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# DEFARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL BRANCH

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#### SUMMARY REVIEW

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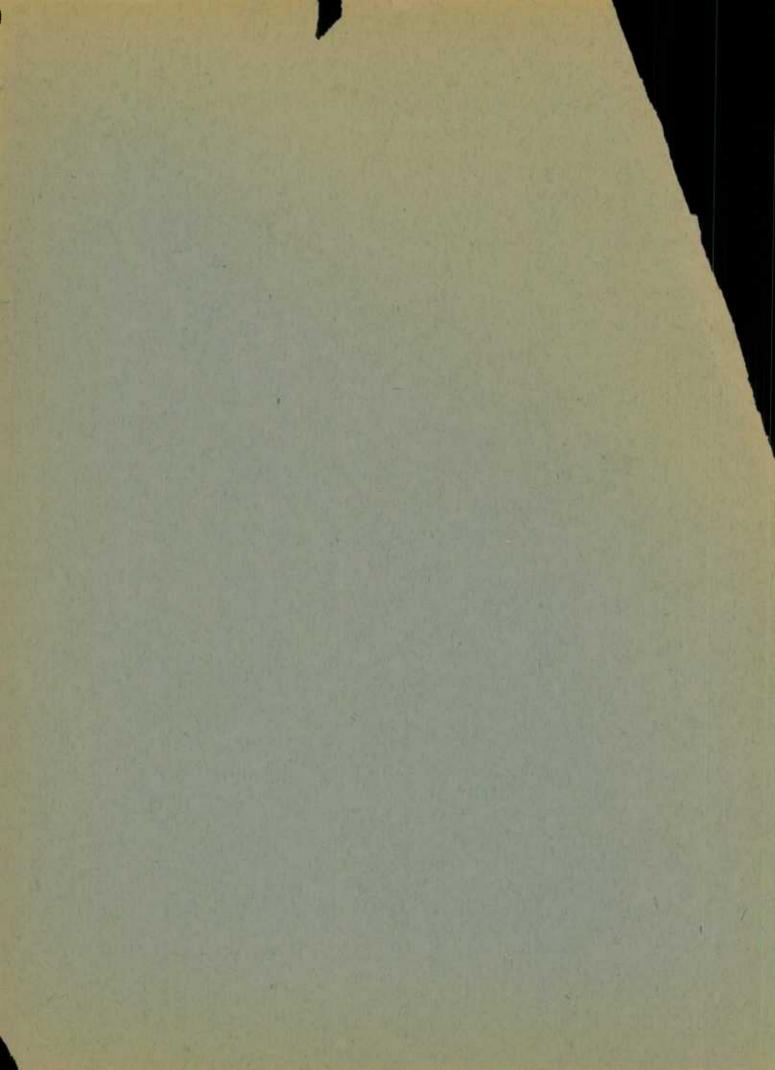
THE GOLD MINING INDUSTRY

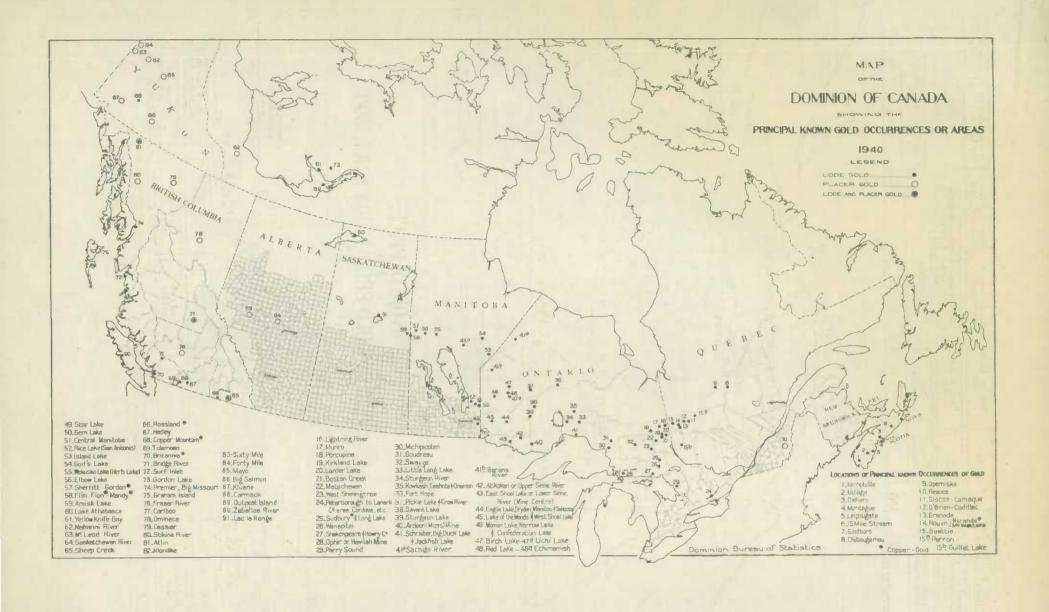
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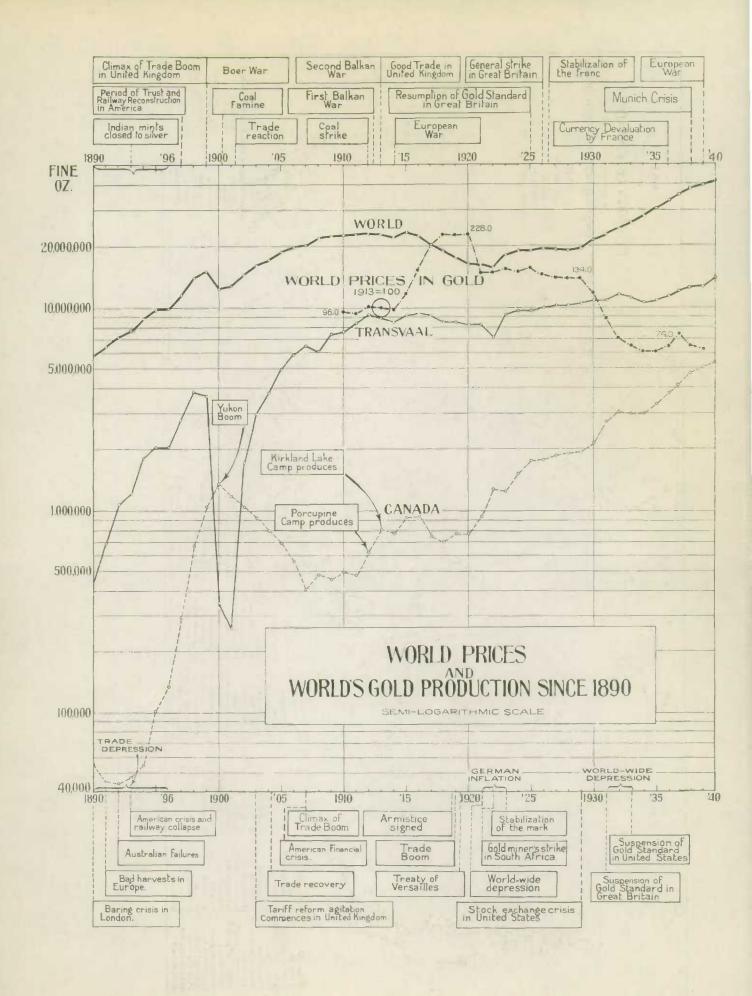
CANADA

1940









Dominion Statistician: Chief - Mining, Metallurgical and Chemical Branch: Mining Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.)
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#### THE GOLD MINING INDUSTRY IN CANADA, 1940

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 named "The Auriferous Quartz Mining Industry" and in which industry the 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.

Gold produced from Canadian ores in 1940 reached an all-time high record of 5,311,145 fine ounces valued at \$204,479,083. This represents an increase over the preceding year of 4.25 per cent in quantity and 11.05 per cent in value. Of the total output in 1940, Ontario mines contributed 5,261,688 fine ounces; Quebec, 1,019,175 fine ounces, and British Columbia, 617,011 fine ounces. Relatively smaller quantities were recovered from auriferous deposits in Manitoba, Yukon, Saskatchewan, Northwest Territories, Nova Scotia and Alberta. Production according to type of deposit or nature of recovery included 32.71 per cent from crude gold bullion bars produced at "gold mines"; 10.0 per cent from blister or anode copper; 4.61 per cent from copper-nickel matte, ores, slags, etc., exported; 2.12 per cent from alluvial deposits, and 0.56 per cent from base bullion made chiefly from silver-lead ores.

Accurate statistics relating to gold production in most foreign countries have been increasingly difficult to obtain since the commencement of the war in 1939. From data made available, it is estimated that Canada as a world gold producer ranked at least third in 1940 in the quantity of the precious metal produced. The Union of South Africa, with the great producers of the Transvaal field, ranked a definite first, while production in the United States, exclusive of output in the Philippine Islands, was estimated at approximately 4,808,231 fine ounces or some 502,914 fine ounces less than the Canadian total. Reliable data relating to gold production in Russia are unobtainable, but a conjectural total output of 5,000,000 ounces was reported for this country in 1939.

The estimated average price per ounce of fine gold, expressed in Canadian currency, was \$38.50 in 1940 compared with \$36.14 in 1939. Practically all new bullion produced in the Dominion from Canadian ores is sold to the Dominion Government through the Royal Canadian Mint at Ottawa, or to the Dominion Assay Office at Vancouver. This gold is refined, converted into fine gold bars weighing approximately 400 ounces each, and is usually disposed of in world markets wherever the most advantageous net price can be obtained.

Table 1 - SUMMARY, BY NINE MAIN BRANCHES, OF THE NET VALUE OF PRODUCTION IN CANADA FOR 1957, 1958 and 1959\*

Tame 1 - Dominant Dr William	1937	1938	1939	Percentage of total net value, 1939
	\$	\$	\$	%
Agriculture	678,953,000	742,020,000	846,066,000	25.92
Forestry	284,492,827	244, 564, 571	271,723,416	8.33
Fisheries	34,439,481	35,593,009	34,378,681	1.05
Trapping	10,477,096	6,572,824	7,919,412	0.25
Mining (Total)	372,796,027	374,415,674	393,232,044	12.05
Auriferous quartz	97,961,278	114,472,106	129,633,245	3.97
Other mining	274,834,749	259,943,568	263,598,799	8.08
Electric power	140,963,914	142,320,725	189,752,668	5.81
Construction	176,029,679	176,661,077	183,706,338	5.63
Custom and repair	98,484,982	99,086,100	96,652,386	2.96
Manufactures, n.e.s	1,195,699,282	1,153,439,474	1,240,414,404	38.00
GRAND TOTAL (a)	2,992,336,288	2,974,673,454	3,263,845,349	100.00
Manufactures, Total (a)	1,508,924,837	1,428,286,778	1,531,051,901	46.91

\* General Statistics Branch, Dominion Bureau of Statistics (1939 Survey of Production Report)

Table 2 - PROVINCIAL DISTRIBUTION OF THE NET VALUE OF PRODUCTION IN CANADA, 1937 to 1939 (4)

Province	1937	1938	1939	Percentage of total net value, 1939
	\$	\$	\$	%
Prince Edward Island	9,429,799	11,832,958	12,749,800	.39
Nova Scotia	102,891,083	99,158,589	105,128,078	3.22
New Brunswick	71,136,955	70,047,728	75,985,286	2.33
Quebec	764,517,559	764,189,933	836,677,855	25.63
Ontario	1,329,953,078	1,292,574,329	1,379,412,515	42.27
Manitoba	176,680,688	145,101,719	149,660,899	4.59
Saskatchewan	75,836,421	136,980,819	226, 323, 308	6.93
Alberta	206,987,784	208,382,832	220,457,495	6.75
British Columbia - Yukon	254,903,021	246, 404, 547	257,450,113	7.89
CANADA	2,992,336,288	2,974,673,454	3,263,845,349	100.00

(4) General Statistics Branch, Dominion Bureau of Statistics (1939 Survey of Production Report).

Tehla 5	PROPORTION	CONTRIBUTED B	V MINTING	TO	TOTAL.	NET	VALUE	OF	PRODUCTION	TN	E/ .	H PROVINCE.	1937	to 1	939
19776 9 ***	LIGITATION	POINTIGEDOTED I	THE THEFT LAND LAND	20	TOTUL	74 PHY T	AUTHOR	0.7.	TIMPORTACH	776	add u	IT TAM ATTIONS	2001	00 7	

	1 9	3 7	1 9	3 8	1 9	3 9
Province	Mining Net	0		Mining of Net Value Net provincial production		Percentage of Net Value provincial production
	\$	%	\$	%	\$	%
Prince Edward Island	***					
Nova Scotia	22,597,547	22.08	20,224,347	20.40	23,504,419	22.36
New Brunswick	2,442,101	3.45	3,506,250	5.01	3,600,454	4.74
Quebec	60,872,828	8.02	69,593,807	9.11	81,600,118	9.75
Ontario	190,447,576	14.43	181,897,886	14.07	188,867,969	13.69
Mani toba	13,415,841	7.65	15,144,672	10.44	12,401,404	8.29
Saskatchewan	8,226,326	10.98	7,029,842	5.13	6,391,404	2.82
Alberta	20,988,638	10.19	24,931,056	11.96	26,049,861	11.82
and Northwest Territories	53,805,170	21.28	52,087,814	21,14	50,816,415	10.74
CANADA	372,796,027	12.55	374,415,674	12.59	393, 232, 044	12.05

<sup>(</sup>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 4 - CERTAIN STATISTICS	RELATING TO	SPECIFIED	CANADI AN	INDUSTRIES.	1923,	1928,	1934,	and 19	58 t	0 194	40
			ricity								

Industry	TO SPECIFIED CANADIAN I	Employees	Salaries and Wages
and the same of th	purchased	Number	paratres and wakes
	•	number	
	TOTAL MINING IND		
1923	5,861,740	66,952	91,534,877
1928	9,072,073	89,448	115,954,022
.934	11,510,481	73,505	88,126,186
938	17,485,652	107,275	145,644,000
.939	18,749,417	107,941	152, 353, 208
940	(not	,	complete)
0.02	AURIFEROUS QUARTZ MI		0.003 474
923	922,258	5,524	8,961,434
928	2,002,062	9,066	14,615,990
934	3,091,147	17,762	27,156,887
938	5,333,427	29,647	50,462,092
939	5,803,160	30,622	53,206,225
940	5,893,562	31,405	55, 205, 096
	PITT D AND PAPER	אסייסיער אד	
923	PULP AND PAPER : 4,270,911	29,234	ZQ ZQQ Q45
928			38,382,845
	12,143,874	33,614	47,322,648
234	15,229,289	26,993	33,307,043
38	16,763,639	30,943	42,619,311
39	17,091,511	31,016	44,737,379
340	(not	yet	complete)
	AUTOMOBILE IN	DUSTRY	
923	125,000	9,505	14,998,267
928	244,807	16,749	29,548,114
934	140, 245	9,674	12,938,933
	261,583	14,872	
938			20,993,362
340	264,989 299,841	14,427 16,798	20,573,714 31,110,945
	200,041	10,100	51,110,545
	CHEMICAL INDUS	TRY (a)	
923	1,439,909	15,149	18,433,679
28	2,043,930	16,130	20,290,417
34	2,145,533	17,130	20,919,740
38	2,952,507	21.896	29,570,517
39	3,185,329	22,595	31,567,558
340	(not		complete)
0.07	PRIMARY IRON AND STE		
923	722,770	6,049	10,816,201
928	1,251,820	9,057	15,470,836
934	1,148,554	7,400	9,009,512
38	1,762,107	13,100	18,256,627
939	2,037,377	13,827	20,410,517
940	(not	yet	complete)
	distribut to Target	empy (b)	
0.07	TEXTILE INDUS		03 044 005
923	(data not available)	92,669	81,244,205
928	2,188,544	113,724	103,451,325
934	3,138,195	115,695	90,796,601
938	3,137,655	115,745	99,275,365
939	5,724,916	121,022	107,117,035
940	(not	yet	complete)

<sup>(</sup>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.

<sup>(</sup>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. NOTE: Footnotes concluded on next page.

-4-Gold

Footnotes to Table 4 Concluded 
(c) 1923 figures partially 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 cast-

ings, 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, 1959 and 1940 (Gold at \$20.671834 per

	1 9	3 9	1	9 4 0
	Fine troy ounces	\$	Fine troy ounces	\$
TOVA SCOTIA -				
In gold bullion	29,943	618,977	22,219	459,30
Estimated exchange equalization on gold produced		463,193		396,12
Total Value - Canadian Funds	***	1,082,170		855,43
UEBEC -				
In anode copper, in ores shipped and in gold bullion.	953,377	19,708,051	1,019,175	21,068,21
Estimated exchange equalization on gold produced		14,747,947		18,170,02
Total Value - Canadian Funds	* * *	34,455,998	***	39,238,23
VTARIO -	7 770 700	07 775 050	1 405 731	00 477 00
Porcupine Area - In gold bullion	1,312,702	27,135,958	1,425,711	29,472,06
Kirkland Lake - In gold bullion (a)	941,371	19,459,865	1,024,105	21,170,12
Other gold mines - In gold bullion	754,903	15,605,230	721,007	14,904,53
Copper-Nickel and other ores	77,100	1,593,798	90,865	1,878,34
Total	3,086,076	65,794,851	3,261,688	67,425,07
Estimated exchange equalization on gold produced		47,739,021	***	58,149,91
Total Value - Canadian Funds	****	111,533,872	* * *	125,574,98
WITOBA	100 075	g (20 010	350 005	T 140 03
In gold bullion, ores shipped and in blister copper	180,875	3,739,018	152,295	3,148,21
Estimated exchange equalization on gold produced	***	2,797,985	***	2,715,14
Total Velue - Canadian Funds		6,537,003	***	5,863,55
ASKATCHEWAN - In ores shipped to Canadian smalters, crude placer				
gold and gold bullion	77,120	1,594,212	102,925	2,127,649
Setimated exchange equalization on gold produced		1,192,982		1,834,96
Total Value - Canadian Funds		2,787,194	***	3,962,61
BERTA -				
n alluvial gold	359	7,421	21.5	4,44
stimated exchange equalization on gold produced		5,554	* * *	3,83
Total Value - Canadian funds		12,975		8,27
CITISH COLUMBIA -				
n alluvial gold	39.797	822,677	32,178	664.14
n gold bullion	351,451	7,265,137	348,239	7,198,739
n base bullion and in slag and ores exported	235,722	4,872,806	236,644	4,891,86
Total	626,970	12,960,620	617,011	12,754.749
Stimated exchange equalization on gold produced		9,698,703		11,000,17
Total Value - Canadian Funds	***	22,659,323	* * *	23,754,924
JKON –				
n alluvial gold	85,572	1,768,930	79,905	1,651,78
in ores shipped	2,173(b)	44,920	553	11,43
Total	87,745	1,813,850	80,458	1,663,214
Estimated exchange equalization on gold produced		1,357,342		1,434,419
so will a sort excitative education on ford broduced				

Table 5 - PRODUCTION OF NEW GOLD IN CANADA, BY PROVINCES AND SOURCES, 1939 and 1940 (Gold at \$20.671834 per

fine ounce) -	Concluded			
	1 9	5 9	1	9 4 0
	Fine troy ounces	\$	Fine troy ounces	\$
NORTHWEST TERRITORIES -				
In ores shipped	650	13,436	280	5,788
In gold bullion produced	51,264	1,059,721	54,879	1,134,450
Total	51,914	1,073,157	55,159	1,140,238
Estimated exchange equalization on gold produced		803,067		983, 383
Total Value - Canadian Funds		1,876,224		2,123,621
Total for Canada	5,094,379	105,310,157	5,311,145	109,791,107
Total estimated exchange equalization on gold produced		78,805,794		94,687,976
GRAND TOTAL VALUE, INCLUDING EXCHANGE		184,115,951		204,479,083
NOTE _ In 1940 the actimated everage price of a troy ou	nce of fine o	old in Canadian	funds was	\$38 50+ 1n 1989

NOTE - In 1940 the estimated average price of a troy ounce of fine gold in Canadian funds was \$38.50; in 1959 the corresponding price was \$36.14.

/ 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.

Table 6 - TOTAL (CUMULATIVE) RECORDED PRODUCTION IN CANADA OF SPECIFIED METALS TO DECEMBER 31st, 1939

		Quanti ty	Value
old (a)	fine ounces	75,537,057(/)	2,039,101,147(/)
ilver (b)	fine ounces	807,498,741(/)	463,807,309(/)
pper (c)	pounds	6,697,548,813	814,155,246
ckel (d)	pounds	2,806,377,739	797,434,597
ad(b)	pounds	6,374,120,797	289,504,432
ne (f)	***	• • •	180,684,662
balt (e)	pounds	33,063,655	31,921,836

NOTE - The total value of production by the entire Canadian mining industry from 1887 to the end of 1939 totalled \$8,095,147,269.

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

(/) To the end of 1940.

Property and Province	Ore	Material sorted	Ore	Gold produc-	Mill capacity	See foot-
	raised	(discarded)	treated	tion	24 hours	notes
	tons	tons	tons	fine oz.	tons	
NOVA SCOTIA						
consolidated Mining & Smelting Co. of						
Canada, Ltd	12,984	2,578	12,984	6,465	40	(d)(a)
uysborough Mines, Ltd	38,696	6,524	32,172	7,344	100	(a)(c)
illag Gold Mines Ltd	565		565	268	20	(a)
ueens Mines Ltd	2,185	***	2,185	885	14	(a)
ehabilitation Project (15 mile						
stream)	5,596	1,502	4,094	210	25	(a)(e)
eal Harbor Gold Mines Ltd	88,602	***	88,602	4,173	200	(a)(c)
ther mines	(b)	(b)	(b)	2,874	(b)	
TOTAL - NOVA SCOTIA				22,219(f)		

#### Footnotes -

- (a) Amalgamation.
- (b) Data not available.
- (c) Cyanidation.
- (d) In addition 44.27 tons concentrates stock piled assaying 1.985 ownces per ton.
- (e) In addition 42 tons concentrates stock piled assaying 100 ounces per ton.
- (f) Receipts at Royal Canadian Mint, Ottawa.

	^	Material	0	Gold	Mill	See
roperty and Province	Ore raised	sorted (discarded)	Ore treated	produc- tion	capacity 24 hours	foot- notes
	tons	tons	tons	fine oz.	tons	
QUEBEC						
mm Gold Mines (Quebec) Ltd	32,662		33,521	4,182	150	(a)(c)(d
rntfield Gold Mines Ltd	84,077		84,425	7,168	350	(c)
eattle Gold Mines (Quebec) Ltd	629,920		629,920	71,464	1,500	(c)
elleterre Quebec Mines Ltd	92,489	4,208	88,281	26,504	330	(c)
anadian Malartic Gold Mines Ltd	275,693	***	275,693	29,767	800	(c)
entral Cadillac Mines Ltd	44,652		59,400	8,952	200	(c)
ournor Mining Co. Ltd	96,477	22,637	74,209	16,164	24	(c)
ast Malartic Mines Ltd	541,447		541,447	88,746	1,800	(c)
rancoeur Gold Mines Ltd	66,264		66,264	12,071	250	(c)
amaque Mining Co. Ltd	444,721		444,721	127,039	1,000	(c)
apa Cadillac Gold Mines Ltd	96,590		96,295	9,568	300	(a)(c)
alartic Gold Fields Ltd.	158,231	19,077	150,203	35,080	300	(c)
cWatters Gold Mines Ltd.	44,950	1,716	43,234	10,603	150	(a)(c)
ooshla Gold Mines Ltd.	2,851	646	2,291	2,174		(e)
Brien Gold Mines Ltd.	67,654		67,694	27,789	165	(a)(c)(i
andora Cadillac Gold Mines Ltd	10,324	* * *	30,079	4,051	150	(a)(c)
	210,997	69,971	140,971	49,256	360	(c)
erron Gold Mines Ltd			48,585	25,134	450	(c)(e)
	251,316	* * *		4,676		(g)
enator-Rouyn Ltd	21,161	***	20,719	59,058	350	(c)
Igma Mines (Quebec) Ltd	279,710	70 041	194,280	46,159	600	(a)(c)
iscoe Gold Mines Ltd		39,041		22,290	700	(c)
laden-Malartic Mines Ltd	236,808		236,816		500	(c)
tadacona Rouyn Mines, Ltd.	143,612	c 150	143,612	17,735	335	(a)(c)
ullivan Consolidated Mines Ltd	129,940	6,150	123,790	32,310	225	(c)
ood Cadillac Mines Ltd	85,086	8,209	76,745	13,187		(0)
ther gold mines	***	* * *	***	848		
opper-gold-silver ores	***	400	***	267,200	4 8 4	
TOTAL - QUEBEC	•••	• • •	***	1,019,175	***	
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Ca			•••	1,019,175		
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Callo Crude ore shipped to smelter. c) In addition, arsemical concentrates	dillac Gold	Mines Ltd.	•••	1,019,175		
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Callo Crude ore shipped to smelter. c) In addition, arsenical concentrates	dillac Gold	Mines Ltd.	•••	1,019,175		
octnotes - a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Case Crude ore shipped to smelter. f) In addition, arsenical concentrates () Milled at Arntfield mill.  ONTARIO	dillac Gold	Mines Ltd.	•••	1,019,175		
octnotes -  a) Amalgamation.  b) Data not available.  c) Cyanidation.  d) Operated from July 16 by Pandora Case Crude ore shipped to smelter.  i) In addition, arsenical concentrates in the second mill.  ONTARIO  crupine District -	dillac Gold	Mines Ltd.	127,111	35,640	300	(c)
octnotes -  Amalgamation.  Data not available.  Cyanidation.  Operated from July 16 by Pandora Cases Crude ore shipped to smelter.  In addition, arsenical concentrates in the concentrates of the concentrate	dillac Gold shipped fo	Mines Ltd.				(c) (c)
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Case Crude ore shipped to smelter. d) In addition, arsenical concentrates described at Arntfield mill.  ONTARIO  orcupine District - mor Gold Mines Ltd	dillac Gold shipped fo 127,111 126,950	Mines Ltd. r testing.	127,111	35,640	300	
Octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Case Crude ore shipped to smelter. f) In addition, arsenical concentrates f) Milled at Arntfield mill.  ONTARIO OCCUPINE District - mor Gold Mines Ltd  Offalo Ankerite Gold Mines Ltd	dillac Gold shipped fo	Mines Ltd. r testing.	127,111	35,640 30,893	300 350	(c)
Octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Case Crude ore shipped to smelter. f) In addition, arsenical concentrates in Milled at Arntfield mill.  ONTARIO OCCUPINE District - mor Gold Mines Ltd.  outlan Porcupine Mines Ltd.  outlan Mines Ltd.  outlanum Mines Ltd.	dillac Gold shipped fo 127,111 126,950 387,833 185,455	Mines Ltd. r testing. 16,313 9,496	127,111 110,637 376,337 185,455	35,640 30,893 65,104 48,495	300 350 1,200	(c) (c)
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Callo Crude ore shipped to smelter. c) In addition, arsemical concentrates willed at Arntfield mill.  ONTARIO OFFICE DISTRICT - mor Gold Mines Ltd.  oniaurum Mines Ltd.  chinite Mines Ltd.	dillac Gold shipped fo 127,111 126,950 387,833 185,455 127,633	Mines Ltd. r testing.  16,313 9,496	127,111 110,637 378,337	35,640 30,893 65,104 48,495 22,150	300 350 1,200 600	(c) (c) (c)
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Carlo Crude ore shipped to smelter. c) In addition, arsemical concentrates d) Milled at Armtfield mill.  ONTARIO crcupine District - mor Gold Mines Ltd. coulan Porcupine Mines Ltd. diffalo Ankerite Gold Mines Ltd. coniaurum Mines Ltd. delnite Mines Ltd.	127,111 126,950 387,833 185,455 127,633 59,517	Mines Ltd. r testing.  16,313 9,496 2,950	127,111 110,637 378,337 185,455 127,741 56,444	35,640 30,893 65,104 48,495	300 350 1,200 600 400	(c) (c) (c) (c)
octnotes -  a) Amalgamation. b) Data not available. c) Cyanidation. c) Cyanidation. d) Operated from July 16 by Pandora Carlo Orcude ore shipped to smelter. c) In addition, arsenical concentrates cy Milled at Arntfield mill.  ONTARIO OFCUPINE District - mor Gold Mines Ltd. coulan Porcupine Mines Ltd. confaurum Mines Ltd.	127,111 126,950 587,833 185,455 127,633 59,517 1,261	Mines Ltd. r testing.  16,313 9,496 2,950 200	127,111 110,637 378,337 185,455 127,741 56,444 2,333	35,640 30,893 65,104 48,495 22,150 11,248 42	300 350 1,200 600 400 160 50	(c) (c) (c) (c) (c) (c)(d)
octnotes - a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Carlo Crude ore shipped to smelter. c) In addition, arsenical concentrates d) Milled at Arntfield mill.  ONTARIO Preupine District - mor Gold Mines Ltd.  uffalo Ankerite Gold Mines Ltd.  shnite Mines Ltd.  Santis Porcupine Mines Ltd.  syon Gold Mines Ltd.	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600	Mines Ltd. r testing.  16,313 9,496 2,950 200	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,600	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584	300 350 1,200 600 400 160 50 1,500	(c) (c) (c) (c) (c) (c)(d) (a)(c)
octnotes - a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Carlo ore shipped to smelter. f) In addition, arsenical concentrates g) Milled at Arntfield mill.  ONTARIO OCCUPINE District - mor Gold Mines Ltd. coulan Porcupine Mines Ltd. diffalo Ankerite Gold Mines Ltd. collan intermines Ltd. delnite Mines Ltd.	127,111 126,950 587,833 185,455 127,633 59,517 1,261	Mines Ltd. r testing.  16,313 9,496 2,950 200	127,111 110,637 378,337 185,455 127,741 56,444 2,333	35,640 30,893 65,104 48,495 22,150 11,248 42	300 350 1,200 600 400 160 50	(c) (c) (c) (c) (c) (c)(d)
octnotes - a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Care. d) Crude ore shipped to smelter. f) In addition, arsenical concentrates g) Milled at Arntfield mill.  ONTARIO  ORCUPINE District - mor Gold Mines Ltd. coulan Porcupine Mines Ltd. district Mines Ltd. delaite M	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600 55,006	Mines Ltd. r testing.  16,313 9,496 2,950 200 4,340	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,600 50,666	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584 9,883	300 350 1,200 600 400 160 50 1,500 250	(c) (c) (c) (c) (c) (d) (a)(c) (a)(c)
a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Care) Crude ore shipped to smelter. f) In addition, arsemical concentrates g) Milled at Arntfield mill.  ONTARIO  OCCUPIED DISTRICT — mor Gold Mines Ltd. coulan Porcupine Mines Ltd. coulan Porcupine Mines Ltd. consaurum Mines Ltd. consaurum Mines Ltd. consaurum Mines Ltd. consaurum Forcupine Mines Ltd. consaurum Forcupine Mines Ltd. consaurum Forcupine Mines Ltd. consaurum Forcupine Gold Mines Ltd. consaurum Mines Ltd. consaurum Forcupine Gold Mines Ltd. consaurum Forcupine Gold Mines Ltd. collinger Consolidated Gold Mines Ltd. (Ross)	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600 55,006 140,690 94,697	Mines Ltd. r testing.  16,313 9,496 2,950 200 4,340	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,600 50,666 140,529 94,522	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584 9,883 68,764 21,381	300 350 1,200 600 400 160 50 1,500 250 400	(c) (c) (c) (c) (c) (d) (a)(c) (a)(c) (c)
a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Care) Crude ore shipped to smelter. f) In addition, arsemical concentrates g) Willed at Arntfield mill.  ONTARIO  OCCUPINE District —  mor Gold Mines Ltd.  contain Porcupine Mines Ltd.  contain Mines Ltd.  contain Mines Ltd. contain Mines Ltd. contain Mines Ltd. contain Mines Ltd. cone Mines Ltd. collinger Consolidated Gold Mines Ltd. (Ross) collinger Consolidated Gold Mines Ltd. (Timmins)	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600 55,006 140,690 94,697	Mines Ltd. r testing.  16,313 9,496 2,950 200 4,340	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,666 140,529 94,522 1,780,377	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584 9,883 68,764 21,381	300 350 1,200 600 400 160 50 1,500 250 400 225	(c) (c) (c) (c) (c) (d) (a)(c) (a)(c) (c) (c)
a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Care) Crude ore shipped to smelter. f) In addition, arsemical concentrates g) Milled at Arntfield mill.  ONTARIO  OCCUPINE District —  mnor Gold Mines Ltd.  roulan Porcupine Mines Ltd.  unifalo Ankerite Gold Mines Ltd.  coniaurum Mines Ltd.  e Santis Porcupine Mines Ltd.  evon Gold Mines Ltd.  evon Gold Mines Ltd.  aymar Porcupine Cold Mines Ltd.  allinor Mines Ltd.  collinger Consolidated Gold Mines  Ltd. (Ross)  collinger Consolidated Gold Mines  Ltd. (Timmins)  colntyre Porcupine Mines Ltd.	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600 55,006 140,690 94,697 1,779,185 885,930	Mines Ltd. r testing.  16,313 9,496 2,950 200 4,340	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,600 50,666 140,529 94,522 1,780,377 885,930	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584 9,883 68,764 21,381 436,712 247,772	300 350 1,200 600 400 160 50 1,500 250 400 225 6,000 2,500	(c) (c) (c) (c) (c) (d) (a)(c) (a)(c) (c) (c)
a) Amalgamation. b) Data not available. c) Cyanidation. d) Operated from July 16 by Pandora Care) Crude ore shipped to smelter. f) In addition, arsemical concentrates g) Milled at Arntfield mill.  ONTARIO  OCCUPINE District —  mnor Gold Mines Ltd.  roulan Porcupine Mines Ltd.  unifalo Ankerite Gold Mines Ltd.  coniaurum Mines Ltd. e Santis Porcupine Mines Ltd. e Santis Porcupine Mines Ltd.  allnies Ltd.  come Mines Ltd.  allnor Mines Ltd.  collinger Consolidated Gold Mines Ltd. (Ross)  collinger Consolidated Gold Mines Ltd. (Timmins)	127,111 126,950 387,833 185,455 127,633 59,517 1,261 621,600 55,006 140,690 94,697	Mines Ltd. r testing.  16,313 9,496 2,950 200 4,340	127,111 110,637 378,337 185,455 127,741 56,444 2,333 621,666 140,529 94,522 1,780,377	35,640 30,893 65,104 48,495 22,150 11,248 42 205,584 9,883 68,764 21,381	300 350 1,200 600 400 160 50 1,500 250 400 225	(c) (c) (c) (c) (c) (d) (a)(c) (a)(c) (c) (c)

- 7 -

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1940 - Continued Material Gold M111 See Ore Property and Province Borted Ore produccapacity foot-(discarded) tion raised treated 24 hours notes tons tons tons fine oz. tona ONTARIO (Continued) Porcupine District (Concluded)-575,728 575,728 Pamour Porcupine Mines Ltd. ..... 70,818 1,500 (c) Paymaster Consolidated Mines Ltd. .... 214,675 3,998 207,168 45,101 550 (c) 4,952 175,773 Porcupine Lake Gold Mining Co. Ltd. .. 5,192 260 470 25 (a) Preston East Dome Mines, Ltd. ..... 177,259 1,559 60,753 500 (a)(c) Kirkland Lake District -Bidgood Kirkland Gold Mines, Ltd. .... 125 50,445 50,437 10,467 (c) Golden Gate Mining Co: Ltd. ..... 25,481 458 25,481 6,794 125 (a)(c) 137,986 647,426 Kirkland Lake Gold Mining Co. Ltd. ... 137,986 53,229 (c) . . . 400 Lake Shore Mines Ltd. ..... 647,426 (c)(f) 283,349 2,500 ... Macassa Mines Ltd. ..... 150,491 150,674 69,486 400 (c) ... Morris Kirkland Gold Mines Ltd. ..... 38,238 39,579 4,196 100 ... (c) 212,519 317,560 59,524 Sylvanite Gold Mines Ltd. ..... 212,206 68,930 600 ... (c) Teck-Hughes Gold Mines Ltd. ..... 317,560 92,764 1,000 (c) Toburn Gold Mines Ltd. ..... 68,106 8,582 33,619 150 (c) Upper Canada Mines Ltd. ..... 66,656 66,656 27,915 225 . . . (c) Wright-Hargreaves Mines Ltd. ..... 442,920 442,920 225,235 1,200 (c) Larder Lake District -Chesterville Larder Lake Gold Mines 224,228 220,816 33, 305 700 (c) Ltd. ..... ... 445,864 445,864 1,000 Kerr-Addison Gold Mines Ltd. ...... 92,021 (a)(c) ... Omega Gold Mines Ltd. ..... (c) 172,595 172,595 22,780 500 Matachewan District -Hollinger Consolidated Gold Mines, Ltd. 368,292 1,000 (Young-Davidson) ..... 568,247 59,014 (c) 182,033 21,487 500 Matachewan Consolidated Mines Ltd. ... 182,033 (c) . . . Tyranite Mines Ltd. ..... 80,651 1,306 79,875 9,996 200 (c) Sudbury District -Consolidated Mining & Smelting Co. of Canada, Ltd. (Golden Rose) ...... 38,810 38,575 11,438 100 (c) Algoma District -81,981 Cline Lake Gold Mines Ltd. ..... 82,431 15,429 240 (c) 1,700 1,593 682 (a)(g) Regenery Metals ..... 174 10 Thunder Bay District -Bankfield Cons. Mines Ltd. ..... (a)(c) 42,499 11,125 43,250 1.50 47,734 Hard Rock Gold Mines Ltd. ..... 167,439 119,255 31,108 (c) 4,871 10,116 3,914 Jellicoe Mines Ltd. (h) ...... ... (b) 7,016 22,698 45,724 (a)(c) Leitch Gold Mines Ltd. ..... 38,159 31,118 25,918 Little Long Lac Gold Mines Ltd. ..... (a)(c) 138,983 113,065 300 238,780 54,771 McLeod-Cockshutt Gold Mines Ltd. .... 308,113 69,486 650 (c) 5,758 41,485 28,671 Magnet Cons. Mines Ltd. ..... 175 (a)(c) 47,243 5,320 Northern Empire Mines Co. Ltd. ..... 67,396 61,691 17,441 180 (c) St. Anthony Gold Mines Ltd. ...........
Sand River Gold Mining Co. Ltd. ..... 75,773 5,143 59,039 10,972 125 (c) 9,836 34,726 10,460 75 44,562 (c) (a)(c) Sturgeon River Gold Mines Ltd. ..... 45,259 17,469 27,790 13,306 75 Tombill Gold Mines Ltd. ..... 45,228 45,228 16,756 125 (a)(c) ... Kenora and Rainy River Areas -25 (a)(1) Kenopo Mining & Milling Co. Ltd. .... 476 143 13 Kenricia Gold Mines Ltd. ..... 6,696 6,676 1,003 100 (c)(j) 710 1,305 (a) (a)(k) Straw Lake Beach Gold Mines Ltd. .... 5,497 5,133 60 Upper Seine Gold Mines Ltd. ..... 1,073 1,578 278 75 46,330 Wendigo Gold Mines Ltd. ..... 9,574 36,756 12,337 80 (a)(1)

Table 7 - PRODUCTION OF GOLD IN CAMADA		Material		Gold	Mill	See
Property and Province	Ore	sorted	Ore	produc-	cepacity	foot-
	raised	(discarded)	treated	tion	24 hours	notes
	tons	tons	tons	fine oz.	tons	
ONTARIO (Concluded)						
Patricia District -						
Berens River Mines Ltd	82,346		82,346	24,663	225	(m)
Central Patricia Gold Mines Ltd	124,019	5,845	118,803	49,011	200	(c)
Cochenour Willans Gold Mines Ltd	53,935	•••	53,921	21,219	200	(a)(c)(n)
Gold Eagle Gold Mines Ltd	59,181	13,065	46,116	10,870	125	(c)
Hasaga Gold Mines Ltd	101,192	13,115	88,077	16,495	275	(c)
Howey Gold Mines Ltd	551,584	97,401	454,183	25,077	1,250	(c)
Jason Mines Ltd	24,974	1,010	23,964	10,242	125	(c)
J. M. Consolidated Gold Mines Ltd	4,781	187	4,594	1,310	100	(c)(o)
Madsen Red Lake Gold Mines Ltd	139,370	180	141,625	29,282	400	(a)(c)
McKenzie Red Lake Gold Mines Ltd	93,913	17,341	76,572	26,237	200	(c)
McMarmac Red Lake Gold Mines Ltd	4,561		4,561	1,748	(b)	(p)
Pickle Crow Gold Mines Ltd	170,253	28,251	141,992	74,704	400	(a)(c)
Sachigo River Exploration Co. Ltd	22,094	9,021	13,030	12,511	25	(a)(c)
Uchi Gold Mines Ltd.	251,199	23,380	227,294	33,716	750	(a)(c)
DOLL GOLD WINES NOT	201,100	20,000	2219201	00,110	. 00	(4)(0)
Eastern Ontario -						
Consolidated Mining & Smelting Co. of						
	24,455		26,526	3,108	125	(e)(q)
Canada, Ltd. (Cordova)	24, 200	* * *	20,020	0,100	Tro	(0)(4)
Other cold wines				924		
Other gold mines	* * *	* * *	***	90,865	* * *	
Nickel-copper ores	***	***	, , ,		***	
TOTAL - ONTARIO	***			3,261,688		
(b) Data not recorded. (c) Cyanidation. (d) Testing. (e) Milled at Faymar mill. (f) In addition 143,168 tons of tailings retreated. (g) Includes 11 tons ore shipped to smelter.  MANITOBA Beresford Lake Mines Ltd. God's Lake Gold Mines Ltd. Gunnar Gold Mines Ltd. San Antonio Gold Mines Ltd. Other gold mines Other gold mines TOTAL - MANITOBA	(j) Closed (k) In addi stock per to (l) Copper- (m) Gold co ed; in	gold concentrate ntent of concentration, conquantities of	concentrate ng 1 ounce ates export entrates ex ntains rela	gold ed. (o) port- (p) tively lead.	addition concentrated as ounces a Closed do In additi- centrate piled.	treated and in 229 tons rates stock asaying 3.70 gold per ton. own March 31. ton some con- es were stock own July 30.  (a)(d) (a)(c) (c) (c) (b)
THE THE WALL OF THE PARTY OF TH				20,000		
Footnotes - (a) Amalgamation. (b) Data not available. (c) Cyanidation. (d) Property closed down September 30t	h.					
(d) Troper by Crosed down bepressible 500						
SASKATCHEWAN Consolidated Mining & Smelting Co. of						
SASKATCHEWAN	451,562		451,562	20,024	1,200	(c)
SASKATCHEWAN Consolidated Mining & Smelting Co. of Canada Limited (Box)	451,562 (b)	(b)	451,562 (b)	20,024	1,200 (b)	(c) (b)
SASKATCHEWAN Consolidated Mining & Smelting Co. of	4	(b) (b)	4 6			
SASKATCHEWAN Consolidated Mining & Smelting Co. of Canada Limited (Box)	(b)	3 5	(b)	406	(b)	1

Footnotes (b) Data not recorded.
(c) Cyanidation.

Table 7 - PRODUCTION OF GOLD IN CANADA,		Material		Gold	Mill	See
Property and Province	Ore	sorted	Ore	produc-	capacity	foot-
	raised	(discarded) tons	treated	fine oz.	24 hours tons	notes
AT DETERMA	tons	vons	CONB	line oz.	tons	
ALBERTA	()	(-)	(-1	07.5		
lacer gold	(x)	(x)	(x)	215	***	
x) No record.						
BRITISH COLUMBIA						
	518		518	127		(d)
rmandy Mine	(b)	100	4,400	1,860	50	(d)
lpine Gold Ltd	14,600		13,083	6,720	50	(c)
	(b)		191,412	101,282	500	(a)(d)
ralorne Mines Ltd		• • •		The second second second		(4)(4)
uena Vista Mining Co. Ltd. (f)	111 996	• • •	111 996	AX 979	300	(c)
ariboo Gold Quartz Mining Co. Ltd	111,826	580	111,826	43,878		1 1
onsolidated Nicola Goldfields Ltd	(b)	539	4,759	437	(b)	(d)
old Belt Mining Co. Ltd	62,366	***	62,366	16,948	150	(c)
rasshopper Mine Ltd.	1,361	• • •	1,361	924	375	(d)
edley Mascot Gold Mines Ltd	63,280	• • •	62,812	22,819	175	(d)
sland Mountain Mines Co. Ltd	49,229	***	49,229	20,961	110	(c)
elowna Exploration Co. Ltd	82,389	* * *	82,660	(b) 18	275	(c)(d)
ootenay Belle Gold Mines Ltd	38,837	***	38,837	12,743	150	(c)
ivingstone Mining Co	(b)	2,300	780	482	50	(a)
cArthur, W. E. (Brooklyn-Stemwinder)	2,000	***	1,979	619	50	(d)
cArthur, W. E. (Number 7)	773		722	185		(d)
t. Zeballos Gold Mines Ltd	32,896	9,367	23,529	14,716	60	(a)(d)
scarson, R. (Arlington)	819		819	1,150		(d)
soyoos Mines of Canada Ltd	9,207	***	9,207	810	150	(c)(d)
ioneer Gold Mines of B.C. Ltd	88,942	11,445	77,585	42,923	300	(a)(c)
olaris-Taku Mining Co. Ltd	80,320		80,364	22,954	150	(d)(e)
rivateer Mine Ltd	49,248	19,240	30,008	29,594	90	(a)(c)
elief Arlington Mines Ltd	55,495	23,522	31,333	10,603	75	(c)
eno Gold Mines Ltd., Sheep Creek	35,730		35,978	11,828	120	(a)(c)(d)
eno Gold Mines Ltd., Zeballos	19,811	5,589	14,222	6,610	45	(a)(d)
heep Creek Gold Mines Ltd	55,077		55,077	26,229	150	(c)
ilbak Premier Mines Ltd	171,504		171,504	37,168	500	(d)
pud Valley Gold Mines Ltd	56,184	27,758	28,426	18,099	75	(a)(d)
nion Mine (W. E. McArthur)	4,248		4,144	1,082		(d)
nited Prospectors Ltd. (Thistle)	• • •	144	2,780	1,377		(d)
enango Gold Mines Ltd.	127		127	48	•••	(d)
enus Juno Mine	(b)	(b)	183	191		(d)
hite Star Mine Ltd	508	***	508	2, 345		(d)
Indpass Gold Mining Co. Ltd	500	(b)	(b)	298	(b)	(d)
inslow Syndicate	(b)	(5)	582	185	30	(a)(d)
4	44		44	22		(d)
ukelick, J. P. (Grandora)		* * *	53,526	10,205	100	(c)(d)
mir Yankee Girl Gold Mines Ltd	53,471	(b)				(6)(4)
lacer gold	***	(b)	(1)	52,128	• • •	
opper-gold ores exported		* * *	* * *	54,751	***	
				61,730		
ilver-lead and other gold mines						

17,500 28.200

Footnotes (1) Partly estimated—cubic yards.
(a) Amalgamation.

<sup>(</sup>b) Not recorded.

<sup>(</sup>c) Cyanidation.
(d) Ore or concentrates shipped to smelter.
(e) 6,689 tons concentrates produced and 6,659 tons shipped.

<sup>(</sup>f) Not published.

Table 7	- P	RODUCTION	OF	GOLD	IN	CANADA.	BY	PRINCIPAL	MINES.	1940 -	Concluded

		Material		Gold	Mill	See
Property and Province	Ore	sorted	Ore	produc-	capacity	foot-
	raised	(discarded)	treated	tion	24 hours	notes
	tons	tons	tons	Fine oz.	tons	
YUKON						
Placers		(x)	(1)	79,905	***	
La Forma (quartz)	(x)	(x)	(x)	292	(x)	(b)
Silver-lead ores				261		
TOTAL - YUKON	• • •	***		80,458		
Footnotes -						
(x) No record.						
(1) Cubic yards, partly estimated.						

#### NORTHWEST TERRITORIES

TOTAL - NORTHWEST TERRITORIES	***	***	• • •	55,159	***	
Silver ores	***	***				
Other Gold Mines and Placers	(x)	(x)	(x)	289(b)	• • •	(4)(0)
Negus Mines Ltd	26,474	4.822	21,580	(x)	50	(a)(c)
of Canada, Limited-Rycon Mine	7,504		7,856	(x)		(d)
Consolidated Mining and Smelting Co.						
of Canada, Limited (Con)	51,831	***	50,750	(x)	175	(a)(c)
Consolidated Mining and Smelting Co.						
TANTANTON TENANT TOTAL						

Footnotes -

(x) Not recorded or available for publication.

(a) Amalgamation.

(b) In ores smelted and refined.

(c) Cyanidation.

(d) Treated in Con mill.

GRAND TOTAL - CANADA ..... 5,311,145

Table 8 - SU		DIAN GOLD PRODUCTION,				
	In	In crude gold	In base bullion	In blister	In ores, matte,	Total
Year	alluvial	bullion pro-	produced at lead	copper pro-	slegs, etc.,	Gold
	gold	duced at mines(a)	smelters	duced (/)	exported	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	4,096,213
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
1040	9 1	89 7	0.6	10.0	16	5 811 1/5

(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 COLD IN CANADA, BY MONTHS(x), 1938, 1939 and 1940

Month	1938	1939	1940	Month	1938	1939	1940
		Fine ounces				Fine ounces	
January	361,086	411,328	425,034	July	420,778	440,065	457,330
February	340,838	390,963	405,982	August	412,135	449,207	466,946
March	376,023	414,217	430,519	September	409,612	421,485	441,145
April	368,439	406,795	419,282	October	411,263	432,678	468,170
May	381,089	432,359	443,199	November	410,023	423,358	450,712
June	390,693	436,783	451,964	December	433,877	432,896	450,862

<sup>(</sup>x) Compiled from monthly reports recedved from principal operators and the totals, therefore, will not necessarily agree with those shown elsewhere in this report.

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Table 10 - FINE GOLD AND FINE SILVER CONTENT OF SHIPMENTS TO THE ROYAL CANADIAN MINT, OTTAWA, CANADA, BY SOURCES, 1940 (4)

	Gold	Silver
9	Fine ounces	Fine ounces
orthwest Territories	52,617.826	11.527.56
ritish Columbia	312,170.322	86,642,91
Lberta sundries	2.906	0.26
askatchewan	20,652.568	6,161.91
anitoba	76,881.493	11,544,61
itario	5,202,648.539	425, 219.47
lebec	1,108,187.122	150,119.35
ova Scotia	22,218.895	724.62
ewellery and scrap	10,641.602	2,805.54
ancouver Assay Office	178,795.556	32,355.30
ukon sundries	1,274.817	281.61
ther -		
Foreign Gold Coin	14.040	
Foreign ore	4,739.493	1,376.03
TOTAL	4,990,845.179	708,556.95

(/) Based on monthly reports and subject to revision.

Table 11 - PRECIOUS METALS CONSUMED BY THE JEWELLERY AND SILVERWARE INDUSTRY IN CANADA, 1938 and 1959

	Cost at works			
Materials	1938	1939		
	\$	\$		
Precious metals -				
Fine gold	950,836	1,187,238		
Gold alloys	494,965	94,685		
Fine silver	505,038	644,750		
Silver alloys	361,555	400,947		
Platinum	85,503	160,688		
Old gold, jewellers' findings, waste and scrap for refining	1,709,946	1,482,950		
Gold-filled wire and stock	94,301	141,965		

NOTE - Complete data for 1940 not yet available.

Table 12 - GOLD PRODUCTION OF THE WORLD(a) 1939 and 1940 (Taken from the Year Book of the American Bureau of Metal Statistics)

Country	1939	1940	
voiding.	2000	1040	
NORTH AMERICA:			
United States	5,559,139	5,919,928	
Canada	5,094,379	5,302,920	
Mexico	841,623	883,096	
Newfoundland	20,313	22,000	
Total North America	11,515,454	12,127,944	
CENTRAL AMERICA AND WEST INDIES	155,000	<b>x</b> 250,000	
SOUTH AMERICA:			
Brazil	178,000	x 180,000	
Chile	525,026	541,000	
Colombia	570,017	631,900	
Ecuador	85, 352	85,000	
Peru	272,362	300,000	
Guiana - British	58,473	¥ 38,000	
Dutch	12,000	<b>x</b> 12,000	
French	57,606	₹ 38,000	
Venezuela	146,607	145,000	
Other South America	¥ 50,000	× 45,000	
Total South America	1,715,445	1,815,900	

Table 12 - GOLD PRODUCTION OF THE WORLD(a) 1939 and 1940 (Concluded) - (Taken from the Year Book of the American Bureau of Metal Statistics)

(in fine ounces)	American bure	au of Metal Statistics
Country	1939	1940
EUROPE:		
Czechoslovakia	10,000	
France	<b>x</b> 85,000	
Yugoslavia	71,503	
Rumania	211,496	
Russia and Siberia	<b>2</b> 5,000,000	
Sweden	216,144	
Other Europe	50,000	- 5 500 000
Total Burope	5,644,143	# 5,500,000
OCEANIA:		
New South Wales	87,188	(d)
Queensland	147,248	(d)
Victoria	156,522	(a)
Western Australia	1,214,237	1,191,481
Tasmania	19,982	(d)
New Guinea	246,214	275,000
New Zealand	178,955	179,000
Other Oceania (c)	160,000	165,000
Total Oceania	2,210,346	2,225,000
ASIAs		
	\$1C FOA	
	516,504	
China, including Manchuria	265,000	
Chosen (Korea)	975,000	
Netherland India	81,185	
Formosa	<b>≈</b> 60,000	
Japan	<b>■</b> 850,000	
Other Asia	110,000	
Total Asia	2,657,687	<b>#</b> 2,650,000
AFRICA:		
Belgian Congo	516,904	(d)
French West Africa	140,000	(d)
Kenya	77,444	(d)
Madagascar	14,000	(d)
Rhodesia	800,256	828,000
British West Africa (b)	839,900	900,000
Tanganyika	130,366	(d)
Transvaal, Cape Colony and Natal	12,821,507	14,047,000
Other Africa	170,000	(d)
Total Africa	15,510,377	16,829,000
TOTALS FOR WORLD	39,408,450	41,397,800

<sup>(</sup>a) The 1940 compilation contains some preliminary data and conjectural figures (\*) have been inserted where necessary.

The accountings 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.

Production of the Philippine Islands is included with the United States in this table and amounted to 1,111,697 fine ounces in 1940.

<sup>(</sup>b) Comprising Gold Coast, Sierra Leone and Migeria.

<sup>(</sup>c) Includes Papua and Fiji.

<sup>(</sup>d) Not reported; estimate has been included in total.

<u>Gold</u> - 13 -

Table 13 - COMPARATIVE FIGURES OF GOLD PRODUCTION FOR THE WORLD SINCE THE DISCOVERY OF AMERICA, ALSO

	PRODUCTION	Transvaal		Canada since	(a) World
	Russia	since the	United	the recording	since the
Year	(a)	commencement	States	of production	discovery
21077 1145	(-)	of Fields(1)	(f) (a)	in 1858	of America
	fine ounces	fine ounces	fine ounces	fine ounces	fine ounces
495 - 1600		* * *	***		24,266,820
601 - 1700		***			29, 350, 445
701 - 1800		• • •		***	61,088,215
801 - 1840		***		***	. 20,488,552
841 - 1850			1,187,170(c)		17,605,018
851 - 1860		•••	2,201,210(0)	220,039	64,482,933
861 - 1870		144	58,279,778(d)	1,477,999	61,098,345
			15,281,264(e)	904.095	55,670,618
871 - 1880		1,070,651	15,808,339	584,102	51,280,184
881 - 1890		, ,	9,106,834	291,564	39,412,823
891 - 1895		6,870,158			
396 - 1900	***	12,578,869	15,728,572	5,469,791	62,234,698
901 - 1905	***	13,632,908	19,393,722	4,592,261	78,033,650
1906		5,792,823	}	556,415	19,471,080
1907		6,450,740	(00 007 000	405,517	19,977,260
1908		7,056,266	(22,995,218	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	8,798,556	4,299,784	802,973	22,556,347
1914		8,394,322	4,572,976	773,178	21,652,883
1915	,	9,093,902	4,887,604	918,056	22,846,608
1916		9,296,618	4,479,057	950,492	22,032,542
1917		9,018,084	4,051,440	738,831	20,346,043
1918		8,418,292	5,520,784	699,681	18,588,127
1919		8,331,294	2,918,628	766,764	17,539,679
1920		8,158,226	2,476,166	765,007	16,146,830
1921		8,128,681	2,422,006	926,329	15,997,692
		7,009,767	2, 363,075	1,263,364	15,496,859
1922		9,148,771	2,502,632	1,233,341	17,845,349
1923		9,574,918	2,528,900	1,525,382	18,619,481
1924					
1925		9,597,573	2,411,987	1,735,735	18,673,178
1926		9,954,762	2,335,042	1,754,228	19,117,568
1927		10,122,459	2,197,125	1,852,785	19,058,736
1928		10,354,157	2,233,251	1,890,592	18,885,849
1929		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	20,903,756
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	5,044,587	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	5,284,890	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		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	39,651,307
1940	(b)	14,037,741(i)	5,919,928(h)(j		41,397,800(h)
TAL		566,944,213	261,365,581	75,537,057	1,376,123,510

(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.

(j) Includes 1,111,697 fine ounces produced in Philippines.

<sup>(</sup>g) Data not available for preceding years. A revision by the United States Mint of estimated Russian gold production for the years 1915 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.

 <sup>(</sup>h) Subject to revision. American Bureau of Metal Statistics.
 (i) Annual Report - Department of Mines, Union of South Africa. 1940 figures, Transvaal Chamber of Mines.

Gold - 14 -

 Table 14 - ESTIMATED AVERAGE MONTHLY VALUE OF AN OUNCE OF FINE GOLD, EXPRESSED IN CANADIAN FUNDS, 1931-1940

 Month
 1931
 1932
 1933
 1934
 1935
 1936
 1937
 1938
 1939
 1940

Month	1931	1932	1955	1934	1935	1936	1937	1938	1939	1940
	\$	\$	\$	\$	\$	\$	\$	\$	\$	8
January	20.71	24.24	25.64	35.05	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	54.98	35.05	55.15	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	25.83	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	54.27	35.49	34.99	54.99	35.32	38.45	38.50
November	25.22	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, 1940, 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}{4} 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 1940, was equal to \$34.9125 per ounce.

### FOREIGN EXCHANGE, 1940 (Internal Trade Branch)

In terms of the Canadian dollar, both sterling and United States funds held unchanged throughout 1940 at buying and selling rates of \$4.45-\$4.47 and \$1.10-\$1.11 respectively. These rates which were set by the Canadian Foreign Exchange Control Board have been maintained since the middle of September, 1939. At New York there were sharp fluctuations for both sterling free market rates and the Canadian dollar. Following comparative steadiness at approximately \$5.95 during January and February, sterling free market rates dropped sharply in the ensuing two and one-half months to a 1940 low of \$5.16 on May 10. Weakness in Canadian dollar rates during this same period lowered quotations from a final 1939 figure of 83 5/8¢ to 78¢ on the 21st of May. Subsequently both rates stiffened gradually from these levels until by the close of the year sterling was quoted at \$4.04 and Canadian funds at 86 1/8¢. Movements of these units have been of little significance in the latter half of 1940 due to their restricted use.

At Montreal there was a sharp drop during the year in the number of units quoted. First to disappear from trading lists were the Danish and Norwegian kroner, for which no rates have been quoted since April 8th. On May 9th, rates for the Belgian belga and Netherlands florin were discontinued, while in the first half of June the French franc and Italian lira were dropped from quotation lists.

Among Latin-American currencies, most rates were steady to higher in terms of the Canadian dollar. Many of these countries, however, suffered a serious shortage of foreign exchange owing to loss of European export markets. To ease conditions caused by this loss, substantial loans were granted by the United States Export-Import bank. Rates for the Argentine free peso, following mid-summer weakness stiffened to close the year more than one cent higher at 26.14¢, while unofficial rates for the Brazilian milreis eased fractionally from 4.61¢ at the end of 1939 to 5.57¢ on December 31, 1940.

Far eastern currencies, except for Chinese units, were steady throughout 1940. The Japanese yen which was linked to the United States dollar late in 1939, indicated no net change during the year, quotations remaining at 26.024. Over the same period the Indian rupee showed little change, the closing rate of 55.59¢ for 1940 comparing with 55.65¢ at the end of 1939. Both the Shanghai dollar and Hong Kong dollar showed substantial losses. The former closed at 6.01¢ for a net decline of more than 2 2/5¢ while the latter unit eased slightly more than a cent to 26.22¢. However, both of these units showed considerable increases over mid-year lows, supported by loans from both Great Britain and the United States.

			Noon Rates	at Montreal	X	
				Hong		Argentine
	Sterling	U.S.	Swiss	Kong	Japanese	Peso
		Dollar	Franc	Dollar	Ien	(free rate
1932 - December	5.7866	1.1544	. 2226	2495	. 2423	.2982
1935 - December	5.0957	.9954	.3022	. 5729	.3083	.2874
1934 - December	4.8865	.9878	.3202	.4189	2855	.2483
1935 - December	4.9755	1.0095	.3275	. 3240	.2902	2749
1936 - December	4.9042	.9995	. 2297	.5047	.2850	2975
1937 - December	4.9985	1.0004	.2313	. 31.21	.2910	.2950
1938 - December	4.7133	1.0092	.2283	.2945	.2747	.2297
1939 - December	4.4500+	1.1050+	.2490	.2716	.2602	. 2527
1940 - January	4.4500+	1.1050+	.2489	.2756	.2602	.251.5
February	4.4500+	1.1050+	.2489	.2730	2602	. 2573
March	4.4500+	1.1050+	. 2489	.2588	2602	2598
April	4.4500+	1.1050+	. 2489	.2425	2602	. 2550
May	4.4500+	1.1050+	.2471	. 2256	.2602	.2514
June	4.4500+	1.1050+	.2491	. 2487	.2601	. 2458
July	4.4500+	1.1050+	.251.8	.2620	.2601	.2405
August	4.4500+	1.1050+	. 2526	.2505	.2601	.2492
September	4.4500+	1.1050+	. 2528	.2515	.2601	. 2575
October	4.4500+	1.1050+	. 2569	.2566	. 2602	.2604
November	4.4500+	1.1050+	.2575	.2602	.2602	. 2606
December	4.4500+	1.1050+	.2575	.2619	. 2602	.2614

\* Bank of Montreal 1932-34; Bank of Canada 1935-40.

#### GOLD EXPORTS

(Order-in-Council P.C. 7246 - December 11th, 1940)

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. 4188, dated December 20, 1959, continued in force until December 31, 1940;

AND WHEREAS in the opinion of the Minister of Finance it is expedient that the said regulations be continued in force beyond December 31, 1940;

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 51, 1941, 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 ...."

#### 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.

<sup>+</sup> Since September 16, 1939 quotations used are the average of the daily buying and selling rate set by the Foreign Exchange Control Board. The current buying and selling rates for sterling are \$4.43 and \$4.47 and for U.S. funds \$1.10 and \$1.11.

<u>Gold</u> - 16 -

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 <u>net</u> exports of non-monetary gold, including changes in stocks held under earmark, are published as a supplement to the trade figures, and are given below.

NET EXPORTS OF NON-MONETARY GOLD 1936 1937 1938 1939 1940 1941 \$ \$ \$ \$ \$ \$ 000,000's omitted 11.0 18.1 10.8 10.1 21.6 19.2 January ...... 11.2 12.1 10.8 12.9 12.4 14.7 8.7 16.3 17.6 15.5 16.2 March ..... April .... 11.9 10.5 9.5 10.6 18.0 8.6 14.3 15.9 10.3 16.9 11.3 13.5 11.5 17.2 15.1 June ..... 9.0 10.1 11.5 15.2 15.9 12.5 17.6 10.5 16.6 9.0 August ..... September ..... 10.5 11.6 15.1 17.3 16.5 October ..... 13.4 11.3 15.5 22.8 18.9 November ..... 13.6 12.1 15.3 15.0 16.6 16.4 11.6 17.3 December 11.5 14.9 12 Months December ...... 131.7 145.1 160.5 184.4 203.0

Table 15 - IMPORTS OF GO		and	200 1008 - 10	40 TOILL COU	U.S.	artment of C Foreign	Ommerce)
Year		bullion	Bullion,	refined	coin	coin	TOTAL
``	Ounces	\$	Ounces	\$	\$	\$	\$
			(000	's omitted)			
1940	5,188	110,935	117,704	4,115,290	9	523,233	4,749,467
1959	2,679	92,764	99,426	3,476,103	1	5,797	3,574,659
1958	2,240	77,628	53,920	1,885,628		16,201	1,979,458
1937	2,150	74,215	44,469	1,554,667	2	2,640	1,631,523
1936	2,133	73,705	30,519	1.067.680	2	2.730	1,144,117
1935	2,103	72,718	45,103	1,578,635	5,375	84,250	1.740,979
1954	1,119	36,274	52.678	1,140,764	7.179	2,454	1,186,671

Table 16 - AVERAGE COMMERCIAL RATIO OF SILVER TO GOLD FOR EACH SPECIFIED YEAR SINCE 1700 (Supplied by United States Mint)

ear		Year		Year	
700	14.81	1900	53.35	1933	59.06
750	14.55	1905	33.87	1934	72.49
800	15.69	1910	38.22	1955	54.19
850	15.70	1915	40.48	1936	77.09
875	16.64	1920	20.29	1937	77.44
880	18.05	1925	29.78	1938	80.39
885	19.41	1930	53.74	1939	88.84
890	19.75	1931	71.25	1940	100.65(x)
895	31.60	1932	75.29		

<sup>(</sup>x) Estimate based on Canadian prices.

Table 17 - WORLD'S MONETARY STOCKS OF GOLD AT THE CLOSE OF 1937, 1938 and 1939 (Subject to revision)

(Compiled by the United States Mint from available data

	(St	tated in Uni	ited States money	)		
	Total		Total		Total	
Country	Gold Stock	Per	Gold Stock	Per	Gold Stock	Per
	Value, 1937(e)	capita	Value, 1938(e)	capi ta	Value, 1939(e)	capita
	\$	\$	\$	\$	\$	\$
United States (d)	12,760,151,000	99.04	14,511,124,000	111.04	17,643,577,000	153.17
Canada	183,603,000	16.51	193,088,000	17.23	206,223,000	18.55
Argentina	469,421,000	36.78	431,561,000	33.30	466,000,000	56.51
Belgium	597,070,000	71.67	728,104,000	86.82	607,140,000	72.85
Denmark	53,451,000	14.26	53,366,000	14.07	53,083,000	14.10
France	2,566,425,000	61.18	2,430,376,000	57.89	2,708,878,000	64,64
Germany	28,491,000	0.42	28,543,000	0.36	40,118,000	0.59
Great Britain	3,141,485,000	66.43	2,696,043,000	56.78	10,314,000	0.22
Italy	210,253,000	4.87	192,885,000	4.43	144,000,000	3,29
Netherlands	929,542,000	107.45	994,525,000	113.96	690,128,000	79.92
Norway	81,764,000	28.12	93,598,000	32.04	93,916,000	32.31
Poland	82,611,000	2.39	84,541,000	2.41	85,000,000	2.46
Portugal	68,653,000	9.40	68,758,000	9.22	68,900,000	9.47
Roumania	120,780,000	6.15	132,791,000	6.69	151,606,000	7.72
Russia (Soviet Union)	(a)	(a)	(a)	(a)	(a)	(a)
Spain	525,000,000	21.13	525,000,000	21.00	525,000,000	21.13
Sweden	244,685,000	38.93	321,119,000	50.89	308,117,000	49.02
Switzerland	648,203,000	154.96	699,095,000	166.06	548,580,000	131.45
British India	275,014,000	0.74	274,578,000	0.76	274,472,000	.81
Japan (including Chosen,						
Taiwan, Kwantung)	261,390,000	2.56	163,476,000	1.59	163,570,000	1.61
Netherlands East Indies.	(c) 79,338,000	1.20	79,552,000	1.18	89,930,000	1.40
Egypt	54,781,000	3.43	52,229,000	3.26	52,500,000	3.30
Australia	3,435,000	0.50	3,435,000	0.50	4,200,000	0.61
New Zealand	23,086,000	14.55	23,086,000	14.39	23,086,000	12.04
Union of South Africa	194,360,000	19.09	229,357,000	23.19	250,451,000	2.13
Other countries	(a)718,611,000		746,510,000	• • •	724, 292,000	
TOTAL	24,322,103,000	(b) 11.75	25,757,240,000	(b) 12.46	25,933,081,000	(b) 12.71

<sup>(</sup>a) Russian data omitted because of indefiniteness or unavailability.

<sup>(</sup>b) Population figures are principally from Yearbook of the League of Nations, 1937-38-39.

<sup>(</sup>c) January 1st, 1938. (d) Includes Alaska, Hawaii and Puerto Rico.

<sup>(</sup>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.

Cable 18 - CANADIAN GOI				of fine ounces)	dom st
	Dominion Notes	Chartered Bank	Postal Sav-	Free Gold Bal-	TOTAL
December 31	on Statutory	Gold in Canada	ings Bank	ance of Minister	GOLD
	Reserve	(1)	Reserve	of Finance	STOCK
.925	6,506	3,014	154	9	9,683
.926	6,187	3,115	150	9	9,461
927	6,039	3,067	147	138	9,391
.928	4,152	2,961	141	221	7,475
.929	2,841	2,675	124	82	5,722
.950	4,398	2,612	117	140	7,267
951	2,944	2,467	113	133	5,707
952	3,395	2,056	109	29	5,589
953	3,326	1,814	111	44	5,295
934	3,183	1,822	107	285	5,397
	Bank of Canada				
	Gold Reserve				
935	5,158	1	105	136	5,400
936	5,159	2	104	119	5,384
937	5,160	2	106	55	5,323
938	5,285	2	109	93	5,487
939 (a)	5,886	2	111	129	6,128
940	-,	DATA NOT PUB	LISHED - (See be	elow)	

(a) December 30, 1939.

The following is an excerpt from an announcement made April 30th, 1940 by the non. J. L. Halston, Canadian Minister of Finance at that time:

"As part of the requisitioning of foreign exchange resources, the large gold and exchange reserve of the Bank of Canada is being transferred (May 1st, 1940) to the Foreign Exchange Control Board and the minimum gold reserve requirement for the Central Bank is being discontinued. In normal times, it is essential that a central bank should maintain a substantial reserve of gold and foreign exchange, for if it does not do so, it is not well equipped to face an emergency. It will be recalled that in his last Annual Report, the Governor of the Bank of Canada referred to the fact that during the previous three years the gold and foreign exchange holdings of the Bank had been increased in order to have additional resources readily available in case of war. The war emergency is now with us, and the institution of foreign exchange control makes it desirable to bring together, in one central fund, the gold and foreign exchange reserves of Canada. The transfer of the Bank of Canada's gold and foreign exchange holdings to the Exchange Fund, which is now being operated by the Foreign Exchange Control Board, subject to the directions of the Minister of Finance, forms part of this program.

"It will be recalled that shortly after the outbreak of war, similar action was taken by the British Government. On September 6, 1939, gold held by the Bank of England was transferred to the Exchange Equalization Account and the foreign exchange balances of British nationals, including the Bank of England, were requisitioned, and transferred to the said account.

"The Foreign Exchange Control Board will, as part of the transfer procedure be purchasing some \$250 millions of gold and foreign exchange from the Bank of Canada, plus the foreign exchange which will be sold by other Canadian residents."

	Dominion and	Circulation	Total Notes	Subsidiary	Subsidiary	Circulating
Tear	Bank of Canada	of Bank Notes	in Hands of	Coin Out-	Coin in Hands	Media in Hands
	Notes /3	/3	Public /1/3	standing	of Public	of Public
			(Millions	of Dollars)		
1919	508.0	218.9	217.0	28.77	22.97	239.97
1923	240.9	170.4	160.1	30.23	24.43	184.53
1928	190.0	168.9	180.3	30.04	24.24	204.54
1929	204.4	178.5	191.5	32.26	26.46	217.96
1951	155.1	142.0	156.7	32.83	27.03	135.73
1955	179.2	130.4	149.8	53.27	27.47	177.27
1954	190.5	135.5	155.7	33.70	27.90	183.60
1955	127.5 /2	125.6	165.9	33.67	27.87	193.77
1956	105.5	119.5	179.9	34.00	28,20	208.10
1937	141.1	110.5	199.1	55.29	29.49	228.58
1958	161.1	99.9	203.7	56.65	30.97	234.67
1959	184.9	94.1	218.1	38.87	55.18	251.28
1940	277.1	91.1	294.1	45.05	39.15	353.25

<sup>(1)</sup> Including gold coin deposited in the Central Gold Reserves.

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#### Footnotes to Table 19

/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 date.

Table 20 - DEPOSITS IN CANADA, AVERAGE OF MONTHLY DATA FOR YEARS SPECIFIED

Notice Deposits	Deposits	Deposits	Deposits	Sum of
7 705 0			neboar ca	Deposits
1,125.2	621.7	181.8	22.0	1,950.7
1,197.5	523.2	50.6	34.2	1,805.3
1,340.6	553.5	31.3	21.6	1,946.8
1,479.9	696.4	77.8	24.5	2,278.6
1,438.0	578.6	49.0	24.4	2,089.9
1,378.5	488.5	58.8	25.2	1,929.0
1,372.8	514.0	35.1	30.8	1,952.6
1,445.3	568.6	25.5	39.3	2,078.7
1,518.2	618.3	57.8	39.3	2,213.7
1,573.7	691.3	47.2	42.7	2,354.9
1,630.5	690.5	49.2	44.9	2,415.1
1,699.2	741.7	92.3	53.5	2,586.7
1,646.9	875.1	165.4	65.6	2,749.0
	1,197.5 1,340.6 1,479.9 1,438.0 1,378.5 1,372.8 1,445.3 1,518.2 1,573.7 1,630.5 1,699.2	1,197.3 523.2 1,340.6 553.3 1,479.9 696.4 1,438.0 578.6 1,378.5 488.5 1,372.8 514.0 1,445.3 568.6 1,518.2 618.3 1,573.7 691.3 1,630.5 690.5 1,699.2 741.7	1,197.5 523.2 50.6 1,340.6 553.5 31.5 1,479.9 696.4 77.8 1,438.0 578.6 49.0 1,378.5 488.5 38.8 1,372.8 514.0 35.1 1,445.3 568.6 25.5 1,518.2 618.3 37.8 1,573.7 691.3 47.2 1,630.5 690.5 49.2 1,699.2 741.7 92.3	1,197.3 523.2 50.6 34.2 1,340.6 553.3 31.3 21.6 1,479.9 696.4 77.8 24.5 1,438.0 578.6 49.0 24.4 1,378.5 488.5 38.8 23.2 1,372.8 514.0 35.1 30.8 1,445.3 568.6 25.5 39.3 1,518.2 618.3 37.8 39.3 1,573.7 691.3 47.2 42.7 1,630.5 690.5 49.2 44.9 1,699.2 741.7 92.3 53.5

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

Table 21 - ANNUAL AVERAGE INDEXES OF FIVE CANADIAN ECONOMIC FACTORS, WITH SEASONAL ADJUSTMENT WHERE

NECESSARY, 1934 - 1940

		Physical			
Year	Bank Debits	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
937	117.5	122.7	119.3	84.5	127.0
.938	101.8	112.9	111.2	78.6	104.1
.950	104.0	122.4	112.3	75.4	100.5
1940	113.4	145.4	155.4	82.9	84.9

#### PRICE MOVEMENTS, CANADA, 1940 (Internal Trade Branch - D.B.S.)

Wholesale and retail prices moved gradually higher during 1940 in continuance of an advance dating from the outbreak of war. The 1940 increase of 4.0 per cent in the cost of living index was slightly in excess of the wholesale price index increase of 3.1 per cent. However, from August 1939 to December 1940, the general wholesale price index rose 16.5 per cent as compared with 7.1 per cent for the cost of living index.

WHOLFSALE PRICE INDEX NUMBERS MARKING PEAKS AND DEPRESSIONS SINCE 1913

(1926 = 100)							
	1915	1920	1922	1929	1932	1937	Dec. 1940
General Wholesale Index	64.0	155.9	97.3	95.6	66.7	84.6	84.2
Raw and Partly Manufactured Goods	63.8	154.1	94.7	97.5	55.0	84.5	76.2
Fully and Chiefly Manufactured Goods	64.8	156.5	100.4	93.0	69.8	80.5	83.2
Producers' Goods	67.7	164.3	98.8	96.1	62.4	86.1	79.3
Consumers' Goods	62.0	136.1	96.9	94.7	71.3	79.5	85.2
Canadian Farm Products	64.1	160.6	88.0	100.8	48.4	87.1	67.1
Imports	73.0	158.8	100.4	94.2	70.5	89.8	98.0
Exports	64.7	158.1	94.7	92.2	54.9	81.1	72.0

#### COST OF LIVING (1935-1939 - 100)

According to the Bureau's new cost of living index on the base 1935-1939 = 100, living costs advanced 4.0 per cent during 1940. The index of 108.0 for December 1940 compared with 103.8 and 100.8 for December and August 1939, respectively. While all constituent groups contributed to the 1940 increase, the greatest advance was noted for the clothing group which rose 9.9 per cent to an index level of 113.5; home furnishings mounted 6.3 per cent to 110.7. Since August 1939 indexes for these two series have advanced 13.4 per cent and 9.7 per cent respectively. The retail food price index rose 4.2 per cent in 1940, compared with a 9.9 per cent increase since August 1939, while residential rentals advanced 3.2 per cent and 3.8 per cent in these same intervals. The December 1940 fuel and lighting index was 9.6 per cent above the August 1939 level, of which 2.9 per cent was added in 1940. Showing the smallest net advance, by December 1940 an index of miscellaneous items had moved up only 1.5 per cent over pre-war levels, with about one-half of this amount added since December 1939.

Table 22 - SECURITY PRICE INDEX NUMBERS, 1930 - 1940

		(1926	= 100)				
			Canadian Stocks				
	(a) Indu	strials and Util:	ities (Common)	(b)	Mi	nes	Dominion of
Month	Common Stocks Total	Industrials	Utilities	Mines Total	Gold	Base Metals	Canada Long Term Bond Yields
1950 - December	103.1	120.5	104.7	59.2	57.8		93.9
1931 - December	64.8	74.3	59.3	59.0	59.0		111.7
1932 - December	52.2	58.9	45.7	63.1	62.7		100.6
1933 - December	75.3	111.4	47.8	105.1	100.4	127.1	96.0
1954 - December	86.2	125.6	47.5	124.9	124.7	129.6	74.6
1935 - December	107.4	178.2	50.1	133.6	116.9	201.7	78.5
1956 - December	129.2	212.8	62.8	167.7	131.3	317.8	67.2
1937 - December	103.7	167.7	49.5	134.3	115.5	213.1	72.0
1938 - December	106.8	179.4	44.0	159.0	121.6	313.0	67.7
1939 - December	101.2	165.3	45.7	142.4	105.0	298.0	75.1
1940 -							
January	99.7	162.1	45.7	144.7	107.3	298.8	74.4
February	99.0	161.1	45.3	137.9	101.8	288.1	73.4
March	99.1	159.2	47.1	132.6	96.5	281.8	73.4
April	97.0	154.8	47.1	130.7	95.7	276.7	72.4
Мау	80.4	125.8	39.4	106.8	79.6	221.1	71.8
June	71.9	111.5	55.8	90.9	67.9	186.6	73.0
July	72.5	113.9	35.5	92,9	69.6	187.7	72.8
August	76.0	119.6	37.1	101.8	76.0	209.0	72.0
September	83.2	132.9	39.3	111.1	83.4	227.3	71.3
October	81.4	129.6	58.8	113.6	85.8	228.0	71.0
November	81.7	129.6	39.4	118.2	89.8	236.0	70.5
December	77.1	119.8	38.5	115.0	88.2	224.8	69.8

# TORONTO STOCK EXCHANGE (J. Scott Rattray - Statistician)

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.

	Total gold	Quoted	Number	Total value	Total number
	shares	market	of	of all	of all
	issued	values	issues	stocks	issues
		*		\$	
941-					
pril	345,981,649	453, 437, 387	117	8,536,711,993	533
larch	343,262,307	467,260,612	116	3,672,749,488	530
ebruary	545, 267, 707	468,503,517	116	3,595,573,831	529
anuary	541.970.802	485,611,851	115	3,785,363,418	528

Table 25 - (Concluded)					
	Total gold	Quoted	Number	Total value	Total number
	shares	market	of	of all	of all
	issued	values	issues	stocks	issues
		\$		*	
1940-					
December	541,215,292	509,227,164	115	3,818,056,375	529
November	340,763,552	502,696,791	115	3,882,154,669	529
October	340,173,552	485,988,056	115	3,917,141,005	550
September	538,114,669	463,109,992	114	3,963,214,091	529
Anmet	SEO ONE ONG	438 325 596	115	5.855.491 991	551

115

116

116

116

115

114

3,686,112,054

3,396,623,798

3,536,504,797

4,505,396,985

4,683,895,556

4,726,439,592

4,670,727,958

551

531

530

529

533

531

551

411,916,725

351,490,935

383,965,534

523,634,090

544,341,941

542,315,038

563,014,431

NOTE - Subject to revision.

July .....

June ......

March .....

February .....

January ......

339,443,936

339,423,936

342,288,436

342,132,120

341,355,453

355,926,985

333,422,035

# PRICE ACTION OF CANADIAN GOLD SHARES DURING 1940 AND THE FIRST FIVE MONTHS OF 1941

(By Gordon R. Bongard, President, The Toronto Stock Exchange)

Canadian gold mines continued to increase production values in 1940 and the first five months of 1941 in contrast to a reduction in market valuation of shares of the gold mining companies listed on the Toronto Stock Exchange.

During the period the market was dominated entirely by the war. The first major market swings came in early 1940, reversing the uptrend which had got under way following the outbreak of war. As reflected by the Toronto Stock Exchange index of 20 representative gold issues, the golds had climbed from just over the 100 mark in the previous September to 125 by the beginning of January.

It was at this time that market interest was centered on the First War Loan and trading volume suffered accordingly. In addition, the effects of the Foreign Exchange Control regulations became apparent in restricting the free flow of international trade in securities, although the golds had as an incentive an increase in the bullion price to an all-time high of \$38.50 per ounce through the decline in the Canadian-American dollar exchange rate.

February witnessed a slow but steady decline which continued into mid-March, when the golds rallied from a low of 108.00. The rally was short-lived, although action in the lower priced golds stepped up the share volume following encouragement in the way of repeal of the famed Quebec "Bill 5" and the Federal Government freeing prospectors and syndicates from income tax restrictions.

Invasion of Norway and Denmark brought additional repercussions to the markets and by the beginning of May the gold index figure receded to around 107.00. For a time the golds held at this figure, buoyed by indications that the excess profit tax would be revised. A fair volume developed and the stocks of certain gold camps improved when the attack on Holland and Belgium precipitated a selling wave which carried the gold index to a new low for seven years around the 85 mark.

Invasion of the low countries left the June market debilitated with the volume at the low rate of 200,000 shares daily. The fall of France by the middle of June brought no fresh selling but bids were light and the gold index fell to beneath the 80 mark.

By July, the market had gotten over its fear-selling and the beginning of the second major market movement got under way. In the absence of activity, however, the improvement was scarcely noticeable in day to day fluctuations, but at the end of July a recovery of ten points had been made.

After hesitating for a week or so, the upward movement was resumed in August, although the daily improvement continued indiscernible due to the lack of volume. Contributing to the lack of activity was the fear of an invasion attack against England, and in September the market had a reaction of about five points, when it was announced that a German invasion fleet had been dispersed by a gale along the channel ports.

Gold

The market soon recovered and continued upwards in early October. The initial bombing of London by German planes at this time had little or no depressing effects marketwise. The end of October saw the gold index figure above the 100.00 mark and the figures passed that of the industrials for the first time in two years.

The lag in the gold index compared to the industrial had at times run to nearly 15 points. Street appreciation that taxation would possibly hit the industrial companies harder than gold mining, the high yields indicated on gold stocks, which averaged more than 14 per cent in July against less than 7 in the industrials, and the regaining of confidence in gold as a basis of international trade, all tended to bring attention to gold shares at this time. In addition, the mines were not affected as were the industrials by the repatriation of British held Canadian securities limiting the available funds for investment. Actually, gold shares had little or none of this situation to contend with since their financing has been prectically all done with either Canadian or American capital.

The recovery movement in the golds reached its peak at above the 112.00 mark in November. From August to November the market had witnessed great activity in such issues as Broulan Porcupine Mines and Upper Canada Mines. These two issues in particular more than tripled their lows for the year made in June and dwarfed other market movements. Reason the the rapid advances was that both companies entering production during a depressed market had indicated earnings of about a third of their earlier price levels.

Throughout December and January the gold index hovered between the 100 and 110 mark with the market drifting about undecidedly in spite of the success of the British forces in Africa against the Italians. By February the index figure sagged beneath 100 followed by a partial recovery in March. This March recovery was helped by the signing of the Lend-Lease Bill by President Roosevelt. At the end of March the golds, in common with the balance of the list, were inclined to sag and this movement was extended in early April when the Axis powers declared war against Yugoslavia and defeated the Greeks.

The Federal Budget and the provisions being made for the third War Loan further reduced trading in May. There was not even the limited speculative interest and marginal trading of the previous year to help volume, while the board seemed utterly impervious to any kind of news. As a result, turnover declined to figures comparable with the 1931 depression days, while movements were confined to the smallest of fractions, the gold index hovering around the 97.00 mark as against 101.00 at the beginning of 1941.

## TREND IN EMPLOYMENT (General Statistics Branch - D.B.S.)

#### General Summary

The year 1940 witnessed an unprecedented expansion in industrial employment in the Dominion, a continuation and intensification of the upward movement that had its inception late in 1959 and, apart from seasonal fluctuations, is expected to gain momentum in the months to come as the result of the development of Canada's war effort. The situation in 1930 had shown considerable variation, the index rising from a rather low level in the winter and spring, to a position at the end of the year that was higher than in any preceding December; nevertheless, employment in 1939, despite the sharply upward curve in the latter months, averaged only slightly higher than in 1938, while the index was fractionally lower than in 1937, being also several points below the 1929 average, the maximum in the period of observation prior to the year under review.

The seasonal curtailment indicated, as usual, in the early months of 1940 affected many workers, but did not suffice to lower the index in the first quarter from its favourable position in relation to the same period in any earlier year of the record. From April 1, the trend was uninterruptedly favourable, the rate of improvement accelerating as the year progressed. This resulted in the establishment of successive new all-time peaks from August 1 until November 1; at the latter date the index at 139.2, was 19.8 per cent higher than at the opening of the year, and 12.6 per cent above the figure for the same month in 1939. It also exceeded by 8.9 per cent the previous maximum figure of 127.8 at August 1, 1929.

At the beginning of December there was a very slight seasonal recession, which reduced the index to 139.1; this falling-off, however, compared favourably with the average decline of 1.8 per cent between November and December in the experience of the years, 1921-1939. The 1926 average is taken as 100 in calculating the index numbers of employment.

The industrial activity indicated during 1940 raised the employees of the co-operating establishments by almost one-fifth from January 1 to December 1, a proportion greatly exceeding that shown in any other twelve months in the twenty years for which information is now available; the average change from the beginning of January to the first of December in the period, 1921-1939, was 8.1 per cent.

<u>Gold</u> - 23 -

#### Mining

The trend in mining as a whole was upward in eight months of 1940, when employment was in rather greater volume than in 1939, the previous maximum for this record; the annual index was 168.4, compared with 163.8 in the preceding year.

In <u>coel\_mining</u>, the index averaged 91.3, or slightly above the 1939 figure of 89.5. The labour force of the 105 co-operating operators included 25,064 workers in 1940, as against a mean of 24,584 employees in 103 mines in the preceding year.

Employment in the extraction of <u>metallic ores</u> generally was greater than in 1939, or any other year for which statistics are available; the annual index, at 350.9, was a few points above the average of 543.1 in the preceding twelve months. The index varied between 342.4 at January 1, and 354.9 at June 1. The staffs of the 210 reporting firms averaged 43,983 during the year under review, compared with 42,548 in 253 mines during 1939. War-time demands 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, afforded more employment in 1940 than in any earlier year since 1920. The index averaged 142.6, or 5.1 per cent above the 1939 figure of 135.7. An average payroll of 9,571 persons was employed during 1940 by the 103 co-operating firms, while those reporting in the preceding year had a mean of 9,052. Quarries and other divisions coming under this heading recorded a rather better situation.

#### Gainfully Occupied

The procurement of the man-power essential to the effective prosecution of the war is at present a matter of major importance in the countries immediately involved in the struggle, and only less so to the neutrals with vital interest in its outcome; the recruitment of labour is a problem of especial concern in the democratic countries, where the preservation of the standard of living and the protection of adolescents and of women workers has in the past taken precedence over the production of the instruments of destruction. The expansion of the war effort in the Dominion will make demands upon reserves of labour which hitherto have scarcely been tapped, and the mobilization of this essential man-power is receiving considerable attention. A comparison of the proportions of the gainfully occupied in Canada and other countries may therefore now be timely, in view of the public interest in the matter.

The effect of differences in age composition on the average percentage gainfully occupied has been eliminated by the International Labour Office by the method of standardising rates. The following table shows the standardised percentages of gainfully occupied in certain countries, indicating the proportions which would be gainfully occupied in each country, had sex and age distribution been the same as in Great Britain, which was taken as a standard. The results show only small differences between the crude and the standardised percentages, except in the case of Japan, which occupies a much higher rank in the standardised than in the crude figures. If the true rank is desired, the International Labour Review, in concluding its article, advises the use of the standardised figures in preference to the crude.

# Table Published by the International Labour Office Showing Crude and Standardised Percentages of Population Gainfully Occupied, in 16 Countries

	Gainfully Occupied						
Country	Standardised Percentage 2/	Crude Percentage	Difference (Standard - Crude)				
Great Britain	47.0	47.0	0.				
Canada	39.2	57.9	1.3				
Australia	43.2	43.3	- 0.1				
United States	40.8	39.8	1.0				
Sweden	47.6	47.1	0.5				
Switzerland	47.7	47.8	- 0.1				
Estonia	58.5	59.1	- 0.6				
Japan	52.6	46.0	6.6				

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#### Table Published by the International Labour Office Showing Crude and Standardised Percentages of Population Gainfully Occupied, in 16 Countries

	Gainfully Occupied						
Country	Standardised Percentage 2/	Crude Percentage	Difference (Standard - Crude)				
France	52.0	52.4	- 0.4				
Belgium	44.7	46.3	- 1.6				
Netherlands	42.4	40.1	2.3				
Norway	48.3	45.5	2.8				
Czechoslovakia	48.3	47.5	0.8				
Denmark	46.0	45.2	0.8				
Germany	48.8	49.4	- 0.6				
[taly	43.5	43.2	0.3				

1/ International Labour Review, May, 1940.

Table 24 - STRIKES AND LOCKOUTS IN CANADA, BY INDUSTRIES, 1939 and 1940 (Department of Labour)

	1 9 3 9 :					1 9 4 0					
		Workers	involved Time lost :				Workers	involved	Time	Time lost	
	Number of dis- putes	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	70	0.1	210	0.0	1	50	0.1	200	0.1	
Fishing and trapping	1	15	0.0	40	0.0	5	1,855	3.1	12,070	4.5	
Mining, etc.(1)	50	31,333	76.4	122,074	54.4	70	31,652	52.2	76,303	28.6	
Coal mining	(48)	(31,102)	(75.8)	(111, 274)	(49.5)	(65)	(31, 223)	(51.5)	(68,734)	(25.8)	
Manufacturing	43	7,901	19.3	80,962	36.1	56	16,118	26.6	148.631	55.8	
Construction Transportation and	11	683	1.7	1,414	0.6	18	1,953	5.2	4,476	1.7	
Public Utilities	4	265	0.6	325	0.2	7	6.816	11.3	15,087	5.7	
Trade	4	563	1.4	18,964	8.4	4	1,404	2.3	6,668	2.5	
Service	8	208	0.5	699	0.3	7	771	1.2	2,885	1.1	
TOTAL	122	41,038	100.0	224,588	100.0	168	60,619	100.0	266,318	100.0	

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

Labour disputes in the mining industry during 1940 accounted for 70 of the 168 during the year, and involved over one-half of the workers in all disputes but resulted in slightly more than one-quarter of the time loss for the year. All of the disputes in this industry were in coal mining except five, two of which involved salt miners and the other three involved gold miners. One of these was at Pioneer Mines, B.C., carried over from 1939, one was at Golden City (Porcupine), Ont., and the other was at Val d'Or, P.Q. Several of the coal mining disputes were against working with miners of alien enemy origin. None of the mining disputes during the year resulted in great time loss and most of them were of short duration.

#### 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.

<sup>2/</sup> The population of Great Britain is used as standard. The percentages gainfully occupied in the different sex and age groups (15-19; 20-64;65 and over) in the different countries are applied to the standard population, giving a standardised average percentage from which the effect of varying age and sex composition of the population in the various countries has been eliminated.

The domestic gold currency of Canada, as at present authorized by the Currency Act, consists of \$20, \$10, \$5 and \$2-1/2 gold pieces, 900 millesimal fineness (only \$10 and \$5 heve 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, 9/10ths 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 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, 3-1/2 cents the ounce.

  Over 10 per cent but not over 15 per cent base metal, 4-1/4 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 ownce 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 Covernment 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.

#### Order in Council P.C. 1621 - March 6, 1941

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. 598 dated February 12, 1940, 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, 1940.

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, 1941, unless sooner rescinded by Order in Council.

#### INCOME TAX EXEMPTION TO NEW MINES

With a view to stimulating exploration and development of mineral resources in Canada, certain exemptions from income tax are granted to new or re-opened mines coming into production. An amendment to the Income Tax Act, made in May, 1936, provides that any metalliferous mine coming into production between May 1, 1936, and January 1, 1940, shall 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, shall determine which mines, whether new or old, qualify for this exemption, and a certificate will be issued accordingly. General regulations covering depletion allowance to precious metal mines are unchanged from the previous year and remain on the basis of 33 1/3% for mining companies, with the allowance in the case of dividends received by shareholders standing at 20%.

In the 1939 session of Parliament an emendment 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. Provision was also 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 above 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 the exempting emendment here mentioned 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.

The above mentioned three-year exemption from income tax has been and is available only to new or reopened mines. The 1939 income tax amendments, however, now offer an important and far reaching tax credit to the mining industry as a whole under provisions which are applicable generally to all taxpayers. Briefly stated, the new provisions offer a credit against income tax up to 10% of any capital expenditure undertaken by the taxpayer in the period May 1st, 1939 to April 30th, 1940, the credit to be taken in three equal annual instalments.

An act to amend the Income War Tax Act was assented to on September 13th, 1939. The Act was further amended in the 1940 Spring Session of Parliament.

A copy of Bill 104 —The Excess Profits Tax Act, 1940—is contained in the Dominion Bureau of Statistics Gold Mining Report for 1959. Bill 78, an Act to amend Bill 104 referred to above, was passed by the House of Commons on May 26, 1941. A copy of Bill 78 is shown at the end of this report.

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 suggested 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.

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"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 limites, 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."

#### THE ALLUVIAL GOLD MINING INDUSTRY, 1940

In 1940, 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 139,306 ounces of crude gold were recovered from Canadian alluvial deposits in 1940. Of this production, 87 ounces came from Saskatchewan, 271 ounces from Alberta, 39,067 ounces from British Columbia and 99,881 ounces from Yukon. In addition to crude gold recovered, there were 24 ounces of platinum obtained in 1940 from alluvial deposits in British Columbia.

QUEBEC - During 1940 the Appalachian Mining Syndicate completed 120 feet of trenching on a property located near Stratford Centre; the trenching was reported as 12 feet deep and 10 feet wide and the work was conducted in the months of June and July. Embergold Mines Ltd. was active from January 1 to June 30; this Company is developing properties in Ditton and Emberton Townships, Compton County, and reported both surface and underground operations on Lat. 14, Range 10, Ditton Township. In Compton Township a portable placer testing machine was purchased by Moe River Gold Mines Ltd. and numerous test pits and trenches were dug and land cleared by the Company. On Lat. 11, Range 5, Westbury Township, Compton County, trenching was carried on by W. A. Davis and approximately 5 ounces of gold were recovered.

ONTARIO - Placer mining operations in Ontario in 1940 were restricted to the sampling of deposits by the Onwatin Placer Mining Syndicate Ltd. Ground explored by this Syndicate is located in Beulah, Hutton, Parkin and Norman Townships in the Capreol District. No commercial production was reported.

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 verying success, though most of the gold has been

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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.

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.

In 1940 official returns were made to the Deminion Bureau of Statistics by approximately 114 operators who reported 351 employees and the distribution of \$557,685 in salaries and wages. Consumption of fuel and process supplies amounted to \$82,303. The value of crude gold production was \$1,191,543 compared with \$1,454,573 in 1939. The quantity of sands and gravels treated during the year under review was estimated at 7,936,685 cubic yards; equipment employed in mining included hydraulic jets (monitors-giants), gasoline shovels, drag lines, steam shovels, tractors and land dredges. Material worked included bench gravels, river gravels, glacial deposits, tertiary channels and tailings. Operations were conducted both at the surface and underground.

YUKON - The following is from the Annual Report of G. A. Jeckell, Controller of Yukon Territory, for the fiscal year ending March 31st, 1941:

"The amount of placer gold mined during the year in the Territory on which royalty export tax was paid was 98,138.61 ounces, produced as follows: Dawson District, 95,293.07 ounces; Mayo District, 1,938.5 ounces; Whitehorse District, 907.04 ounces. The royalty collected was \$36,302.34. The gold production was 9,939.28 ounces less than for the previous year.

"In the Dawson District, one hundred and seven new placer location grants, forty-five relocation grants and two thousand three hundred and twenty-five renewal grants were issued, representing two thousand four hundred and seventy-seven placer 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 fourteen new placer location grants, seven relocation grants, and ninety-four renewal grants were issued, making one hundred and fifteen placer claims in good standing. Applications were received in the mining recorder's office for twenty-one placer prospecting leases covering forty-two miles of ground.

"In the Whitehorse District, fourteen new placer location grants and twenty-six renewal grants were issued, making forty claims in good standing. Applications were received in the Recorder's Office for ten prospecting leases covering eighteen miles of ground.

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

"The hydro-electric plant of the Yukon Consolidated Gold Corporation Limited, on the North Fork of the Klondike River, was operated for the entire year and generated a total of 36,991,700 kilowatt hours, an increase of 10% over the previous year. Approximately 85% of the output was used by the Company in connection with placer mining operations and the balance sold to the Dawson City Utility Companies. During the season the power ditches of the Company aggregated 22 miles in length and were maintained in first class condition. Hydraulic muck stripping operations were conducted during the summer season at eight large plants; the yardage removed was about 14% higher than during the preceding years; a total of \$229,530 was expended on stripping operations, an average of 5.34 cents per cubic yard. Cold water thawing operations were continued at six plants formerly operated and a new plant on Middle Hunker was operated for the entire season. Nine dredges were operated by the Company for the entire season and a tenth dredge, No. 4, was operated until July 6th when it was shut down and dismantled after completion of mining in the Arlington Area at the mouth of Hunker Creek. Due to a combination of favourable conditions and an early breakup, the dredges were able to start earlier than usual in the spring, and the last one started on April 29th, which is a record for the district. Dredging closed down on dates from November 2nd to January 1st. Prospecting drilling was resumed by the Company during the season, two drills being operated continually from early in April until the latter part of October.

"The Holbrook Dredging Company, in Receivership, operated a dreged on the Upper-Sixtymile River, commencing on May 15th and closing down on November 3rd, 1940. The dredge is diesel operated and equipped

with fifty-two four foot buckets. Operations were continued in 1940 on Miller Creek by Stewart and Campbell, and a few individual miners operated on Glacier Creek. On Clear Creek, in the Stewart River area, extensive operations were carried on by Canadian Placers Ltd.; new equipment included 2-Td-18 International Trac-Tractors: 1-10B Bucyrus Erie Dragshovel; and 1-37-B Bucyrus Erie dragline; ten camp buildings were erected and thirty-seven and one-half miles of road was constructed from the river landing at McQuesten Landing field to the mining camp on the left fork of Clear Creek; with Government aid the actual mining operations were started on September 13th and continued to October 13th, with very satisfactory results.

"In the Mayo District more extensive placer operations were carried on than formerly, particularly on Haggart Creek, Dublin Gulch and Highet Creek. Individual placer mining was generally on the increase throughout the Territory, and there was an increase in new locations and areas acquired under prospecting lease."

Table 25 - SUMMARY STATISTICS OF ALLUVIAL GOLD MINING IN CANADA, 1939 and 1940

		1 9 3 9		:	1 9 4 0	
	(d)British Columbia	Yukon (e)	(f) Quebec Saskat— chewan and Alberta	: (d)British : Columbia	Yukon (e)	(f) Quebec, Saskat- chewan and Alberta
umber of firms and individual						
operators (/)	89	6	(g) 2	114	7	(g) 4
Capital employed \$		7,746,017	(c)	1,562,172		
number of employees	361	465	(g) 4	351	472	(g)17
Galaries and wages paid \$		926,560	(g)1,432	557,685	1,104,145	18,949
lectricity generated for own	022,110	01.0,000	(6/2,202	001,000	1,101,110	20,010
use	1,346,927	30,218,700	•••	1,300	52,899,706	•••
K.W.H.	26,057	3,562,100	•••	• • •	4,091,994	•••
ounces	49.746	106,965	559	39,067	99,881	(a) 358
latinum recovered - ounces	25		M HEI	24		
alue of platinum recovered \$	840			938		
muantity of material handled -						
	4,779,407	11,152,198	2,300	7,936,685	11,551,170	•••
ength of ditches miles(b)	129	72		149	57	***
otal gross value of alluvial						
products	1,455,413	5,051,829	16,345	1,192,481	2,915,450	•••
(purchased)	44.771	74,921		45,284	92,030	654
rocess supplies used \$	30,535	60,075	(c)	59,022		764
ost of freight and express on dust, nuggets, bullion, etc.,			T 100 (200)			
shipped	2,487	33,050	(c)	1,887	40,741	•••
shipped	5,271	67,503	(c)	5,448	56,294	
Products\$		2,816,280	16,345	1,102,840	2,707,829	

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

<sup>(</sup>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.

<sup>(</sup>b) Includes flume; in use.

<sup>(</sup>c) Information not available.

<sup>(</sup>d) Value of crude gold in Canadian funds in 1939 was estimated to be \$29.24 per crude ounce. In 1940 it was \$30.50.

<sup>(</sup>e) Value of crude gold in Canadian funds in 1939 was estimated to be \$28.55 per crude ounce. In 1940 it was \$29.19.

<sup>(</sup>f) Value of crude gold in Canadian funds in 1939 was estimated to be \$29.24 per crude ounce. In 1940 it was \$30.50.

<sup>(</sup>g) Quebec only - data not available for Alberta and Saskatchewan.

ATTITUTAL COLD RECOVERED AND QUANTITY OF MATERIAL HANDLED (4) 1925 \_ 1940

	E	BRITISH COLI	MBI A			YUKO	N		
			Ounces	Value			Ounces	Value	Average
Year	Material	Gold	per	per	Material	Gold	per	per	value gold
	handled(x)	recovered	cu.yd.	cu. yd.	handled	recovered	cu.yd.	cu. yd.	per fine oz
38 377	cu.yds.	fine oz.	fine oz.	\$	cu. yd.	fine oz.	fine oz.	\$	\$
1925	(a)	13,181	(a)	• • •	3,103,892	47,817	0.0154	0.318	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	1,536,390	5,158	0.0039	0.0806	4,500,000	35,678	0.0079	0.1633	20.67
1930	224, 539	7,164	0.0319	0.6593	3,559,642	35,160	0.0099	0.2046	20.67
1931	1,587,271	15,741	0.0086	0.1853	4,914,638	44,061	0.0090	0.1939	21.55
1952	1,058,677	16,320	0.0155	0.3637	6,051,256	40,373	0.0067	0.1572	23.47
1955	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	34.50
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	34,711	0.0166	0.5815	8,067,159	50,192	0.0062	0.2172	35.03
1957	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	36.14
1940	7,936,685	32,128	0.0040	0.1540	11,551,170	79,905	0.0069	0.2656	38.50
TOTAL	36,725,963	346,582			97,452,421	740,560			• • •

<sup>(</sup>f) 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 necessitated estimates in order to obtain totals.

Table 27 - FUEL AND FLECTRICITY USED BY THE ALLUVIAL GOLD MINING INDUSTRY DURING 1940

Kind	Unit of measure	Quanti ty	Cost at plant
			8
Bituminous coal (a) From Canadian mines	short tons	***	
(b) Imported	short tons	4	237
Anthracite coal from other than United States	short tons	22	1,880
Coke (for fuel only)	short tons	7	706
Gasoline	Imp. gals.	89,606	48,501
Gerosene or coal oil	Imp. gals.	1,471	820
Fuel oil and diesel oil	Imp. gals.	132,897	41,605
Good (cords of 128 cubic feet of miled wood)	cords	3,922	42,201
Other fuel	•••		8
TOTAL			135,968
Sectricity generated (a) For own use	K.W.H.	32,901,006	
(b) For sale	K.W.H.	4,091,994	25,860

Table 28 -	- POWER	EQUIPMENT	INSTALLATION.	1940			
					Ordina	irily in	use
						eter a	

Description	Number of units	Total horse power	Number of units	Total horse power
Steam engines and steam turbines	5	76	5	90
Diesel engines	32	1,472	2	96
Gasoline, gas and oil engines, other than Diesel engines	70	1,389	8	56
Hydraulic turbines or water wheels	10	15,415	1	3
Electric motors - (a) Operated by purchased power	1	3		
TOTAL	118	18,355	16	245
(b) Operated by power generated by the establishment	270	14,596	38	5,848
Stationary boilers	4	46	•••	***

In reserve or idle

<sup>(</sup>x) Data partly conjectural.

<sup>(</sup>a) Not available.

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#### 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 Territories; 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 1940 totalled 428 compared with 455 in 1939; 80 in 1929 and 65 in 1923. During the year under review, there were 438 properties in operation compared with 474 in 1939; in 1940, 278 mines reported production as against 232 in 1939 and 35 in 1923.

The gross value of output for the entire industry and including the value of all recoverable metals, including gold, silver, etc., totalled \$178,790,485 in 1940 compared with \$160,014,172 in 1939. Of the 1940 total, \$122,675,051 were contributed by mines in Ontario, \$29,003,738 by mines in Quebec, and \$20,413,118 by the gold mines of British Columbia.

Employees in the lode gold mining industry totalled 31,405 compared with 30,622 in 1939 and 5,524 in 1923. Salaries and wages paid increased from a total of \$53,206,225 in 1939 to \$55,205,096 in 1940 and fuel and purchased electricity consumed by the industry during 1940 amounted to \$8,147,304 while the cost of explosives, drill steel and other process supplies used in the same period amounted to \$20,751,201.

Dividends paid during 1940, as computed from actual returns made by the lode gold mining industry, totalled \$39.431,890.

# MOVA SCOTIA GOLD MINING INDUSTRY, 1940 (J. P. Messervey, Inspector of Metal Mines & Quarries, Nova Scotia Department of Mines)

The Rehabilitation Project commenced last year in the Fifteen Mile Stream Gold District was continued throughout the year 1940. This project was cerried on jointly by the Department of Labor for Nova Scotia and the Federal Department of Labor to rehabilitate coal miners from the Thorburn area of Pictou County. All surface installations were completed early in the year and fairly extensive development work was carried out on the 90 foot level from the McLean shaft. This work along with the usual surface operations, including milling gave instruction and training to 140 men. Near the end of the year, straightening of the McLean shaft and sinking of the shaft to the 200 foot level was baing carried out. Exploration work on the 200 foot level is expected to commence early in February.

The Mine Apprentice Project carried on at Chester Basin for about three years was closed during the winter of 1940. The war situation definitely changed the necessity for training youths in the art of hard rock mining. The Project under normal conditions more than proved its worth and successfully trained hundreds of young men who were able to find immediate employment in the industry after completing thair training.

Guysboro Mines Limited continued another year of successful operations at Goldenville. Underground developments were confined to the 400, 500 and 600 foot levels. The establishment of a sorting and crushing station between the 500 and 600 foot levels underground was completed about the end of the year replacing the old plant on the surface. Final touches to the buildings on the surface were also completed.

At Goldboro, Seal Harbor Gold Mines Limited, continued mining and milling operations at the rate of 250 tons per day. The main inclined winze was sunk for a length of 300 feet from the 550 foot level to the 625 foot and 700 foot levels. Development work will be carried out on these levels during 1941 along with continued sinking of the winze to lower levels.

Also at Goldboro, the Victoria Gold Mines Limited commenced work on the Victoria mine during the latter part of the year. Mining equipment buildings were erected on the surface and treatment of ore in the ten stamp mill of the Seal Harbor Gold Mine was begun in December.

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The Consolidated Mining and Smelting Company carried on another year of successful operations at Caribou Mines. Stoping operations were confined to one above the 500 foot level. A new one body of extensive proportions was discovered and partially developed during the year.

Killag Gold Mines Limited carried on underground operations in the Killag Gold District for nine months of the year.

Avon Gold Mines Limited at Oldham carried out their original program and deepened the main inclined winze from the 675 foot level to the 925 foot level. Lateral development on the 550, 675, 800 and 925 foot levels was carried out.

Queens Mines Limited who commenced work in the Molega Gold District late in 1939 continued steady operations throughout the year. Original operations were carried out by a steam plant but this was supplented by hydro electric power which was brought into the district last spring. Underground developments have been carried out on the 200 foot level and an initial ball mill unit of 15 tons capacity was installed during the summer.

L. H. Douglas continued with small scale operations at Whiteburn during the year. This operation has carried on steadily for the past four years.

Interest in the development of the gold fields of the province has increased considerably.

#### NEW BRUNSWICK

(New Brunswick Department of Lands and Mines)

Gold prospects in Victoria County located on a road some fifteen miles from Wapske, and others on the Wapskehegan about three miles above the mouth of Sadler Brook were examined. The bed rock is well exposed by shallow pits. It consists of pinkish rhyolite with disseminated specks of pyrite, and of greenish diabase with specks and small vugs of pyrite. Four samples taken carried gold in quantities varying from 0.005 to 0.01 ounces per ton, and seven carried silver in quantities varying from 0.02 ounces to 0.06 ounces per ton. In most instances the samples represent large volumes of rock but the values were so low that further work was not encouraged.

# THE GOLD INDUSTRY IN QUEBEC IN 1940 (A. O. Dufresne, Deputy Minister)

The province of Quebec still holds second place among the provinces of the Dominion with a gold production (shipments) valued at \$39,169,361 from 1,017,586 ounces for the year 1940. This is an increase over the previous year of close to 7% weight, and 14% in value.

A total of 29 regular mines contributed to this production, all of which are located in that region extending 100 miles westward of Larder Lake to the Bell River. Of these mines, eleven produced over a million dollars in gold and six others were within 50% of that mark. In order of importance they are Noranda, Lamaque, East Malartic, Beattie, Sigma, Perron, Siscoe, Malartic Goldfields, Sullivan, Canadian Malartic, O'Brien, Powell-Rouyn, Belleterre, Sladen Malartic, Stadacona, Cournor and Wood Cadillac.

There are two main types of ores out of which gold is extracted. These are the "straight gold ores" and the "complex sulphide ore bodies". In the first type the gold is found in quartz or highly silicified gangue, and in the second it occurs in replacement lenses of iron, copper and zinc sulphides, out of which copper and zinc are also produced. The percentage of gold derived from deposits of the first type represents 74% of the total in 1940 against 72% in the previous year.

Staking of claims fell off about 40% from 1959 when the number of claims recorded totalled 8,781. In 1938 the number was 11,320 and during the record year of 1937 it was 18,641.

The Amm, Mooshla and Armtfield ceased producing during 1940, while Pandora and Senator-Rouyn registered their first production of bullion. However, in the case of Armtfield, the halt in production was only temporary, and the mill treated the Senator-Rouyn ore. (At May, 1941 Armtfield had resumed milling its own ore while Senator-Rouyn completed construction of a mill on its property).

ROUTN AREA - Aldermac, Noranda and Waite Amulet, (as also Normetal in the Desmeloizes Area) are the only gold producers working on complex sulphide ores. At Arntfield, from October 12th to the end of the year the mill was operated on a lease arrangement for the treatment of Senator-Rouyn ore, while development underground was pushed in a search for new ore bodies. Francoeur milled an average of 180 tons during the year.

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Underground development of No. 8 zone was carried out from the second level of the main zone. The new zone lies 800 feet North and had been tested in 1939 by diamond drilling. The McWatters mine increased the tonnage treated by about 30% for a daily average of 120 tons. A reduction in grade has resulted in a correspondingly longer life expectancy. At Powell-Rouyn No. 2 shaft was completed and reached a depth of 1,725 feet. At 1,900 feet south-east of it, No. 3 shaft was commenced with the object of mining a large body of low-grade siliceous ore. A 450 ton treatment plan was constructed and put in operation during September. Senator-Rouyn entered the class of gold producers; the ore was shipped to the Arntfield mill while construction of its own mill and plant additions were in progress. The Senator-Rouyn mill was in operation as scheduled in the latter part of April, 1941. The property of Stadacona-Rouyn continued operations during the year under a receivership. An average of 400 tons of ore were milled during the year.

<u>DUPARQUET AREA</u> - The <u>Beattie</u> mine is still the only producer in this area. The milling rate was maintained at 1,700 tons per day.

BOUSQUET-CADILLAC AREA - During the first six months of the year, 4,901 tons of high grade ore were shipped from the Mooshla to the Moranda Smelter. The Amm mine ceased to operate about July, but the mill was continued in operation by Pandora-Cadillac; its ore being trucked from the No. 2 and No. 5 shaft areas.

Central Cadillac also used motor transport for its ore, and 59,400 tons were thus sent to the Thompson Cadillac mill for treatment. In addition, 2,723 tons of Kewagama ore accumulated on surface from past development work were also hauled to the Thompson mill as a result of an arrangement between Central and Kewagama. The mill continued to operate normally at Lapa Cadillac with an average daily tonnage of 265 tons. At the O'Brien milling averaged 185 tons per day. Underground development is to be carried below the 2,000 foot level by an internal shaft. 90% of the mill feed at the Wood Cadillac came from the magnetite-jasper orebody; a total of 76,745 tons of ore were treated during the year.

MUD LAKE AREA - The only producer in this area was Belleterre, a subsidiary of McIntyre Porcupine Gold Mines Ltd. During the year 88,281 tons of gold ore were milled; the mill capacity having been increased from 200 to 500 tons per day.

MALARTIC AREA - A daily average of about 750 tons were milled at Canadian Malartic. This constitutes an increase over the 1939 average of 675 tons. Improved position in ore reserves will permit a plant capacity of 1,000 tons per day. At the East Malartic an average milling rate of 1,483 tons was maintained as against 969 tons per day in the previous year. Ore reserves are estimated at close to 2,500,000 tons grading \$6.45 in gold. The mill capacity at Malartic Goldfields was increased from 300 to 600 tons and it is expected that minor additions will bring it up to 1,000. For the year 1940 a total of 150,201 tons of gold ore were treated for a recovery of 55,942 ounces. Sladen Malartic milled an average of 650 tons of ore per day; underground development was carried out from the 350 foot level into National Malartic ground where 4,357 tons of development ore were taken out and treated in the Sladen mill.

DUBUISSON-BOURLAMAQUE AREA - Siscoe hoisted an average of 640 tons of ore per day out of which about 110 tons were sorted out and discarded as waste. A policy of outside exploration was carried out during the year and it is reported that forty-five prospects were examined. At Sullivan milling was maintained at a rate of 540 tons per day. An average of 1,218 tons of ore were treated daily at the Lamaque mine; No. 2 shaft was further deepened in April and at the year's end had reached a depth of 2,816 feet. The new hoist equipment at No. 2 shaft of Sigma was completed in the latter part of the year, and will be capable of handling over 1,000 tons to a depth of 3,000 feet. Milling operations during the year averaged 765 tons per day.

PASCALIS-LOUVICOURT AREA - During the year <u>Perron</u> deepened its No. 5 shaft another 800 feet, down six new stations to the 1,875 foot level. The daily milling rate averaged 385 tons. At the <u>Cournor</u> the mill treated 200 tons of ore per day. About two-thirds of this ore came from the adjoining <u>Beaufor</u> workings.

There was a good deal of activity in the field of exploration and development in practically all localities of Western Quebec. Several properties were examined under options or similar arrangements by Sullivan, Teck Exploration, Siscoe, Anglo Huronian, Inspiration, Toburn, Kirkland Lake, Howey, Consolidated Mining & Smelting, McIntyre and many others. Underground development was carried out at the Mic Mac, West Malartic, Central Mining, Kiena, Pascalis. At the Flordin in Desjardins Township work was done on the 200 and 350 foot levels, but operations were suspended in December. Drifting on the 200 foot level at Senore, next to the Perron mine, opened up four ore showings. Work was suspended in July, however. Underground lateral work and diamond drilling was reported at Lacoma until the month of June when operations were halted.

## GOLD MINES OF ONTARIO - 1940 (Maurice Tremblay - Ontario Department of Mines)

Gold Mines of Southeastern Ontario - The spurt of activity in the gold mining areas of southeastern Ontario which was manifested by the production of one gold mine and development work at two other properties in 1959, died down in 1940. At the Addington mine of Consolidated Mining and Smelting Company, the old mill was dismantled and pulled down. The same mother company which had operated the Cordova mine decided to shut down and abandon the property on July 30, 1940. This property milled 26,526 tons of ore, 2,071 of which came from surface dumps. The Cordova mill equipment moved to Yellowknife in the Northwest Territories. Steady operations on a small scale were carried on throughout the year by the Mayboro Milling Company which developed a property which was formerly part of the old Diamond mine. The main shaft was deepened 50 feet to a total depth of 156 feet and a second level was established at a vertical depth of 135 feet. The mill treated 160 tons of ore in November and December.

Gold Mines of Larder Lake Area - In this mining area which starts at the Quebec boundary and extends as far west as the Kirkland Lake area proper, activity centered at the three producing mines, Kerr Addison, Chesterville and Omega. Some development work was done at Cheminis Gold Mines Limited, but operations were suspended in August, 1940. Additions to the steel shop, electric shop and heating plant were made at the Kerr Addison Mines Limited, and a new steel and tile hoist house was built for the new 10-foot Nordberg hoist for the cage and skip assemblies. The mill capacity was increased in the latter part of the year in preparation for an eventual daily tonnage of 1,800 tons. In 1940 the lowest level under development was at 1,450 feet. Average mill tonnage at Kerr Addison was 1,221.6 tons. Chesterville Larder Lake Gold Mining Company erected a new tile and concrete hoist house for the C.I.R. double-drum 4" x 8" hoist acquired from Sylvanite Gold Mines. The mill and steel shop were enlarged. A new steel headframe was under construction at the end of the year and the average mill tonnage reached 600 tons per day.

Gold Mines of Kirkland Lake Belt - The Kirkland Lake area proper embraces Teck and Lebel Townships and parts of the Townships in the east, north and west. For convenience, adjoining areas in the district of Timiskaming (exclusive of the Larder Lake and Matachewan areas) are grouped together under the designation Kirkland Lake "Belt". The number 2 shaft at Macassa Mines Limited was sunk 1,195 feet to complete it to 4,070-foot depth, and stations were established at 3,000, 3,350 and thereafter at 125-foot intervals to 4,000 feet. The number 1 winze was sunk 450 feet to the 4,310 horizon and levels were established at 3,875, 4,000, 4,125, and 4,250 feet. The number 2 shaft is now connected to the main workings on the 3,000, 3,350, 3,475, 5,600 and 3,725 levels. Three residences and enlargements of the steel shops plus the construction of an iron and steel warehouse were added to the buildings already erected at the property. The lowest stoping level was at 3,725 feet. During 1940 the cross-cut from No. 1 winze on the 2,600-foot level was driven under the No. 2 main shaft at Kirkland Lake Gold. The shaft was raised to connect with the former sump below 2.475 feet and 45-foot sump was sunk below the 2,600-foot level where ore-pockets were installed. An ore-pass was also raised to the 2,475-foot level. In the No. 2 main shaft combination cages and skips were installed. Mill tonnage was maintained at 400 tons per day from the middle of the summer to the end of the year. There was nothing outstanding at Teck-Hughes Gold Mines, Limited. The mill treated 800 tons per day. At the Lake Shore Mine sinking operations at the No. 6 shaft were temporarily halted 50 feet below the 4,700-foot level. No. 4 shaft was sunk 1,434 feet to the 5,760 horizon and levels were established at 125-foot intervals from the 5,200-foot level to the 5,700-foot level. Sinking is continuing in 1941. A double-deck cage was installed in the fourth compartment of No. 5 winze, in balance with the counter weight in the manway at the Wright-Hargreaves mine. The hoist for the winze is on the 3,900-foot level. The fourth compartment in question was formerly a ventilation compartment. Development was spread over all levels except nine between the 200-foot level and the 6,300-foot level. The mill averaged 1,210 tons per day during the year. A new hoist with a capacity of 28,000 pounds and with a rope speed of 1,560 feet per minute equipped fully with safety devices was installed at the Sylvanite mine. Work was continued during the year on the No. 5 winze which is collared at the 3,150 level. A new 3,300 V. power cable was installed from surface down No. 2 shaft to the 3,150 level and to the No. 5 winze. It is expected that the winze will be sunk continuously to the 5,150 level. The mill treated an average of 580 tons per day during 1940 which constitutes an increase of 145 tons per day over the comparable period of 1939. After the sub-shaft was sunk 6,336 feet during 1940, levels were established at 125-foot intervals from the 1,975-foot level to the 2,475-foot level at the Toburn Gold Mine. A double-drum, 10,000 pound pull hoist was installed on the 1,080 level to serve the sub-shaft. A new steel headframe was erected over the main shaft and a new hoist room was built. The Company also purchased a new hoist similar to the winze hoist and a new time office and warehouse was erected. The mill treated an average of 163 tons per day over the year. Toburn also carried out some exploration at Federal Kirkland Mining Co. from their own workings. At the Amalgamated Kirkland Mines, Limited, property (formerly Kirkland Hunton Gold Mines) it was expected that the underground drive from the Macassa mine would reach the property by the end of 1941. Macassa was also driving underground towards the Casakirk Gold Mines Ltd. property. Surface exploration was done at the Miles Martin Kirkland Gold Mines under the direction of Kirkland Hudson Bay Gold Mines Ltd. During 1940 the No. 2 winze at Bidgood Kirkland Gold Mines, Limited, was sunk 174 feet and levels were established at 1,900 feet and 20-25 feet horizons. Several highgrade ore bodies were worked on the 900-foot horizon of the

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No. 2 workings after the winze there had been sunk 100 feet. The section in question is now connected with the 1,025-foot level. Average daily tonnage milled during the year was 138 tons. At the Upper Canada Mines' property where the average milling rate for the year was 183 tons per day, the shaft was deepened 252 feet and levels were established at 675 feet and 1,000 feet. Brock Gold Mines was also active during the period under review. A 3-compartment shaft was sunk 220 feet and a level was established at the 200-foot horizon. Prior to suspension of operations at the Anoki Gold Mines, the shaft at that property was deepened 254 feet to a depth of 754 feet and levels were established at 600 feet and 735 feet. There was very little development at the Omega Gold Mines, Limited property and outside of the installation of mill ventilation equipment, there was little new to report. The mill treated on the average 472 tons of ore per day. Some surface work only was done at Raven River Mines, Limited (Laguerre Gold Mines, Limited). Wolfe Lake Gold Mines, Limited, which is a reorganization of Lakeland Gold Mines, carried on minor operations. The No. 2 shaft was dewatered and sampled. No work was being done at the end of the year. Golden Gate Mining Company in the Goldthorpe-Swastika Section sunk its No. 2 shaft 349 feet and levels were established at 725, 850, and 975 feet. Mining of a flat vein on the Crescent Kirkland Gold Mines' property which was acquired by Golden Gate is being carried on through an adit. The mill averaged 70 tons per day throughout the year. Yama Gold Mines confined its developments to two levels, one at 375 feet and the other at 500 feet. These levels were established after the shaft had been deepened to the 520-foot horizon. Yama was the only active property in the Boston Creek Section.

Gold Mines of Porcupine Belt - Aunor Gold Mines; Limited shipped bullion for the first time in January, 1940. During the balance of the year the average tonnage milled was 363 tons. Development work was inaugurated at the Bonetal Gold Mines, Limited. This Company had been incorporated on November 10, 1936, sinking of a three-compartment shaft was commenced and a temporary mining plant was installed. A modern mining plant was later assembled and by the end of the year the plant installation was nearing completion. Broulan Porcupine Mines, Limited, which had forwarded ore for treatment to the Old Mace mill completed the erection of a new mill during 1940. The Mace mill is now idle for the first time in many years. Activity at the Buffalo Ankerite Gold Mines, Limited was transferred from the No. 2 shaft to the No. 5 shaft upon the completion of a new crushing plant underground and grinding on the surface. An excellent miners' change house and a central heating plant was also erected in the vicinity of No. 5 shaft. The Company also completed a connection between No. 5 shaft and the deepest workings of the older part of the mine. This connection has been of great interest to mining men locally as well as to visitors from foreign mining fields because of the nature of the ground traversed and the methods used to accomplish it. The most difficult ground was serpentime and the trouble resulted from the swelling of the ground. In timbering the combinations of huge timber and steel beams were not sufficient to keep the cross cut open. This was finally accomplished by using steel rings covered with concrete reinforced with 30" track rails. The steel rings had to be kept close to the face at all times. The rails outside the rings were used in short lengths. These were inserted in holes dug around the outside of the face in such a way as to give a lap joint at each ring. Another new addition to the list of gold producers in the Porcupine district, Faymar Porcupine Gold Mines, Limited, turned over its new mill at the beginning of April. This Company treated an average of 180 tons of ore from its mine workings plus an additional 50 tons from the adjoining property of Nakhodas Mining Company, Limited. The first concrete headframe ever to be used at a Canadian mine was erected during 1940 at the Hollinger Consolidated Gold Mines, Limited. This headframe is unique both as to design and as to its enormous size. It was expected to be put into operation about April or May of 1941. This shaft would then become the main ore shaft of this great mine. The Ross mine which is operated by Hollinger Consolidated Gold Mines, Limited, saw some improvement during the year. Late in 1940 a new and larger headframe was under construction. A community hall and a curling rink for the benefit of the employees was also built. Hoyle Gold Mines, Limited, completed initial development and decided to build a 500-ton mill, the erection of which was completed just after the end of the year. Nakhodas Mining Company, Limited acquired a single claim in Tisdale Township in 1940. Years ago a shaft was sunk on this claim to a depth of 229 feet but no levels were opened. Installation of a plant was commenced in May and in July ore shipments were made to the Faymar Porcupine Mine. During the latter part of the year, the Nakhodas mined about 300 tons of ore weekly. Added attention was given to exploration within porphyry masses at the McIntyre Porcupine Mines, Limited and from 4,500 feet of drifting was developed 100 feet of ore averaging 0.29 ounces over drift width. It must be remembered that prior to 1939 the Company had never found any worthwhile ore deposits in the porphyry masses on the property. Development at the Pamour Porcupine Mines, Limited, property in 1940 consisted of drifting east on the 800, 1,000, 1,200, 1,400 and 1,600-foot levels and west on the 400, 600 and 1,400-foot levels. A curling rink was built at this mine for the use of employees of the mine as well as those of the adjacent Hallnor mine. Hallnor Mines, Limited, completed 35,273 feet of diamond-drilling during 1940. During the period under review, raising was done on the 1st, 2nd, 5th, 6th, 7th and 8th levels. The ore pass raise was completed to the skiploading pocket between the 8th and 9th levels. Griszlies and control shutes were installed on the 5th, 6th, 7th and 8th levels. All dismond-drilling was done underground with 289 holes which gave the total length mentioned earlier. Following the loss by fire of the old mining plant, Jodela Gold Mines, Limited, installed a new mining plant and replaced the former headframe by a much larger structure. Evidence of the tremendous growth of Porcupine over recent years is indicated by labour statistics. The increase of employment in the mines in 1940 was 6.7 per cent over the comparable figures for 1939. The increase over the number employed in 1935 is over 60 per cent. The increase in tonnage milled in 1940 over that of 1935 was 51 per cent.

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Gold Mines of Matachewan and West Shiningtree Areas - In the Elk Lake, Gowganda, Tyrrell Section, the main shaft at Tyranite Mines, Limited was sunk 310 feet to the 853-foot horizon and levels were established at 675 and 825 feet. Additions were made to the mill and compressor house. Average mill tonnage was 218 tons per day. The No. 2 shaft (winze) at Young-Davidson was sunk 206 feet to the 1,109-foot horizon and a level was established at 1,063-foot horizon. The main shaft was deepened 135 feet and the fifth level established at the 1,060-foot horizon. The mill treated an average of 1,014 tons per day. A tunnel was driven to divert Davidson Creek. Matachewan Consolidated treated an average of 497 tons per day in its mill. Some cross cutting was done on the 215-foot level of the Arbade Gold Mines, Limited which was in operation from January 1 to April 26.

Gold Mines of Sudbury and Nipissing Districts - The mine and the mill of New Golden Rose were operated throughout the year. Stoping was principally confined to the 4th level. A 2-compartment winze was sunk from the 5th level to an inclined depth of 398 feet, and stations were cut for the 6th and 7th levels at vertical intervals of 125 feet. Development work at the Jerome Gold Mine was carried on throughout the year on the 200, 350 and 500-foot levels. Preparations were made for the construction of a 500-ton mill during 1941.

Gold Mines of Algoma District - At the Cline Lake Gold mine shrinkage stopes were mined on the 125, 250, 400 and 500-foot levels. The shaft was sunk 675 feet to a total depth of 1,196 feet and levels were established at 725, 875, 1,025 and 1,175 feet. Development work was carried on at the Maginot Gold Mines (Algoma Summit) from January until June. All work was done on the 2nd level. The mill was not operating.

Thunder Bay District - Tombill Gold Mines, Limited continued to produce at the rate of 100 tons daily during the year. An exploration drift was being driven to the north of the main drift on the 1st level. Towards the end of the year MacLeod-Cockshutt continued to produce at the rate of roughly 670 tons daily from which 150 tons of concentrates were sent to the roasting plant. Erection of the plant was begun late in 1939 and the first roasting unit capable of handling 50 tons daily went into service in the middle of February. A second and similar unit was inaugurated in March and a third on June 15th. The mining method employed at MacLeod-Cockshutt is horizontal cut-and-fill and the bulk of the ore has been obtained from the north ore body. Exploration by diamond-drilling and drifting on the 5th level to explore the south ore zone was very fruitful and drifting west on the 5rd and 5th levels towards the old No. 1 shaft met with an umusual success. This particular ore can be treated directly by cyanide without roasting. At the end of the year both No. 1 and No. 2 shafts were being deepened. Magnet Consolidated Gold Mines, Limited added a cyanide unit to the flotation-amalgamation mill which went into operation on July 2. A secondary crushing plant was also added. Shaft sinking below the 780-foot horizon commenced in December, 1939 was completed to 1,115 feet by March 1, 1940, with two new levels developed at 930 and 1,010 feet. Little Long Lac Gold Mines, Limited, increased their daily production from 300 tons at the end of 1939 to 315 tons in 1940. Mining was carried on in 15 stopes. It was proposed to sink a winze to mine the west ore below the 2,200-foot level. The winze is located some 1,500 feet west of the main shaft. Mining an old ore section in the south vein considered to be too low-grade to be worked at a profit was resumed on the 200-foot level. Jellicoe Mines (1939) Limited, operated part of the year to recover the remainder of a small high-grade ore body, the profits being used to carry out additional exploration by diamond-drilling and lateral development. There was little success in this endeavour and all work was definitely suspended on August 9. The ore was treated by the Magnet and latterly by the Bankfield mill. A new hoist was installed during June to service the No. 2 shaft at Hard Rock Gold Mines. This property was treating 350 tons of sorted ore daily at the end of the year. The roasting plant handles 80 tons of concentrates per day. Development work was carried on outside the north ore zone which has supplied the bulk of the ore to date. The No. 2 winze located some 1,100 feet northwest of No. 2 shaft was sunk below the 475 level and was completed by the end of September. New levels were established at the 625 and 775 horizons. Bankfield Consolidated Mines, Limited increased its tonnage from 100 to 120 tons up to May and again to 135 tons by the end of the year. Mining was carried on by shrinkage methods on one stope on the 1,025-foot level and one on the 150-foot level. The surface pillar of 1,010foot stope was removed. Operations on all other levels were confined to drawing off broken muck. The winze was deepened early in the year below the 1,025-foot level to 1,275 feet to open up new levels at 1,150 and 1,275 feet and drifting towards the Tombill boundary followed in the hope that the extension of the Tombill structure would make one on the Bankfield property. This was not successful. In the Beardmore and Sturgeon areas of the Thunder Bay District, Leitch Gold Mines, Limited treated an average of 85 tons of ore daily. In July sinking below the 1,025-foot level was inaugurated with an objective of 1,650 feet. The sinking was completed in December. The shaft at the Northern Empire Mines Company, Limited was deepened from April 16 to the end of the year. Ore was obtained by resuming cut-and-fill methods. Other development at this property consisted of a drift on the 1,700-foot level which is being driven under contract for the Spooner Gold Mines. It was planned to do some 2,000 feet of lateral work at this latter property. Northern Empire treated an average of 185 tons daily. Development was carried out to the east of the shaft on the property of Sand River Gold Mining Company Limited. A narrow length of ore was found and was reported to be better than .61 ounces. Subsequently the same ore which had been found on the 1,150-foot level was looked for on the 900foot level. This ore is somewhat of especial importance as all ore mined to date was found west of the shaft

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below the 650-foot level. Leitch Gold Mine was in charge of surface exploration at the Halport Gold Mines, Limited property. From 8 to 10 men worked between March and September and 5,000 feet of diamond-drilling was completed. Three new levels were established at Sturgeon River Gold Mines, Limited after the shaft had been deepened to 1,775 feet. The mine operated continuously during the year and treated an average of 75 tons of ore daily. In the Sturgeon and Savant Lake Areas, St. Anthony Gold Mines produced throughout the year at an increased rate of 170 tons daily. The shortage of power was relieved somewhat by the installation of a new Diesel power unit in December, 1939. A 2-compartment vertical winze was completed to 262 feet by March 20. Two new levels were established at 875 and 1,000 feet. Mining was carried on at the north end of old stopes on all levels above the 750, and these consisted of salvage operations. Wide interest was aroused over a new gold discovery in Poisson and Jutten Townships in the Savant Lake area on the west side of Savant Lake which is about 20 miles north of the Canadian National station, Savant Lake. Gold was reported in sediments late in September by prospectors of the Northern Canada Mines, Limited. The greenstones of this area had received some attention years before, but nothing of note had ever been discovered. Many prominent companies were soon in this field. About 400 claims were staked and recorded but in 1940 little thorough prospecting was done. There is no known main break but the general strike is east of north. A number of small free gold showings have been found on the stakings along the west shore of the south half of Savant Lake.

Gold Mines of Patricia Portion of Kenora District - Efforts to locate new ore at Sachigo River failed in 1940. The mill treated an average of 45 tons of sorted ore daily. The shaft was completed to 840 feet by January and again deepened to 1,130 feet with levels established at 800,950 and 1,100 feet. Development followed on the new levels with little success and plans were to mine and mill the remaining ore and close the property. It was shown earlier that work on the 800-foot level indicated the ore to be cut between the 650 and 800-foot levels. Berens River Mines, Limited, in the Favourable Lake Area, treated an average of 225 tons of ore daily which was obtained from shrinkage stopes on all levels down to the 500-foot horizon. Ore-passes and a loading pocket below the 375-foot level are used to handle ore from levels above. The shaft was deepened below the 500-foot level to 972 feet and three new levels were established. A loading pocket was installed below the 800-foot level and development on an ore pass system to handle ore below the 575-foot level was in progress. Workmen's and staff houses were built during the year as well as an 8-apartment house and a residence for the manager. Less than one year after the mill was completed Cochenour-Willans Gold Mines, Limited, in the Red Lake Area, paid an initial dividend. The mill treated an average of 150 tons of ore obtained from open stopes on all three levels. Flotation units have been added to the mill to treat the tailings from which three to four tons of concentrates are obtained each day. These are then shipped to the smelter during the summer. The concentrates have a value of about \$8,000 per month. Operations at the Gold Eagle property were continuous throughout the year, Ore was obtained from the removal of the 125-foot level floor and from new stopes to the east of the old workings as well as from old pillars left in worked-out stopes. Exploration by diamond-drilling and lateral work with the view to picking up Gold Eagle or McKenzie shearings at 850 and 1,000 feet, met with little success. The new levels had been opened after the winze had been deepened to 1,036 feet. In September, 1940, Gold Frontier Mines, Limited, successor to Frontier Red Lake Gold Mines, Limited, sent a crew of men to dewater the mine which is located one mile east of Pipestone Bay at the west end of Red Lake. It was expected that some development work would be carried on at the two levels which had been worked in 1936. Hasaga Gold Mines, after having pushed development on new levels, was milling at the rate of 350 tons of ore by November. Development work at the new No. 2 operation, also known as the Starratt-Olsen property, was continued until March 31st when operations ceased. The mine was idle at the end of the year. Howey Gold Mines, Limited, treated 1,250 tons of sorted ore daily from 1,500 tons of hoisted ore. This came chiefly from the stopes on the 1,350-foot level. Removal of the surface pillar was completed and the only other mining centered around a new ore section east of the old workings between the 1,315 and 1,000-foot level. By the end of 1940 all ore had been mined from the 200-foot level to the surface at Madsen Red Lake Gold Mines, Limited. Shaft sinking was completed below the 500-foot level on January 29, following which new levels were established at 650 and 800-foot horizons. Sinking was again resumed in August with a proposed depth of 1,305 feet. At the end of the year a new hoist and headframe were being installed. McKenzie Red Lake Gold Mines, Limited, continued production throughout the year at a daily average tonnage of slightly more than 200 tons. Mining was carried on by open stope methods on all levels between 450 and 750 feet. McKenzie also directed and financed McMarmac Gold Mines, Ltd. to production in 1940. Exploration by diamond-drilling and development at the McKenzie property resulted in the outlining of ore on all levels up to the 450-foot level. The deepest work was done on the 1,050-foot level. New possibilities for the property were also indicated by discovery of new ore about 1,000 feet north and east of the shaft on the 650, 850 and 1,050-foot levels. Following the deepening of the shaft to 325 feet, McMarmac Red Lake Gold Mines, Limited established a new level at 300 feet by the end of 1939. Development was carried on on both the 160 and 300-foot levels and by September sufficient ore had been indicated to warrant the installation of a 75-ton mill. The shaft was deepened further to establish a new level at 450 feet during mill erection and installation of equipment. The mill went into production in October and the flow-sheet includes flotation, amalgamation and cyanidation. In the Uchi Lake area, Uchi Gold Mines added flotation and re-grind units as well as a sorting plant to the mill. Mining was carried on by shrinkage stoping on all levels down to the 600-foot level. Shaft sinking below the 600-foot level at the No. 2 shaft was completed to 1,170 feet. During the third week in August, the capitalization was increased from 3 to 5 million shares in order to take over and operate adjoining Hammell, Hanalda and Jalda properties whereby the

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tonnage could be increased to 1,000 tons daily. Development was carried on at the Hanalda and Jalda properties. Following the merger with Uchi Gold Mines, Limited, Hanalda and Jalda workings were dewatered starting September 30 and the mines prepared for production. By the year-end, the Hanalda was shipping 100 tons to the Uchi mill by trucks. Uchi also obtained an option on the Grassett property operated by Consolidated Mining & Smelting some years ago. Uchi dewatered the shaft at this property and installed a new shaft collar. The Hanalda is known as Uchi No. 3 operation, the Jalda, No. 4, and the Grassett, No. 5. In the Woman Lake area, J. M. Consolidated Gold Mines, Limited, operated their mill at 100 tons daily until the end of February when ore reserves were exhausted. Exploration by diamond drilling followed on the 600-foot level with little success. All work was definitely suspended on April 24. In the Birch Lake area, Jason Mines, Limited, successor to Argosy, renovated the old mill and commenced operations on June 16. The first brick was poured on July 13. Hydro power from the Ear Falls-Uchi line was delivered to the property early in April. No. 1 shaft was deepened from 404 feet to 530 feet and a fourth level opened at 510 feet. June saw the start of dewatering at the No. 2 or Argosy workings. Some 125 tons of ore are milled daily, of which 70 tons are obtained from the stopes on the 2nd and 3rd levels of No. 1 shaft and trucked to the mill. The balance is obtained from No. 2 shaft stopes on the 2nd and 3rd levels.

Pickle Crow Area - In the Pickle Crow Area, work at the Albany River property was concentrated on the 625-foot level and consisted of exploration by diamond-drilling and drifting to the west towards the east drive of the Pickle Crow Gold Mines' 750-foot level. Production at the Central Patricia Gold mine came chiefly from the levels between the 750 and 1,450-foot horizons. The mill treated an average of 325 tons of sorted ore daily. An extension was made to the mill to provide for additional equipment and ore storage to increase the tonnage to 400 tons. The Springer or No. 2 operation, continued to truck ore to the mill at the rate of 50 tons per day until the end of May when all work was suspended and the mine allowed to flood. Another all steel headframe was erected at Pickle Crow Gold Mines, Limited, and the mill treated ore at the rate of 325 tons daily. Exploration to the east on the 750-foot level continued and by the end of the year considerable new high-grade ore was exposed. In September, shaft sinking was resumed below the 1,950-foot horizon with an ultimate objective of 3,000 feet.

Gold Mines of Kenora District - Kenricia Gold Mines, Limited produced at the rate of 100 tons daily until May 31 when operations ceased. The milling equipment was removed and the mill building dismantled and shipped to the Hoyle Gold mine in Porcupine. The compressors and hoist were sent to Little Long Lac. During March and April, Kenricia did some customs milling for the Sunbeam Kirkland Gold Mines. Kenwest Gold Mines, Limited was formed to operate the Big Master Consolidated Gold Mines property for Selby Lake Gold Mines who had an option on the Big Master. On July 23 shareholders of the Big Master company agreed to surrender their charter and transfer their assets to the new company. Owing to low water, it was necessary to build a new road 9 miles in length to connect with Wabigoon Lake to get supplies to the property. Slashing got under way in October and was completed to the 350-foot level after which sinking was started. Kenopo Mining and Milling Company Limited, operated spasmodically during the year and treated small lots of ore received from highgrading operations around Kenora. The ore came from the following properties: Eldiver, near Black Sturgeon Lake: White, near Hilly Lake six miles east of Kenora; Silverman, (Breakneck Mine) eight miles east of Kenora; and C. Alcock claims at High Lake, six miles south of the Trans-Canada Highway near the Manitobe boundary. Goldwood Gold Mines is the latest name for the Horseshoe or Kenland property at Regina Bay, fifty miles south of Kenora. Kenland sold the property to Goldwood Gold Mines for a stock consideration. On November 29, a lease was given to J. D. Shannon who checked samples on the 1st, 2nd and 3rd levels. No other work was in progress at the year end. Surface work was done at the White property and at the Silverman property by LaRae Exploration Company, Limited. The Eldiver property was worked for the last time it. 1893 when operations were suspended as a result of a fire. A shaft was reported to have been sunk to a depth of 108 feet on a quartz vein at that time. In July, 1940 the shaft was dewatered and sampled after which more work was done for Pioneer Gold interests. Some 60 tons of ore were shipped to the Kenopo mill. Mining was suspended at Straw Lake Beach Gold Mines, Limited, September 16, 1939 and the mill was shut down, but early in 1940 the shaft with levels at 100, 300 and 425-foot depths was deepened from 425 to 600 feet and levels established at 465 and 575-foot depths. Sinking was resumed and the 700-foot level was opened. Milling was resumed on September 17 at about 60 tons daily. Wendigo Gold Mines, Limited paid its first dividend on December 1st after having produced throughout the year just over 100 tons of ore per day. At the end of the year a winze below the 1,100-foot level was being considered.

Gold Mines of Rainy River District - During 1940 two former gold operations were reopened, one of which, the Upper Seine Gold Mine, went into production again while the second, the Orelia Gold Mines, Limited, working in conjunction with the lower Seine Mining Company, Limited, and Minerals Milling, Limited, just failed to make it.

### MANITOBA GOLD INDUSTRY, 1939 (Geo. E. Cole, Director of Mines)

The production of gold in Manitoba during 1940 totalled 152,375 ounces as compared with 180,875 ounces for 1939, the decrease being accounted for by operations being discontinued at the Gurney and Laguna mines towards the end of 1939.

Gold was produced at eight gold-quartz properties and was also obtained in the treatment of base metal ores of the Flin Flon and Sherritt Gordon mines.

An important development at God's Lake was the commencement of the new No. 2 shaft located 6,000 feet west of the original No. 1 shaft. The decision to sink the new shaft was based on encouraging diamond drilling results. The tuff bed in which the vein system was encountered was at 860 feet instead of 1,100 feet as had been previously expected. Sinking operations were begun in June and the objective of 1,850 feet is expected to be reached in June, 1941. At the end of the year the shaft had passed the half-way mark.

San Antonio carried out the heaviest development campaign of its history during 1940. Early in the year a three-compartment winze was sunk 912 feet below the 10th level, opening up six new levels. In November it was decided to increase the mill capacity from 330 to 550 tons a day, following the disclosure of ore of major importance at depth. Construction will be undertaken some time in April, 1941 and the mill will probably be operating at its new capacity by early fall. During 1940, 36,745 ounces of gold were produced and ore reserves were very substantially increased.

Gunnar mine set a new record with a production of \$666,872 from 51,992 tons compared with \$662,010 from 49,036 tons in 1939. Plans are being made to deepen the shaft and open up two new levels at 1,875 feet and 2,000 feet.

Payment of dividends was continued by San Antonio, Gunnar and God's Lake during 1940.

In common with other provinces, there was a marked falling off of prospecting in Manitoba during 1940. In the southwestern part of the province some interest was shown in bog manganese deposits of recent origin, associated with shales of Cretaceous age. No large deposits of economic importance have as yet been discovered. In the Precambrian areas prospecting for gold and base metals continued in many widespread localities. Claims staked the previous year in the Last Hope Lake area were actively prospected by mining companies. Geological work was continued by the Dominion and the Provincial Governments during the year.

Owing to the difficulty of putting prospectors in the field and the opportunity for better employment of young men in industry, the Youth Training Scheme for training prospectors, which had been initiated successfully the previous year, was temporarily discontinued.

### SASKATCHEWAN GOLD MINING INDUSTRY, 1940 (E. Swain, Supervisor of Mines)

In almost a decade gold mining in Saskatchewan has risen from nil to 103,751 ounces. The year marks the first time that gold production has exceeded 100,000 ounces. The advance in production represents an increase of 34.5 per cent over 1939 which was our last highest output. This increase is attributable to several factors, namely, one complete continuous year of operation of the "Box Mine" at Goldfields, which came into production about July 1, 1939; increased ore tonnage at the Hudson Bay Mining and Smelting Co. Limited mine at Flin Flon, which is due to the foresight of the management in improving the mine, mill and smelter as well as increasing the output of electrical energy; also the gold content of ore now being recovered is a little higher. Present values are expected to be recovered for some time to come. These are the principal factors contributing to the increase but other factors are the opening up of a prospect mine at Bootleg Lake by Henning Maloney Gold Mines Limited. This lake is some four miles southwest of Flin Flon; also the re-opening of the prospect mine on the west shore of Amisk Lake, formerly known as Monarch Gold Miners Syndicate Limited, by Pamon Gold Mines Limited. If satisfactory reserves of ore are ascertained, these companies will seriously consider putting in small mills. At the moment the ore recovered by both of these companies is being treated at the plant of the Hudson Bay Mining and Smelting Co. Limited, Flin Flon.

Placer gold output advanced a few ounces and has but little bearing on the total output. This gold is recovered from benches and bars in the North Saskatchewan River, when conditions are convenient to work such bars which move from point to point according to the vagaries of the stream.

The following prospect mines were idle:

Flin Flon Gold Mines Limited at Douglas Lake Athona Mines (1937) Limited at Goldfields.

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A considerable amount of geophysical prospecting and geological work was undertaken in the Sulphide Lake area some six miles north of Lac la Ronge, the results of which are not definitely known. One individual, however, has signified his intention of working his most promising discovery, with a view to shipping out high-grade gold ore for treatment during 1941.

The mining road from Prince Albert to Lac la Ronge remains uncompleted but it is hoped that the road will be continued in the immediate future. Upon completion the terminal of Lac la Ronge would provide an ideal point from which to prospect the country, some of which is thought to hold promise for discovery of useful metallics.

### BRITISH COLUMBIA GOLD MINING INDUSTRY, 1940 (Philip B. Freeland, Chief Mining Engineer, British Columbia Department of Mines)

In the Atlin Mining Division, the Polaris-Taku Mining Company, Tulsequah River, continued operations and a total of 80,364 tons of ore was treated, and the concentrates shipped to Tacoma smelter.

The Portland Canal Mining Division in 1940 contributed a total tonnage of 384,000 tons. The Big Missouri Mill treated 212,112 tons; the Silbak-Premier 171,504 tons. Lessees were active at the Dunwell property, and small shipments from several other properties were made.

The Surf Inlet Consolidated Gold Mines Ltd. continued operations all year, and 39,437 tons were treated and concentrates shipped to Tacoma smelter.

The small property operated previously by the McDames Lake Mining Co. in the Stikine area, was closed during 1940.

In the Omineca Mining Division, a number of properties were worked by individuals, and some under development by companies under option. Most of the shippers sent small tonnages to the Government Sampling Plant at Prince Rupert, and in turn the latter sent resulting products to the Tacoma smelter. Among the properties shipping were the Black Bull, D & N Group, Dome Mt., Duthie, Golden Eagle, Hazelton View, Hunter Basin, Hyland Basin and the Coronado. The total tonnage recorded as treated was 293 tons.

In the Kanloops area the <u>Windpass</u> was again worked by lessess. The Consolidated Nicola Goldfields Ltd. operated all the year and concentrates produced were shipped to Trail smelter. In the Vernon area the <u>Kalamalka</u>, <u>Jumbo</u>, and <u>Monashee</u> were operated intermittently. The main producers in the Osoyoos Division again were the Hedley Mascot, <u>Nickel Plate</u> (Kelowna Exploration Co.), Osoyoos Mines of Canada Ltd. and the <u>Morning Star</u>.

Other shippers were the <u>Grandoro</u>, <u>King</u>, <u>Black Diamond</u>, <u>Gold Standard</u>, <u>Koh-i-Noor</u>, <u>Lucky Strike</u>, <u>Queen Mary</u>, <u>Silver King</u>, <u>Silver Moon</u>, <u>Silver Ring</u>, <u>Summit</u>, <u>Grandview</u> and <u>Twin Lakes</u>.

Greenwood Mining Division again had numerous properties in the shipping list, and the main ones were the Union, Yankee Boy, Dentonia, Providence, No. 7, Granby (Phoenix), Carmi, Brooklyn-Stemwinder and the Amandy.

The Copper Mountain mine operated by the Granby Mining, Smelting & Power Co. Ltd. continued throughout the year, and the Grashopper also was a producer in the Similkameen area.

The  $\underline{\text{Highland Surprise}}$  was the main producer in the Ainsworth Division. The Lardeau division had the  $\underline{\text{Meridian}}$ ,  $\underline{\text{True Fissure}}$  and the  $\underline{\text{Winslow}}$  as shippers.

In the Nelson area the main producers were the Arlington (Oscarson), Bayonne, Gold Belt, Kootenay Belle, Relief Arlington, Reno, Sheep Creek, Ymir, Yankee Girl, Ymir Con. and lessees thereof. The Alpine, Nugget Motherlode, California, Granite-Poorman, Spokene, Venango, Venus-Juno, Clubine-Comstock, Harriet and Wilcox also produced a substantial amount in the aggregate.

In the Trail division, the Midnight mine, Juno, I.X.L. and Velvet combined with lessees of Rossland properties to make the total.

The Vidette and the Grange Consolidated mine were the only two producers in the Clinton Division.

The W.W.W. mine owned by K. J. Robinson, the <u>Thistle</u> worked by lessees, and the <u>Hesquiat</u> combined to make the total from the Alberni Division on Vancouver Island.

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The Clayoquot division again was one of the main producing areas, through the activity continuing in Zeballos camp. The shipping list included <u>Central Zeballos</u> (controlled by Reno Gold Mines Ltd.) <u>Mount Zeballos</u>, <u>Privateer</u>, <u>Spud Valley</u>, <u>White Star</u>, <u>C. D.</u> (formerly Rey Oro), and several smaller shippers.

The division will no doubt see several new shippers in 1941, the <u>Muskateer</u>, <u>Buccaneer</u> and <u>Homeward</u> reaching the stage when shipments may soon be commenced.

In the Lillocet division, the <u>Bralorne</u> again was the leading gold producer of the province and during the year milled 191,412 tons of ore. The <u>Pioneer</u> milled 77,585 tons. The <u>Minto</u> was operated by Messrs. Evans & Davidson on a lease from the Minto Gold Mines Ltd.

In the Nanaimo division several properties contributed to the total of 2,539 tons treated.

The New Westminster division with which is now included the former Yale division, contributed a small tonnage of gold ore to the Provincial total, from the <u>Dawson</u> and the <u>Aufeas</u>.

Britannia was the main contributor of gold in the Vancouver division; the Jagee and Silta which was operated by R. C. McCorkell.

### GOLD MINING IN NORTHWEST TERRITORIES, 1940

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

All gold produced in Northwest Territories in 1940 came from Yellowknife Bay on Great Slave Lake.

Nearly all of it came from Con, Rycon and Negus mines, and the amount produced was substantially greater than in 1939. A 4,300 horsepower hydro-electric plant was completed on Prosperous Lake for Consolidated Mining and Smelting Company of Canada, Limited, and power delivered to Con mine over a 22-mile transmission line in January, 1941. Part of the surplus power available at this plant is expected to replace diesel power at the Negus, Ptarmigan, and Thompson-Lundmark properties. Most prospecting was done between Hidden and Desperation Lakes in the Beaulieu River area, and near Slemon Lake in the Snare River area. Prospecting activity was comparable to that of 1939 and it is estimated that 30 parties were in the field during the summer. Several gold deposits were found, mainly in the Beaulieu River area. A Mining Recorder's office was opened at Yellowknife.

Yellowknife Bay - Con and Rycon mines are operated from a common plant by Consolidated Mining and Smelting Company of Canada, Limited. Ore reserves at Con mine were increased to 130,460 tons of probable ore containing 0.61 ownces of gold a ton, and 175,000 tons of indicated ore containing 0.37 ownces of gold a ton. No. 1 shaft was deepened from 541 feet to 1,011 feet and levels established at depths of 650, 800 and 950 feet. About 5,600 feet of lateral work was done in the mines during the year, mostly on the 375- and 500-foot levels. The capacity of the Con mill was increased to 175 tons a day. Most ore treated to date has come from Con mine above the 375-foot level. Much new ore is reported to have been located on the 500-foot level of the mine during 1940. It is reported to occur in bodies that are wider and of lower grade than the mine average, and may require special treatment. Ore from Rycon mine, 2,200 feet east of Con mine, was treated at the Con mill.

Negus mine increased its ore reserves to 21,710 tons as of July 31, 1940 and mill-heads during 1940 contained about one ounce of gold a ton. No. 2 shaft was deepened from 328 feet to 452 feet and a level opened at a depth of 425 feet where high-grade ore was found. Lateral work on the 200-, 300-, and 425-foot levels amounted to about 3,200 feet. Most of it was done on the 300-foot level where exploratory drift was driven south to explore a group of promising veins that outcrop about 1,400 feet south-southeast of No. 2 shaft. A transmission line was constructed between Negus and Con mines and it is expected that the diesel power will be completely replaced by hydro-electric power during 1941. Negus mine is the first mine in Northwest Territories to pay dividends and the initial payments were made in April, 1941.

Ptarmigan Mines, Limited, controlled by Consolidated Mining and Smelting Company of Canada, Limited, continued work on a single wide quartz vein. The shaft was deepened to 702 feet and a level opened at a depth of 600 feet. Lateral work to date totals more than 3,000 feet and most lateral work during 1940 was done on the 300-, 450-, and 600-foot levels. Ore reserves are not reported but are said to be substantial. A transmission line was built from the mine to the power line from Prosperous Lake to Con mine.

Giant Yellowknife Gold Mines, Limited, did a little diamond drilling and shipped about 51 tons of high-grade gold ore to Trail, B.C., but was idle much of the year. The Company was reported in March, 1941 to have purchased a 25-ton mill.

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Beaulieu River Area - Consolidated Mining and Smelting Company of Canada, Limited directed operations at the property of Thompson-Lundmark Gold Mines, Limited after August 31, 1940. All work was done from No. 2 shaft, which was started in 1939 at an incline of about 47 degrees to explore the Fraser Vein. During 1940 the shaft was deepened from 301 feet to 834 feet and levels established 450, 600 and 750 feet (slope distance) from the collar. About 1,800 feet of lateral work was completed, mostly on the 150-, 300- and 450-foot levels. A 150-ton mill for the property was shipped to Yellowknife from the Cordova mine in Ontario. Late in the year work was started on a 35-mile transmission line to the Prosperous Lake power station.

Great Slave Lake - Operations were resumed in September at the property of Slave Lake Gold Mines, Limited on Outpost Islands. The two-compartment vertical shaft is 450 feet deep with levels at 50, 125, 200, 325 and 400 feet and lateral work totals about 1,600 feet. Diesel power was installed, a 50-ton mill erected, and the first gold was produced in February, 1941. Most of the gold is recovered by amalgemation and additions to the mill are planned which are expected to recover concentrates containing gold, tungsten and copper. Previous ore reserves of 17,308 tons containing 0.5 ounces of gold a ton, and an unknown amount of tungsten and copper, are said to have been greatly increased.

Snare River Area - About 2,500 feet of diamond drilling and some surface work was done during the summer by Canbrae Exploration Company, Limited on the Au group about 2 miles north of Slemon Lake.

Wray Lake Area - Mercury Gold Mines, Limited was incorporated to explore strong gold-quartz veins on the Dingo group near Emile River about 120 miles north of Rae. A little surface work was done during the summer. Winter camps were erected and exploration continued during the winter of 1940-41. A steam mining plant for the property reached Rae before freeze-up.

### GOLD MINING IN YUKON, 1940

Twenty-nine quartz grants (lode mining) were issued in the Dawson District during the fiscal year ending March 31st, 1941, and one hundred and sixteen claims were renewed. This is one-half the number held in good standing during the previous year. Activity was confined to representation work.

A total expenditure of \$5,798.28 was made to maintain and improve existing aircraft landing fields. The most important fields, namely, at Dawson, Whitehorse, Mayo and Carcross were extended and improved, and work was also done on the secondary fields at Carmocks and Flat Creek. In addition to the above, the White Pass and Yukon Route constructed, at their own expense, emergency landing fields at Fox Lake, Little Salmon, Yukon Crossing and Grand Valley.

On May 22nd, 1941, the Bureau of Statistics was advised that the Mount Free Gold Mine had been closed down for nearly twelve months and would not be reopened by T. C. Richards. Concentrates containing a relatively small quantity of gold were shipped in 1940 from this property to a smelter in the United States.

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(b) Explosives, chemicals, etc.

(e) Includes \$6,369,380 in salaries in 1939 and \$6,794,255 in 1940.

<sup>(</sup>a) Less freight and treatment charges.

<sup>(</sup>c) Number of mines producing - 1925-35; 1929-38; 1937-189; 1938-228; 1939-232; 1940-278.

<sup>(</sup>d) Value of bullion produced plus value of ore, concentrates, etc. shipped.

Table 29(a) - PRIN	No. of produc- ing plants or		Number of em-	Salaries and wages	Cost of fuel and elec- tricity	(a) Cost of process supplies used	Value of freight paid on shipments of ore, slag.	(b) Smelter and re- finery treat- ment	Gross value of bullion, ore, concen- trates or residues shipped from	Net value of bullion, ore concentrates or residues shipped from
	mines	Cap To y ou	project				etc.	costs	mines(d)	mines(d)
		\$		\$	\$	\$	\$	\$	\$	\$
Nova Scotia	9	996,157	385	367,485	64,220	164,887	1,990	7,258	855,673	617,318
Quebec	27	36,880,589	5,586	9,280,813	1,576,811	3,233,098	73,888	503,277	29,003,738	23,616,664
Ontario	76	166,842,210	19,865	35,643,792	5,239,922	13,862,126	205,342	1,310,282	122,675,051	102,057,379
Manitoba	5	3,128,794	593	1,086,282	187,404	368,417	6,107	31,973	2,931,464	2,337,563
Saskatchewan	2	• • •	177	340,955	21,472	240,107	2,614	8,524	776,824	504,107
British Columbia	153	21,176,343	3,447	6,230,057	664,540	2,200,107	391,077	606,152	20,413,118	16,551,242
Northwest Terri- tories	5	1,695,248	295	611,554	180,824	322,042	10,631	19,121	2,126,968	1,594,350
Yukon	1	***			• • •		•••	•••	11,242	11,242
TOTAL CANADA 1940	278	230,719,341	30,353	53,560,938	7,935,193	20,890,784	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

<sup>(</sup>a) Explosives, etc.

<sup>(</sup>b) Includes handling charges.

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

<sup>(</sup>d) Value of bullion produced plus value of ore, concentrates, etc. shipped.

<sup>(</sup>e) Includes \$5,861,681 in salaries in 1939 and \$6,794,255 in 1940.

Table 30 - EMPLOYEES AND SALARIES AND WAGES PAID BY AURIFEROUS QUARTZ MINING INDUSTRY, 1925 - 1940

						Total
	Wage-	Salaried	Total	Wages	Salaries	salaries
	earmers	employees	employees	paid	paid	and wages
	No.	No.	No.	\$	\$	\$
1925	6,607	445	7,052	10,657,452	1,274,496	11,951,948
1926	7,159	504	7,663	10,941,722	1,398,901	12,340,625
1927	7,535	487	8,022	11,518,516	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	14,258,755
1930	7,935	466	8,401	12,490,362	1,544,258	14,034,620
1951	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	27,156,887
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
1957	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

Table 51 - SALARIES AND WAGES PAID, FUEL AND ELECTRICITY USED AND PROCESS SUPPLIES CONSUMED BY THE AURIFEROUS

					ROVINCES, 192	9 - 1940		
	NOVA SCO	DTIA	QUE		ONTA	RIO	MANI	MBA
		Non-		Non-		Non-		Non-
	Producing	producing	Producing	producing	Producing	producing	Producing	producing
	\$	\$	\$	\$	\$	\$	\$	\$
1929	59,892	12,376	224,091	186,836	13,641,012	1,052,884	543,248	90,233
1950	16,644		405,848		14,106,811	286,813	231,474	62,500
1931	5,409	5,988	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	18,128,149	590,012	588,125	154,194
1934	206,729	32,940	2,007,574	1,418,330	20,763,904	1,419,484	826,625	512,586
1935	408,422	57,353	4,165,141	1,754,595	30,809,094	1.866,010	1,659,407	312,556
1936	779,767	40.304	6,448,220	2,317,382	35,829,753		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	829,631	4,681	12,604,061	940,207	52,470,713		1,621,765	190,753
1940	596,592	158	14,090,722	770,280	54,745,840	895,822	1,642,103	2,558
TOTAL	4,529,468	284,497	63,339,397	13,008,965	362,880,943	20,203,413	13,519,705	1,741,097
	0.457.470		DDT me CII	TOT VERTICAL	1/0.00000000000000000000000000000000000			
	SASKATCI	Non-	BRITISH	Non-	NORTHWEST T	Non-	CANA	Non-
	Producing	producing	Producing		Producing	producing	Dandundan	
	Froducting	producing	\$	\$	Froducing	\$	Producing	producing
1000			-				75 000 546	7 507 400
1929	* * *	***	1,018,499	229,143	* * *		15,266,742	
1930	***	• • •	1,273,757	17,078	* * *		16,032,554	,
1931	***		1,210,309	15,722	* * *		18,588,667	
1932	• • •	3,350	1,027,168	7,228		***	20,164,785	
1933		***	1,736,556	334,149			22,015,322	1,850,827
1954		8,367	3,398,918	810,726	* * *	* * 4		
1935	***	94,162	6,312,731	678,467			43, 354, 795	
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	0.00	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

TOTAL .. 1,274,247 1,101,021 58,686,005 4,908,262 2,260,866 1,298,300 479,286,881 38,343,122

NOTE - Cost of process supplies used included only from 1935 to 1940.

Table 32 - FUEL AND ELECTRICITY USED BY AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1939 and 1940

		1 9	3 9	1 9	4 0
Kind	Unit of measure	Quantity	Cost at plant	Quantity	Cost at plant
			\$		\$
Bituminous coal (a) From Canadian mines	short ton	26,894	254,137	16,329	148,855
(b) Imported	short ton	28,573	275,465	32,501	310,402
Anthracite coal (a) From United States	short ton	1,016	12,694	1,977	26,045
(b) Other	short ton	981	18,309	1,515	24,043
Lignite coal	short ton	65	355	261	1,370
Coke (for fuel only)	short ton	104	1,574	237	2,677
Gasoline	Imp.gal.	524,308	164,967	656,846	201,564
Kerosene or coal oil	Imp.gal.	23,849	5,421	29,023	6,435
Fuel oil and diesel oil	Imp.gal.	6,680,545	1,016,182	6,995,037	1,092,046
Wood (cords of 128 cu.ft. piled wood)	cords	81,539	396,321	109,363	438,826
Other fuel Electricity purchased for power and lighting		•••	3,955	•••	1,479
(including service charges)	K.W.H.	761,595,899	5,722,266	863,478,958	5,834,746
(including service charges)	К. W. Н.	16,236,324	80,894	5,367,365	8,816
TOTAL	\$	***	7,952,580	***	8,147,304
Electricity generated -					
(a) For own use	K.W.H.	80,676,577		107,433,458	0 * 9
(b) For sale	K.W.H.	6,422,112	46,035	443,040	7,053

Table 33 - POWER EQUIPMENT (including stand-by or emergency equipment) USED BY THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1940

	Ordinar	ily in use	In reser	ve or idle
	Number of units	Total horse power (x)	Number of units	Total horse power (x)
Steam engines and steam turbines	29	1,527	16	1,335
Diesel engines	131	21,279	60	7,600
engines	108	7,916	114	8,980
Hydraulic turbines or water wheels	25	15,572	5	1,720
Electric motors - (a) Operated by purchased power	9,272	363,742	579	17,817
Total	9,565	410,036	774	37,452
(b) Operated by power generated by the establishment	1,721	26,915	96	2,226
tationary boilers	202	15,565	53	3,379

(x) According to manufacturers' rating.

Table 34 - WAGE-EARNERS, BY MONTHS, IN THE AURIFEROUS QUARTZ MINING INDUSTRY, 1931, 1938, 1939 and 1940

Month	1931	1938	1939	1940
January	8,275	25,492	27,402	27.823
February	8,482	25,480	27,278	28,012
March	8,681	25,760	26,941	28,270
April	8,746	25,591	26,767	28,295
May	9,030	26,707	27,669	28.864
June	9,319	27,087	28,238	28,528
July	9.345	27,234	28,537	28.741
August	9,285	28.824	28,743	28,955
September	9.391	27.844	28,577	29,626
October	9.524	28,057	28,621	30,106
November	9.496	27.787	28,402	30,153
December	9,323	27,095	27.516	29,380

Table 35 - CLASSIFICATION OF WAGE-EARNERS EMPLOYED IN AURIFEROUS QUARTZ MINING INDUSTRY, 1939 and 1940

		1 9 3 9			9 4 0			
		Number			Number			
Province		Mine			Mine			
	Surface	Underground	Mill	Surface	Underground	Mill		
Vova Scotia	138	276	48	97	205	28		
Quebec	1,575	2,971	378	1,574	5,515	435		
Ontario	4,722	12,194	1,349	4,812	12,634	1,428		
lani toba	233	348	59	202	297	57		
Saskatchewan	70	63	11	37	76	26		
British Columbia	855	2.083	354	750	2,082	568		
forthwest Territories	124	89	15	176	153	21		
Yukon	2	1	1	***	• • •	• • •		
CANADA	7,719	18,025	2,215	7,648	18,760	2,339		

Table 36 - CERTAIN DATA RELATING TO THE PRODUCTION OF GOLD BY THE ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY IN

		C.	ANADA, 1928 -	- 1940		
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 ex- plosives 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	Information	
1929	21.8	1.46	7.18	not	not	
1930	237	1.25	6.63	available	available	
1931(a)	250	1.19	6.50	1928	1928	
1932	255	1.21	6.31	to	to	
1933(b)	207	1.36	7.45	1934	1934	
1934(c)	154	1.71	9.64			
1935	146	1.89	10.48	4.38		16.75
1936	137	1.98	11.32	4.46		17.76
1937	132	2.10	12.18	4.65	0.33(d)	19.26
1938	150	1.85	10.95	4.53	0.56	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

<sup>(</sup>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.

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 suriferous 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 36(a) - CERTAIN DATA RELATING TO THE PRODUCTION OF GOLD BY PRODUCERS ONLY IN THE AURIFEROUS QUARTZ

		MINING INDUS	TRY IN CANADA	A. 1931, 1959 and	1 1940	
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 ex- plosives 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	\$	\$	8	\$	\$
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

<sup>(</sup>a) Data not available.

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

<sup>(</sup>d) Not including Mint charges and marketing prior to 1938.

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			INDUSTRY,	1940						
								Northwest		
		Nova Scotia	Quebec	Ontario	Mani toba	Saskat- chewan	British Columbia	Terri- tories	Yukon	CANADA
Number of producing mines		9	27	76	5	2	153	5	1	271
Ore mined		149,661	4,261,760	12,248,971	258.097	451,658	1,530,303	85,856		18,986,30
Material discarded (sorted)		11,490	171,920	466,652		35	99,912	4,842	***	757,538
Ore milled		140,748	3,953,703			451,623	1,433,610	80,186	***	18,083,43
Tailings retreated			***	179,962		-	349	• • • •		180,31
Concentrates produced		245		35,360			44,554			84,47
Gold content of ores, slags, residue and concentrates shipped -								H-FV		
To Foreign smelters	fine oz.			28,507			152,172		292	180,97
To Canadian smelters	fine oz.	***	23,905	2,288		96	25,058	261		51,608
Bullion bars shipped - Gold content	fine oz.	15,867	725,021	2,784,582	74,759	20,024	332,925	33,033		3,986,21
Silver content	fine oz.	569	131,233	589,972		6,138	97,716	7,418		844.13
Bullion produced by amalgamation	crude oz.	20,302	92,492	402,940	24,063		168,549	17,432		25,678
Bullion produced by cyanidation	crude oz.	638	864,358	3,602,894	79,239	28.509	277,653	55,852		4,909,14
Total Bullion Produced	crude oz.	20,940	956,850	4,005,734	103,301	28.509	446,202			5,634,82
Content of bullion bars produced -										, ,
Gold	fine oz.	22,219	728,157	3,139,762	'76,033	20,024	345,602	54,876		4,386,67
Silver	fine oz.	645	132,146	563,952		6,138	101,558	12,023		827,78
Value (standard) Exchange premium on bullion bars	*	459,297	15,052,341	64,902,557				1,134,382		90,678,46
produced	\$	396,135	12,981,703	55,968,176	1,355,528	357,018	6,168,446	978,303	• • •	78,205,30
and residues sold	\$		920,800	1,597,648		3,593	7,062,774	9,815	11,242	9,605,87
TOTAL GROSS VALUE OF PRODUCTION	\$	855,673	29,003,738	122,675,051	2,931,464	773,231	20,413,118	2,126,968	11,242	178,790,48
Value of fuel, electricity and pro- cess supplies used, also freight on shipments, marketing, smelter										
and refining charges		238,413	5,612,542	20,851,609	593,901	272,717	3,890,360	617,199	• • •	32,076,74
NET VALUE OF PRODUCTION	\$	617,260	23,391,196	101,823,442	2,337,563	500,514	16,522,758	1,509,769	11,242	146,713,74

Table 38 - ORES, CONCENTRATES, SLAGS, ETC., SHIPPED TO SMELTERS FROM CANADIAN COLD MINES, 1929 - 1940

			TO CANADI	AN PLANTS			TO FOREIGN PLANTS						
	Or	es	Concer	trates		residues, pitates	Or	es	Conce	ntrates	0 /	residues pitates	
	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	268	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	24,224	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	48,106	29,688	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	
TOTAL	952,050	262,167	50,273	195,261	1,543	31,416	248,412	177,096	429,631	1,115,632	1,940	131,496	

Table 39 - PRINCIPAL STAT				Average			Cost of fuel
	Number of	Ore (/)	Total	ounces		Salaries	electricity
Camp or district	producers		gold	per ton	Employees	and wages	and process
			recovered	recovered		paid	supplies
		Tons	Fine oz.		No.	\$	\$
1938				0.0		3 4 053 000	T 000 TS0
Porcupine	17	4,789,270	1,258,671	. 26	8,222	14,851,682	7,086,736
Cirkland Lake (c)	17	2,277,424	972,772	.43	5,009	8,974,676	4,449,277
arder Lake	3	349,458	58,057	.17	492	903,176	718,110
latachewan	2	513,675	58,699	.11	442	769,207	567,251
Sudbury	4	76,910	21,026	.27	310	531,452	205,064
llgoma	7	115,722	16,210	.14	408	678,685	210,494
Thunder Bay	13	(a) 559,495	195,895	. 35	1,708	2,914,116	1,457,349
Rainy River and Kenora	3	(b) 32,516	10,709	.33	206	303,755	138,717
Patricla	11	889,458	224,089	. 25	1,609	2,773,309	1,605,992
TOTAL	77	9,603,928	2,816,128	.29	18,406	32,700,058	16,438,990
1939							
Porcupine	19	5,133,254	1,312,702	. 26	8,588	15,903,561	7,505,175
irkland Lake	12	2,301,940	941,371	.41	5,031	9,192,857	4,698,044
arder Lake	5	556,390	93,396	.17	823	1,441,235	852,366
latachewan	2	531,503	63,137	.12	642	1,046,464	707,847
Sudbury	5	(d) 121,532	26,229	.22	228	401,654	125,945
llgoma	5	109,169	24,708	.23	271	443,551	180,803
Chunder 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
atricia	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
1940							
Porcupine	21	5,647,114	1,426,173	. 25	9,107	16,101,444	8,021,747
irkland Lake	11	(e)2,150,762	875,982	.41	4,719	8,665,327	4,072,510
arder Lake	3	859,275	148,106	.18	872	1,589,845	1,403,020
atachewan	2	550,280	60,501	.11	510	915,210	638,670
budbury	2	118,450	21,485	.18	290	505,040	197,197
lgoma	2	83,564	16,111	.19	205	508,748	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	(f)1,477,078	337,175	.23	2,399	4,347,949	2,763,687

(a) In addition, 3,100 tons of tailings were treated and some concentrates were not shipped.(b) In addition, 500 tons of tailings were treated.

11,768,174 3,170,557

26,526

14 1

76

3,108

.12

.27

20,299

36,305,677

76,520

32,473 19,335,985

(x) Includes data for all active properties.

Eastern Ontario .....

Table 40 - MILLING CAPACITY OF PRODUCING CANADIAN GOLD MINES, 1935 - 1940 (Tons of 2,000 pounds per 24 hours)

	Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	British Columbia
1955	292	5,368	20,921	1,465	***	2,990
1956	713	4.514	22,639	1,000		4,120
1957	565	6.090	25, 249	975	30	3,915
1958	542	8,217	30,097	875	1,000	4,590
959	562	9.580	33,324	865	1,000	4,417
1940	450	11,215		690		***

<sup>(</sup>c) Probably includes data relating to some non-producing properties that eventually will be classified under Larder Lake area.

<sup>(</sup>d) In addition, 3,820 tons tailings were retreated.(e) In addition, 143,168 tons tailings were retreated. (f) In addition, 36,794 tons tailings were retreated.

<sup>(</sup>A) Does not include low-grade discarded by sorting, but includes ore milled or smelted.

Table 41 - ORES MINED AND TREATED BY AURIFEROUS QUARTZ MINING INDUSTRY, 1925 - 1940

ear	Ore hoisted	Ore milled(c)	Crude ore shipped to smelters(d)	Low grade sorted out	Tailings retreated	Gold re- covered as bullion(b)	crude ore	Gold in concentrates, slag, etc., shipped
	tons	tons	tons	tons	tons	fine oz.	fine oz.	fine oz.
925	3,646,460	3,527,021	118,436(/)	(a)	48,475	1,482,294	97,011	34,151
926		3,888,041	127,116(/)	(a)	48,200	1,517,758	81,849	55, 544
927	4,605,190	4,514,389	96,774	(a)	53,155	1,638,149	61,194	64,594
928	4,601,628	4,483,053	113,819	(a)	43,536	1,607,337	72,440	62,543
929	4,354,744	4,252,994	118,149	(a)	48,707	1,669,932	97,323	4,271
.930		4,306,869	123,037	(a)	37,095	1,782,556	45,342	56,893
931		5,450,576	75,803	(a)		2,169,293	33,626	68,359
932	6,072,665	5,924,359	73,133	(a)	3,140	2,412,829	33,753	55,745
933	6.528.854	6,446,776	33,388	(a)	3,658	2,352,659	17,085	85,621
934		7,475,278	49,525	(a)	27,235	2,331,822	31,624	127,067
935		8,888,129	19,481	(a)	57,798	2,492,145	9,848	143,666
	10,694,208	10,504,181	6,569	(a)	33,814	2,903,063	9,988	192,439
	12,388,489	11,880,323	39,642	457,622	97,710	3,283,795	17,757	188,618
	14,749,649	14,158,555	176,822	528,696	64,926	3,810,642	44,451	191,586
	17,105,744	16,150,173	275,519	660,578	18,426	4,160,352	56,044	167,448
	18,986,306	18,083,439	209,394	757,538	180,311	4,386,673	42,422	190,157

(a) Not available.

(b) Content of bullion shipped 1925-1935; 1936-1940 content of bullion produced.

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

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

Table 42 - GOLD CONTENT OF BULLION, ORES, CONCENTRATES, ETC., SHIPPED AND ORE MILLED BY AURIFEROUS QUARTZ

MINES IN CAMADA, WITH AVERAGE PRICE OF GOLD IN CAMADIAN FUNDS, 1929 - 1940 Tonnage Gold content Oz. of fine Average price fine oz. (/) treated (x) gold per ton of gold Year .41 4,371,143 1,771,526 \$ 20.67 .43 \$ 20.67 4,429,906 1,884,791 1931 ...... 5,526,379 2,271,278 .41 \$ 21.55 2,502,327 .42 \$ 23.47 5,997,492 6,480,164 1933 ..... 2,455,365 , 38 \$ 28.60 7,524,803 2,490,513 .33 \$ 34.50 1934 ..... 8,907,610 10,510,750 1935 ..... 2,645,659 . 30 \$ 35.19 \$ 35.05 .29 3,095,427 1937 ..... 11,919,965(a) 5,490,170 . 29 \$ 54.99 .28 14,335,377(a) 4,046,679 \$ 35.17 .27 16,425,692(a) 4,383,844 \$ 36.14 1939 ..... 1940 ..... 18,292,835(a) 4,619,252 . 25 \$ 38.50

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

(/) Relatively shall quantity of gold contained in concentrates, slags, etc., shipped 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 43 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN

	CANADA, 1940				
	Development				Total
Name of Mine	and explora- tion (a)	Mining	Milling	General (b)	cost per ton (c)
	\$	\$	\$	\$	\$
NOVA SCOTIA					
Seal Harbour Gold Mines Ltd	0.2934	1.1645	0.5076	0.4334	2.3989
QUEBEC					
Amm Gold Mines Ltd	0.23	1.44	1.02	0.44	5.15
Arntfield Gold Mines Ltd	0.333	1.363	0.810	0.610	3.116
Beattie Gold Mines Ltd	0.223	0.677	1.015	0.278	2,193
Belleterre Quebec Mines Ltd	1,978	3.005	1.432	0.780	7.195
Canadian Malartic Gold Mines Ltd	0.639	0.894	0.594	0.421	2.539

Table 43 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN

Vietnorey =	940 (Continued) Development				Total
Name of Mine	and explora-	Mining	Milling	General	cost per
TIME OF MALIE	tion (a)				ton (c)
	\$	\$	\$	Ĉ.	
QUEBEC (Concluded)					
Central Cadillac Mines Ltd	0.98	2.30	1.42	1.16	5.86
Françoeur Gold Mines Ltd	0.54	1.30	1.09	1.12	4.05
Lamaque Mining Co. Ltd	1.36	2.12	0.69	1.12	5.29
Lapa Cadillac Gold Mines Ltd	0.336	1.775	0.969	0.493	3.563
Malartic Gold Fields Ltd	1.143	1.587	0.994	1.265	4.989
McWatters Gold Mines Ltd	2.01	2.40	1.64	1.00	7.05
O'Brien Gold Mines Ltd	2.22	2.50	1.43	1.09	7.24
Pandora Cadillac Gold Mines Ltd	1.07	1.24	0.94	0.55	3.80
Perron Gold Mines Ltd	2.42	2.76	0.83	2.49	9.50
Powell Rouyn Gold Hines Ltd	0.28	2.08	0.82	0.34(g)	3.52(d)
Senator-Rouyn Ltd	3.56	1.65	2.78	0.51	8.50
Sigma Mines Ltd	1.298	2.348	0.615	0.407	4.668
Siscoe Gold Mines Ltd	0.8358	2.0063	0.8369	0.6296	4.3086
Sullivan Consolidated Mines Ltd	2,15	1.96	0.98	1.44	6.53
ONTARIO					
Porcupine District			7 05	3 00	4.05
Broulan Porcupine Mines Ltd	0.69	1.40	1.27	1.27	4.63
Buffalo Ankerite Gold Mines Ltd	0.614	2.925	0.352	0.615	5.006
Conjaurum Mines Ltd	1.82	3.23	0.68	1.00	6.75
De Santis Porcupine Mines Ltd	2.06	2.31	1.10	0.63	6.10
Dome Mines Ltd.	0.869	1.606	1.009	3.359	6.843
Hollinger Consolidated Gold Mines Ltd. (Timmins)	0.9242	2.6429	0.6000	2.0493	6.2164
Hollinger Consolidated Gold Mines Ltd. (Ross)	1.9430	1.1499	1.4301	1.3995	5.9123
McIntyre Porcupine Mines Ltd	0.634	3.683	0.784	1.867	6.968
Naybob Gold Mines Ltd	1.137	2.038	1.026	0.940	5.191
Pamour Porcupine Mines Ltd	0.69	1.17	0.53 1.03(e)	0.19	2.58
Paymaster Consolidated Mines Ltd	1.79 1.1522	2.53 2.2759	0.6889	1.9278	6.0448
Preston East Dome Mines Ltd	Titore	2.2100	0.0003	T*3510	0.0440
Kirkland Lake District					
Bidgood Kirkland Gold Mines Ltd.	3.47	3.91	1.39	0.76	9.53
Golden Gate Mining Co. Ltd.	2.49	2.84	1.95	1.23	8.51
Kirkland Lake Gold Mining Co. Ltd	1.72	3.20	1.22	1.15	7.29
Macassa Mines Ltd.	1.83	3.05	1.12	3.29	9.29
Morris Kirkland Gold Mines Ltd	0.459	2.163	1.368	0.438	4.428
Teck-Hughes Mines Ltd	(f)	3.85	0.94	2.72	7.51
Wright-Hargreaves Mines Ltd	(f)	4.564	1.120	4.154	9.838
Larder Lake District					
Chesterville Larder Lake Gold Mining Co. Ltd	0.391	1.558	0.852	0.367	3.158
Kerr-Addison Gold Mines Ltd	1.20	0.89	0.63	0.37	3.09
Omega Gold Mines Ltd	0.661	2.391	1.208	0.153	4.413
Matachewan District					
Hollinger Consolidated Gold Mines Ltd. (Young	0 7751	1 4400	0 5007	0 5054	0.0473
Matachewan Consolidated Mines Ltd	0.3751	1.4469	0.5997	0.5254	2.9471
madachewan consorrdated wines bld	1.178	1,534	0.786	0.089	3.587
Thunder Bay and Kenora Districts					
Bankfield Consolidated Mines Ltd.	2.3640	2,8503	1.6580	1.5148	8.3871
Leitch Gold Mines Ltd.	3.82	7.01	2.17	4.14	17.14
MacLeod-Cockshutt Gold Mines Ltd	1.1735	2.1962	1.4400	1.8401	6.6498
Sturgeon River Gold Mines Ltd.	2.786	7.019	1.809	1.596	13.010
Wendigo Gold Mines Ltd.	1.35	5.58	1.90	2.58	9.19
					To the same

Gold

(e) Includes crushing and conveying.

Table 43 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN

	Development				Total	
Name of Mine	and explora-	Mining	Milling	General	cost per	
	tion (a)			(b)	ton (c)	
	\$	\$	\$	\$	\$	
ONTARIO (Concluded)						
Patricia District						
Central Patricia Gold Mines Ltd	1.81	2.62	1.25	2.92	8.60	
Cochenour Willans Gold Mines Ltd	1.739	2.482	2.369	0.774	7.364	
AcKenzie Red Lake Gold Mines Ltd.	1.91	2.75	1.11	2.40	8.17	
Pickle Crow Gold Mines Ltd.	0.97	3.11	0.93	0.82	5.85	
Jchi Gold Mines Ltd.	0.46	2.27	0.97	0.87	4.57	
OLG HEROD - OLG THE STREET STREET	0.20	W. 6 12 1	0.00	0.01	240.	
MANITOBA						
od's Lake Gold Mines Ltd	2.525	2.635	1.528(e)	1.436	8.124	
NORTHWEST TERRITORIES					(1)	
Con Mine (/)					(h)	
Rycon Mine (/)	4.05	0. 50	- 50		(h)	
egus Mines Ltd. (/)	4.35	6.32	3.72	6.12	21.01	
BRITISH COLUMBIA						
Bayonne Cons. Mines Ltd	1.27	5.04	4.21	1.68	12.20	
Bralorne Mines Ltd.	2.0210	2.8810	0.7187	1.9769	7.5976	
ariboo Gold Quartz Mining Co. Ltd	2.78	5.09	1.35	2.35	11.57	
old Belt Mining Co. Ltd	1.87	2,98	1.20	0.75	6.78	
Medley Mascot Gold Mines Ltd	0.13	2.81	1.48	2.97	7.39	
sland Mountain Mines Co. Ltd	3.27	2.06	2.09	2.50	9.92	
Cootenay Belle Gold Mines Ltd	2.75	4.71	1.55	0.75	9.74	
ivingstone Mining Co. Ltd	7.76	8.89	4.55	6.00	27.20(d)	
Nount Zeballos Gold Mines Ltd	2.85	5.02	1.58	5.58	13.05	
soyoos Mines of Canada Ltd	0.02	1.19	1.49	0.50	3.19	
olaris-Taku Mines Co. Ltd	1.235	2.718	0.863	1.656	6.472(d)	
deno Gold Mines Ltd., Nelson	3.089	1.985	1.890	0.790	7.754	
deno Gold Mines Ltd., Zeballos	2.862	3.176	2.647	3.153	11.838	
Sheep Creek Gold Mines Ltd	1,555	2,867	1.570	1.035	7.027	
mir Yankee Girl Gold Mines Ltd	0.134	2.423	1.264	0.762	4.583	
a) Exclusive of outside exploration.	(f) Inclu	ded under	mining.			
b) Marketing, head office, taxes, etc.	(g) Not i	ncluding '	taxes.			
c) Depreciation not included.	(h) Not a	vailable :	for publics	tion.		
d) Shipped to smelter.						
Tuesting a second of the secon	1/1 27		2 A .	22 . 4 . 4 . 4		

### THE COPPER-GOLD-SILVER MINING INDUSTRY, 1940

(/) New operations in remote district.

The mining of "copper-gold-silver" ores in Canada during 1940 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 1940 were reported by 25 firms compared with 28 in 1939. The gross value of crude ore, concentrates, etc., shipped in 1940 from the mines and mills to smelters was estimated at \$51,174,776; the cost of fuel, purchased electricity, process supplies, freight and smelter treatment totalled \$25,370,357 and the net value of shipments was estimated at \$25,804,419.

During the year under review the industry provided employment for 6,115 persons and distributed \$10,777,827 in salaries and wages.

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 - Noranda Mines Ltd. reported that in 1940 a total of 9,313 feet of drifting, 6,844 feet of raising and 84,445 feet of exploratory diamond drilling was done at the Horne mine. The use of diamond drills instead of percussion rock drills for drilling holes used in blasting down ore in stopes has gradually increased until now over one-half of the ore broken at the Horne mine is mined by this method.

A large body of rhyolite-breccia, in which occurs numerous large and small lenses of massive pyrite, has been found to extend from the 1,500 foot level to a depth of at least 1,000 feet below the 3,975 foot level.

Waite Amulet Mines Ltd. completed 119,460 feet of diamond drill stope holes in the Amulet section and at the end of 1940 the tonnage drilled and ready for blasting was 360,000 tons. The ore reserve estimate of December 31, 1940 was as follows: Amulet (other than lower "A" orebody) 270,000 tons averaging copper, 2.7 per cent; zinc, 10 per cent; gold, .05 ounces per ton and silver 2.5 ounces per ton. Lower "A" orebody 3,260,000 tons; copper, 6.3 per cent; zinc 5.1 per cent; gold .05 ounces per ton and silver 1.6 ounces per ton. It was expected that production of zinc concentrates would commence in April, 1941. Ore reserves in the Amulet section as of December 51, 1940 were estimated as follows: Copper ore, 312,000 tons; copper, 3.4 per cent; gold, .03 ounces per ton, and silver, .3 ounces per ton; zinc ore, 300,000 tons zinc 11.52 per cent.

Normetal Mining Corp. Ltd. confined stoping operations in 1940 to No. 1 and 2 orebodies. Of the total ore broken about 46.5 per cent was in cut-and-fill stopes, 54.9 per cent in shrinkage stopes, and 18.6 per cent in development. Copper concentrates were shipped throughout the year to Noranda Smelter. Of the resultant copper, approximately 80 per cent was sold, under contract, to the British Ministry of Supply and the balance for domestic consumption. Zinc concentrates stock piled, as well as current production, were shipped to a smelter in the United States.

The mine and mill of the Aldermac Copper Corporation Limited, located in Beauchastel Township, were in operation throughout the year. Ore raised in 1940 totalled 353,072 tons and the quantity milled amounted to 353,652 tons. Copper concentrates were shipped chiefly to the Noranda smelter while the iron pyrites output went to various plants located in Canada and the United States.

MANITOBA - Sherritt Gordon Mines Ltd. brought its East mine into production in May and continued in production until the end of November. Operations in the West mine continued throughout the year on the basis of a aix day week. Approximately 73 per cent of all underground development work and 83 per cent of the underground diamond drilling was done in the West mine. Costs and development work in 1940 about equalled those of 1959, and although tons milled during 1940 were practically the same as in 1939, ore reserves as at December 31, 1940 are substantially equal to those of December 31, 1939. The net operating cost in 1940 was reported at \$2.032 per ton milled or 4.128 cents per pound of copper; the net cost of electrolytic copper, f.o.b. refinery, was recorded at 7.226 cents per pound.

The Hudson Bay Mining and Smelting Co. Limited reported that approximately 86 per cent of the ore milled at the Flin Flon mine during 1940 was derived from underground mining operations and 14 per cent from the open pit. Production of gold, silver, copper and zinc from Flin Flon materials was the highest for any year in the history of the Company. The tonnage of ore treated in the concentrator was gradually increased during the year 1940. The average percentages of recovery of gold, silver and copper in copper concentrates were each the highest on record. The percentage of recovery of the zinc in the zinc concentrates was somewhat lower than in 1939. There was a slightly lower tonnage of zinc concentrates treated in the zinc plant but due to a somewhat greater zinc content and a better recovery in the zinc plant itself, the slab zinc production was higher than in any pervious year. The additions to the zinc plant in 1940 included two new roasters, two additional thickeners, more purification equipment and solution storage tanks in the zinc leacing plant; the installation of the fifth electrolytic tank circuit and the completion of a new fifty-ton melting furnace in the casting plant. The cadmium plant operated continuously throughout the year and copper smelting operations were satisfactory. Another record tonnage of pay charge of Hudson Bay materials and custom concentrates was treated in the smelter.

ERITISH COLUMBIA - The Howe Sound Company reported that the Britannia property operated continuously in 1940. Due to war effort and the movement of men into other industries, a shortage of skilled labour developed and on November 1 it became necessary to decrease the scale of operations in order to divert sufficient personnel to carry on essential exploratory work. This work was largely concentrated between the 2,700 and 4,100-foot levels, although some diamond drilling gave information at greater depths. The mineralized zone on the horizon of the 4,100-foot level was outlined above the tunnel and partially developed by drilling to a depth of over 300 feet below it. This work has proved the existence of a commercial orebody of importance and further exploration of the area will be continued in 1941. The result of the exploratory work has been encouraging.

The "Miner", Vancouver, reports that development at the Copper Mountain mine of the Granby Consolidated Mining, Smelting & Power Co. Ltd. during 1940 consisted of 9,376 feet of drifting and crosscutting, 15,647 feet of raising and 37,504 feet of diamond drilling. A total of 3,748,447 tons of ore were added to

the reserves during the year. Ore shipments during the year amounted to 1,650,486 tons; this leaves a net addition to the reserves of shipping ore of 2,097,961 tons after making provision for losses resulting from non-recoverable pillars and possible excessive dilution. At the Allenby Concentrator, the enlargement programme, undertaken early in the year, was completed about the end of September. An appreciable improvement was made in the recovery of gold and silver, but a slight decrease in the recovery of copper occurred during the year.

Table 44 - PRINCIP	AL STATIST	ICS(/) OF THE	COPPER-GOLD	SILVER MI	NING INDUSTRY	IN CANADA, FOI	SPECIFIED YEARS
Year	No. of active opera- tors(x)	No. of operating plants or mines (x)	Capital employed (x)	(x) Number of em- ployees	Salaries and wages(x)	(x) Cost of fuel and electricity	Value of ores and concen- trates shipped by mines
			8		\$	\$	
1923	14	14	19,108,072	1,790	3,004,292	334,696	4,561,486
1929	144	152	52,546,697	5,243	8,498,755	1,035,133	21,859,907
1935	16	18	38,461,682	3,430	5,040,196	534,152	13,243,165
1936	19	21	40,732,717	3,738	5,473,325	495,843	15,619,897
1957	28	31	73,338,258	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

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

Table 45 - DETAILS OF FUEL AND ELECTRICITY USED IN THE COPPER-GOLD-SILVER MINING INDUSTRY, 1939 and 1940 0 Kind Unit of Cost at Cost at plant plant Quanti ty Quantity measure Bituminous coal (a) From Canadian mines .... short ton 10,428 91,928 11.762 105,915 (b) Imported ..... short ton 4,121 Anthracite coal (a) From United States .... short ton 197 169 5,761 (b) Other ..... short ton 7 245 Lignite coal ... short ton 90,749 147,085 95,547 184,511 Coke (for fuel only) ..... short ton 68 1,152 66 1,166 Gasoline ...... Imp.gal. 93.344 27,238 75,652 21,968 Kerosene or coal oil ..... 1,216 Imp.gal. 3,918 1,573 5,307 Fuel oil and diesel oil ..... 70,722 Imp.gal. 793,568 858,890 80,961 Wood (cords of 128 cu. ft. of piled wood) ... cord 448 1,695 351 1,675 Other fuel ..... \$ 935 Electricity purchased, including service K.W.H. 249,300,170 878,121 270,601,445 896,989 charges ..... TOTAL ..... 1,223,523 1,297,454 Electricity generated for own use ...... K.W.H. 88,466,161 94,081,911 \$ Process supplies consumed (explosives, etc.) 5,585,616 5,812,178 GRAND TOTAL VALUE OF FUEL AND PROCESS SUPPLIES CONSUMED ..... ... 6,809,139 ... 7,109,632

<sup>(/)</sup> 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 46 - POWER EQUIPMENT (including stand-by or emergency equipment) IN THE COPPER-GOLD-SILVER MINING

	Ordinar	Ordinarily in use		ve or idle
Description	Number of units	Total horse power (x)	Number of units	Total horse power (x)
Steam engines and steam turbines	3	17,020	6	11,356
Diesel engines	6	1,345	1	350
Gasoline, gas and oil engines, other than diesel engines	2	5	4	416
Hydraulic turbines or water wheels	6	8,900		
Electric motors - (a) Operated by purchased power	2,142	84,452	150	4,631
Total	2,159	111,722	161	16,753
(b) Operated by power generated by the establishment	239	13,404	20	1,631
tationary boilers	27	6,010	12	1,259

<sup>(</sup>x) According to manufacturers' rating.

Table 47 - WAGE-EARNERS, BY MONTHS, IN THE COPPER-COLD-SILVER MINING INDUSTRY IN CANADA, 1931, 1938, 1939 and

1940						
Month	1931	1938	1939	1940		
January	3,198	4,896	5,279	5,681		
February	5,098	4,871	5,307	5,639		
March	3,142	4,938	5,290	5,537		
April	3,063	5,013	5,489	5,616		
May	3,089	5,009	5,652	5,742		
June	3,139	5,114	5,625	5,308		
July	3,099	5,186	5,727	5,825		
August	3.139	5,309	5,683	5,633		
September	5,094	5,413	5,711	5,605		
October	3,123	5,357	5,744	5,536		
November	3,139	5,363	5,805	5,460		
December	3,106	5,260	5,679	5,355		

Table 48 - CLASSIFICATION OF WAGE-EARNERS EMPLOYED IN THE COPPER-GOLD-SILVER MINING INDUSTRY(x), 1932-1940

Year	Surface	Underground	Mill	Total
1952	773	1,719	441	2,933
1955	610	1.671	401	2,682
1934	747	1,874	344	2,965
1935	999	1,721	474	3,194
.936	1,323	1,735	354	3,412
1937	1,517	2,417	768	4,702
1958	1,543	2,891	710	5,144
1939	1,763	3,075	749	5,587
1940	1,773	3,111	739	5,623

<sup>(</sup>x) Smelter employees not included.

Table 49 - SHIPMENTS FROM COPPER COLD-STIVER MINES OF CANADA, 1959 and 1940

	Oceants to	Value			l Content as		od by
	Quantity	Value	Gold	Silver		Sulphur	Zinc
	Tons	8	fine oz.			tons	pounds
1939					•		
mines shipped to Canadian plants(b) -							
res	868,328	11,753,766	173,019	440,393	60,333,576		***
(A) Copper concentrates	616,071	22,871,809	237,742		145,937,499	• • •	1,683,442(
inc concentrates	96,817	2,775,000	7,378	182,517	1,320,610		91,116,595
ron pyrites concentrates	2,436	8,147		,	2,020,020	1,216	***
A	2,400	0,141	* * *	***	***	1,000	***
lags, residues and gold	ror	004 703	04 740	7 77 770	557 701		
precipitates	595	964,761	24,140	133,330	557,781		***
O mines shipped to foreign plants -							
res	108	3,599	101	55	5,425		
opper concentrates (g)	177,884	11,101,121	53,866	543,600	84,062,126		***
inc concentrates	30,693	752,583		***	203,969		33,669,569
ron pyrites concentrates	225,200	930.682				113,231	
TOTAL (f)	2,018,132	51,161,468	496,246	3,937,860	292,420,986	114,447	126,469,604
alue of process supplies,							
etc. (e)		24,978,891					
NET VALUE	•••	26.182.577					* 1.7
MET ANDRE ********		TO TOUR OIL		•••	***	***	***
1940							
2 mines shipped to Canadian							
plants(b) -							
res	860,237	9,647,143	156,857	372,408		***	***
Copper concentrates	768,833	27,351,049	258,692		188,421,117		2,492,666
inc concentrates	108,328	2,847,070	5,250	185,406	954,803		102,169,600
ron pyrites concentrates	56,508	76,218			***	17,619	•••
clags, residues and gold							
precipitates	566	935,461	23,739	120,970	530,712		•••
mines shipped to foreign		, , , , ,					
plants -							
F	11	984	11	949	2,234		
res						* * *	• • •
opper concentrates (g)	159,516	9,178,716	39,952	492, 352		***	70 550 003
inc concentrates	30,389	530,018	456	45,552	444,808		32,558,961
ron pyrites concentrates	91,457	608,117			***	147,432	***
	2,055,445	51,174,776	404,957	4,732,251	304,780,692	165,051	137,221,227
Value of process supplies,							
		25,370,357		***			
NET VALUE		25,804,419				7.0.0	

(c) Not necessarily recovered.

Year	Pounds	\$	Year	Pounds	
1927	140,147,440	17,195,487	1934	564,761,062	26,671,458
1928	202,696,046	28,598,249	1935	418,997,700	52,511,960
1939	248,120,760	43,415,251	1936	421,027,732	39,514,101
L930	303,478,356	37,948,359	1937	530,028,615	68,917,219
1931	292,304,390	24,114,065	1938	571, 249, 664	56,554,054
1932	247,679,070	15,294,058	1939	608,825,570	60,934,859
1933	299,982,448	21,634,853	1940	(not pul	blished)

<sup>(</sup>b) Certain mines operated in the Rossland area by leasers in 1939 and 1940 treated, statistically, as one mine.

<sup>(</sup>e) Includes freight on ore shipments, smelter charges and fuel and purchased electricity.

(f) Gross value. (See Footnote to Table 38)

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

- 58 -

Table 51 - PRODUCTION OF REFINED COPPER(/) IN CAMADA, 1931 - 1940

Year	Short tons	Year	Short tons
1931	92,183	1936	191,595
1952	90,077	1937	215,080
1935	112,245	1938	227,240
1934	149,261	1959	231,684
1955	173,290	1940	(not published)

<sup>(/)</sup> In all forms and from all sources.

### GENERAL NOTES RELATING TO GOLD PRODUCTION IN CERTAIN OTHER COUNTRIES

UNION OF SOUTH AFRICA - Chamber of Mines, Johannesburg: "During 1940, your Committee was informed by the Government that gold is regarded as a munition of war, and that its production should not only be maintained but, if possible, increased.

"With this object, and with a view to assisting in the release of men for military service, and for the manufacture of munitions, recommendations were issued to place the Industry on a war-time basis, and for the elimination of all services which, for the time being, could be regarded as non-essential.

"At the beginning of the year your Committee issued recommendations to the mines that as many employees as could possibly be spared, should be allowed to undergo part-time military training or undertake full-time military service. The carrying out of this recommendation was subject to the necessity of maintaining the production of gold. At the end of the year 5,403 employees were on full-time service. It is the opinion of your Committee that this number represents the maximum number that can be released in the present national circumstances.

"The Mines Engineering Brigade (S.A.E.C.), consisting of Mines Companies formed on an Engineer Field Company basis, was established on the 25th June, 1940, as a part-time Unit of the South African Engineering Corps. For the purposes of organization, the Brigade was divided into Battalions on the East, Central and West Rand under a Brigade Headquarters, with its offices in Johannesburg. At the camp established at Maccauvlei, instruction in Military Engineering and Infantry Training is provided by personnel supplied by the Engineer and Infantry Training Centres, Premier Mine. Members of the Brigade are required to attest for military service anywhere in Africa, and the training, which includes a period in a local camp once every five weeks, is undertaken in their spare time.

"It was recommended that the holiday leave position of each employee proceeding on full-time military service should be cleared up either by a payment in cash, or by issue of a special "Active Service Leave Voucher" in lieu of any leave due or accrued to him at the time he leaves the mine to proceed on military service. The arrangements were made retrospective to the 6th September, 1939.

\*\*On the 28th February, 1940, it was announced that the present Government had decided to replace the scheme initiated by the late Government, by allowing the 1936 Taxation scale to apply to the full gold price, and adding a 9 per cent tax on the gross profits. Later in the year the 9 per cent special contribution was increased to 11 per cent......

AUSTRALIA - The Mining Journal, London, in a review of Australian Gold Mining in 1940 states:
"Gold production statistics are at present incomplete, but the indications are that the 1939 total of about
1,650,000 fine ounces will not be greatly exceeded. In Western Australia the reported yield actually showed
a decrease from 1,214,237 fine ounces to 1,191,481 fine ounces, but this was due to a technicality in that
the mines are now cleaning up four-weekly, instead of at the end of the calendar month, and December clean-up
occurred about the middle of the month. Actually the yield for the whole of 1940 was about 4,000 ounces
above that of 1939. Victoria will show a decided increase, principally on account of great activity at
Bendigo. Queensland, New South Wales and other states will be relatively unaltered. All the indications
point to the conclusion that the gold boom is over for the time being, and that from now on Australia may
be expected to settle down to steady production, which may reach 1,700,000 fine ounces yearly. . . . . . The
Gold Mining Encouragement Act, passed by the Federal Parliament during the year, was an important piece of
legislation affecting the industry; the Act provides for some remission of the tax for the high-cost
producer, the effect being that partial rebates of tax are made to all producers whose costs are above
approximately \$A.8 6s.6d. per fine ounce, no tax at all being chargeable on gold produced at costs exceeding
about £A.9 per fine ounce. In addition, the Act provides for a grant of £A.150,000 to the states, in

Gold - 59 -

proportions based on the 1939 gold production, which is to be used by the state governments in making advances to assist in the development of the industry. ......Sixteen companies in Western Australia, the production of which is about 60 per cent of that of the whole state, had reserves totalling 11,450,000 long tons. Their combined plant capacities is about 2,900,000 long tons annually, so that the average ore in sight is about four years' mill supply; the average grade was 6.11 dwts. per ton. ......Since the commencement of the government-assisted prospecting scheme in 1933, 8,478 men had been assisted, and 600 men are still working under the scheme."

### MINE PRODUCTION OF GOLD IN THE UNITED STATES, 1940 - PRELIMINARY ANNUAL FIGURES (United States Bureau of Mines)

Total mine production of recoverable gold in the United States (Territories included) was 5,905,052 fine ounces in 1940, an increase of 4 per cent over 5,672,485 ownces in 1939, 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 ownce was \$206,676,820 in 1940 and \$198,536,975 in 1939. Of the total production in 1940, California contributed 24 per cent, Philippine Islands 18 per cent, Alaska 13 per cent, South Dakota 10 per cent, Colorado 6 per cent, Nevada 6 per cent, Utah 6 per cent, Arizona 5 per cent, Montana 5 per cent, and other States 7 per cent.

The production of recoverable gold in Alaska continued to increase in 1940 as more mechanical equipment was brought into use in the mining of placers, and the total was about 765,200 fine ounces, an increase of 13 per cent over 1939.

The output of recoverable gold from Arizona mines declined from 316,453 fine ounces in 1939 to 292,500 ounces in 1940, owing to a decreased output of copper ore from United Verde mine, the closing in May 1940 of the Montana mine, and the smaller production of siliceous gold ores from mines at Oatman.

California was again the leading gold-producing State in 1940, despite a decline of 2 per cent from the 1939 output. Several of its leading gold producers of 1939 were either idle in 1940 or produced less. A labour strike at the Selby plant from July 1 until November 9, 1940, removed a market for concentrates for several months. Lode mines continued by a small percentage to be the major source of gold, and the Grass Valley-Nevadu City district was again the main source of gold ore. Slightly less than half of the State total gold output from ores and gravels in 1940 came from placer gold. The State output from all sources totalled 1,408,700 fine ounces in 1940.

The output of recoverable gold in Colorado in 1940 was about the same as in 1959 and came chiefly from gold, gold-silver, and copper-silver-lead-gold ores. The Cripple Creek district (Teller County) produced 36 per cent of the State total.

The output of recoverable gold (145,000 fine ounces) in 1940 from Idaho ores and gravels was the largest since 1871 when 212,850 ounces were produced. Gold from placer operations totalled 58,000 ounces in 1940, and ores of all classes yielded the remainder.

The output of recoverable gold in Montana increased to 275,700 fine ounces in 1940, or 4 per cent over 1939. This gain resulted chiefly from the increase in output from placers. The largest producer of gold in the State was the West Mayflower mine, operated by the Anaconda Copper Mining Co., near Whitehall; it was followed by the Butte properties of the Anaconda Copper Mining Co., the Winston Brothers dredge near Clancey, and the Jardine mine at Jardine.

The quantity of recoverable gold (367,400 fine ounces) produced in Nevada in 1940 exceeded that in any year since 1916 and its value(\$12,859,000) that in any year since 1912. The Getchell mine in the Potosi district, Humboldt County, was again the leading gold mine in the State. Other large producers were the Nevada Consolidated Copper Corporation and Consolidated Coppermines Corporation, both in the Robinson district, White Pine County; the Mary mine in Esmeralda County; and the Manhattan Gold Dredging Co. in Nye County. Gold was recovered chiefly from dry and siliceous ores and copper ores.

Oregon, with a 21 per cent increase over 1939, produced more recoverable gold in 1940 (112,700 fine ounces) than in any previous year, and 96 per cent of the total value of the gold, silver, copper, and lead produced in 1940 was in gold. Approximately two-thirds of the total gold output of Oregon came from placer operations and one-third from lode properties.

The primary metal of value mined in South Dakota is gold (592,936 fine ounces in 1940), and it is found in commercial quantities 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. The slight decrease in production of recoverable gold from the Homestake mine in 1940 from the peak output of 1939 accounts largely for the decrease in State output.

Gold production in Utah in 1940 (352,770 fine ounces) was the greatest in any year in the State's history. The bulk of the increase was due to the large gain in output of copper ore from the Bingham district; this district in 1940 produced 72 per cent of the State total output of gold. The Tintic district showed a decline of 5 per cent from 1939, and the Park City region a marked increase.

According to a preliminary report, the production of gold in the Philippine Islands in 1940 totalled 1,079,896 fine ounces compared with 999,408 fine ounces in 1939.

INDIA - The following is from the Annual Report of the Champion Reef Gold Mines of India, Ltd. for 1940: "The total dividend paid for the year amounts to  $32\frac{1}{2}$  per cent or 3s. 3d. per unit of stock, a decrease of  $7\frac{1}{2}$  per cent or 9d. per unit on 1939. Underground there were no striking developments, but the bottom levels continue to open up as well as ever. An unfortunate strike of native labour occurred in July and lasted practically a month. The main cause of the reduction in dividends paid was due to the increase in texation and royalties both in India and the U.K. We must inevitably expect a rise of costs in 1941; in the first place we have had to enter into a new agreement with the Mysore Government for the supply of electric power, and in the second place it has been found necessary to increase the wages paid to labour. Then there is the inevitable rise in the cost of all stores and commodities, together with a high increase in freight and insurance. The ore reserves stand at 539,000 tons averaging 10.99 dwts., which is almost identical with 12 months ago. Low-grade ore stands at 120,000 tons. The gold output for 1940 was 65,511 ounces which is 3,546 ounces less than the output for 1939 and is directly attributable to the effects of the strike. The grade milled for 1940 was 9.83 dwts., an increase of 1.11 dwts. over the year previous. The development results during the past year have been good and the prospects of opening up further ore in depth remain eminently satisfactory. The 84th level is now known to average 39 inches wide and assay 24.6 dwts. per ton in value for a total length of 997 feet. A direct result of the provision of conditioned air has been that in November and December the workers building the stope supports underground made good the loss of one month due to the strike, and the increased speed of building accounts for 4,000 tons more granite having been sent underground".

### DIRECTORY

### PRINCIPAL CANADIAN ALLUVIAL GOLD OPERATORS, 1940

Note - (x) Active but not producing.

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### Head Office Address

### Location

Appalachian Mining Synd. (x) Davis, W. A. Embergold Mines Ltd. (x) Moe River Gold Mines Ltd. (x)

Onwatin Placer Mining Synd. Ltd. (x)

BRITISH COLUMBIA -Acorn Placer Group Anderson, Oliver Alice Creek Mines Ltd. Anderson, Maurice A. Armstrong, J. K. Bend K. Placers Black Jack Cariboo Mines Inc. Boulder Creek Mines Ltd. Broswick Bros. Boquist and Co. Brandvold, M. Bride, Maurice Browne, John W. Bullion Placers Ltd. Burrard Placers Ltd. (x) Cariboo Cottonwood Placers Ltd. Columbia Development Ltd.

196 Robinson St., Moncton, N.B. Box 282, East Angus 434 Canada Cement Bldg., Montreal R. R. 2, Moe River

513 Metropolitan Bldg., Toronto

c/o H. A. McKey, Blewett Fort Steele 1010 Hall Bldg., Vancouver Barkerville Princeton c/o H. B. King-Wells 408 American Bldg., Seattle, Wash., U.S.A. Cariboo M.D. Hall Bldg., Vancouver Prince George Atlin Cranbrook Atlin 917 Vancouver Block, Vancouver 555 Burrard St., Vancouver Quesnel Atlin

Stratford Centre Westbury Tp. Ditton Tp. Compton Tp.

Capreol Dist.

Nelson M.D. Fort Steele M.D. Stikine M.D. Cariboo M.D. Tulameen River Cariboo M.D. Stikine M.D. Cariboo M.D. Atlin M.D. Fish Lake Spruce Creek Spruce Creek Quesnel M.D. Quesnel M.D. Quesnel M.D. Atlin M.D.

### PRINCIPAL CANADIAN ALLUVIAL GOLD OPERATORS, 1940 (Continued)

Note - (x) Active but not producing.

### Name

### Head Office Address

### Location

BRITISH COLUMBIA (Continued) -Compagnie Francaise Consolidated Mining & Smelting Co. of Canada Ltd. Coreau, James L. Craig, Munn & Reese Crowe, R. H. Campbell, Robt. Carnie, Robt. Delprato, J. Elder, H. & Co. Erinerdale Placers Ewen, J. and Oscarson, D. Falconer, D. K. Falleson, A. Fleury, T. A. and Chapman, W. Foubert, Adelor French Creek Hydraulic Placers Ltd. Fry. Thomas Germansen Ventures Ltd. Graham & Hargis Mining Co. (x) Grisen, F. and Huffman, R. Gunn, J. J. Hall, J. Halverson, Gunnar Husselbec & Smith Harvey Creek Mines Ltd. Hasbrouck, W. C. Hodges & Moran (Wright Creek Hydraulic Co.) Atlin Holland, J. and Ross, D. Hougen, O. R. Hyslop, A. C. and Stewart, A. Ivanic & Co. Jensen, Peter & Co. Johnson & Co. Johnson, Paul and Bruer, A. Jorgensen, Peter Johnson, Knut Kelby, John Ketch Ltd. Kohler, Hans Knudsen, Martin Kruger, W. Kuchan, Geo. Klee, John Landstrom, L. & Co. Logar & Kindrachuck Lunguist, B. Lost Creek Placer Gold Ltd. Lowhee Mining Co. Ltd. MacPherson, C. A. Matson & Schultz McCall, Frank L. McCrae, Alex & Sons Munro, McDonald, McKay Melline, Fred

Melsted, V. J.

Murphy, Nathan

McKinnon, Chas. E. Morrison, A. M.

c/o M. B. Moran, Atlin Traf1 Cottonwood 808 Vancouver Block, Vancouver Atlin Grand Forks Hatzie Coalmont Wingdam c/o F. W. Freeman, Van Winkle Box 53, Cranbrook Atlin Atlin Wells Atlin 406 Lancaster Bldg., Calgary Wingdam Germansen Landing 351 Victoria St., Kamloops Atlin Wells 11407 .. 67th St., Edmonton, Alta. Barkerville Atlin 555 Burrard St., Vancouver Keithley Creek Wells Mission City Hixon Creek Atlin Likely Atlin Lumby Dease Lake Barkerville Fort Steele c/o H. B. King, Wells Hudson Hope Fort Steele Hudson Hope Horse Fly Atlin Atlin Box 36, Atlin Vslachin 736 Granville St., Vancouver 917 Rust Bldg., Tacoma, Wash. Box 1, Barkerville Atlin Cranbrook Revelstoke Atlin Jesmond Rock Creek

Atlin

Atlin

Atlin

Atlin M.D. (Atlin M.D. (Fort Steels M.D. Cariboo M.D. Quesnel M.D. Atlin M.D. Grand Forks Fraser River Granite Creek Cariboo M.D. Cariboo M.D. Fort Steele M.D. Spruce Creek Spruce Creek Valley Creek Ruby Creek Cariboo M.D. Cariboo M.D. Omineca M.D. Cariboo M.D. Atlin M.D. Cariboo M.D. Vernon Cariboo M.D. Atlin M.D. Quesnel M.D. Quesnel M.D. Atlin M.D. Cariboo M.D. New Westminster Cariboo M.D. Atlin M.D. Quesnel M.D. Atlin M.D. Vernon M.D. Stikine M.D. Cariboo M.D. Fort Steele M.D. Cariboo M.D. Peace River M.D. Fort Steele M.D. Peace River M.D. Quesnel M.D. Atlin M.D. Atlin M.D. Atlin M.D. Omineca M.D. Cariboo M.D. Cariboo M.D. Atlin M.D. Cranbrook Revelstoke

Atlin M.D.

Fraser River

Spruce Creek

Ruby Creek

Greenwood M.D.

O'Donnell River

### PRINCIPAL CANADIAN ALLUVIAL GOLD OPERATORS, 1940 (Concluded)

347 Baker St., Nelson

Lumberton

Note - (x) Active but not producing.

### Name

### Head Office Address

### Location

Fort Steele M.D.

Spruce Creek

Blewitt

BRITISH COLUMBIA (Concluded) . -Nelson Placers Ltd. Nunn, W. H. Noal, Carlo Noland, John W. Northern Resources Ltd. Ohman, Fred Olson, Carl Peebles & MacDougall Placer Engineers Ltd. Prpich, Thos. Priority Miners Ltd. (x) Piccolo, J. Rembler Placers Ltd. Risberg, Carl A. Rix, Wm. Roman, K. Rouban, Chas. Sang Dang Placer Mine Slade Placers Ltd. Spruce Creek Mining Co. Ltd. Stanley Hines Ltd. (x) Standfast, John P. Steele, Granville Swan, John Sr. Swanson, Watt & Lindgren Snell, G. Tabor Creek Mining Synd. Tetley, E. Tom Creek Placers Ltd. Tripple Hydraulic Placers Ltd. Traho, C. O. Trehouse Hydraulic Thissen, P. and Storey, T. Vancourt Placers Wild Horse Placers (x) Williams, James F.

Atlin Atlin 475 Howe St., Vancouver Atlin Tulameen Wells 304 Pacific Bldg., Vancouver Atlin Williams Lake Atlin Vernon Van Winkle Wingdam Hixon Wells Barkerville Cottonwood Atlin 724 Nelson St., Vancouver Revelstoke Atlin Cranbrook Atlin Wanderhoof Prince George Atlin 507 Randall Bldg., Vancouver c/o H. B. King, Wells Atlin Barkerville Wells Box 392, Courtenay 505 Peyton Bldg., Spokane, Wash., U.S.A. Fort Steele M.D. Van Winkle Box 113, Wrangel, Alaska Atlin Rock Creek

Spruce Creek Atlin M.D. Spruce Creek Yale M.D. Cariboo M.D. Quesnel M.D. Atlin M.D. Quesnel M.D. Atlin M.D. Vernon M.D. Cariboo M.D. Cariboo M.D. Cariboo M.D. Cariboo M.D. Cottonwood Atlin M.D. Cariboo M.D. Revelstoke M.D. Atlin M.D. Fort Steele M.D. McKee Creek Omineca M.D. Cariboo M.D. Atlin M.D. Omineca M.D. Cariboo M.D. Atlin M.D. Cariboo M.D. Cariboo M.D. Nanaimo M.D. Cariboo M.D. Stikine M.D. Atlin M.D. Greenwood M.D.

YUKON -Canadian Placers Ltd. Haggert Mining Co. Holbrook Dredging Co. Middlecoff, E. Stewart & Campbell Taylor, Fred Yukon Consolidated Gold Corp. Ltd.

Wing, D. L.

Woodean, E. H. Winser, F.

> Box 1289, Fairbanks, Alaska Mayo Dawson Mayo Glacier Creek Mayo 1919 Marine Bldg., Vancouver

Clear Creek Mayo M.D. Sixtymile Hiat Creek Miller Creek Dublin Gulch various

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940

Note - (x) Active but not producing.

### Name

### Location

# NOVA SCOTTA Cameron, Lee Consolidated Mining & Smelting Company of Canada Ltd. Dickson, Aubrey Guysborough Mines Ltd. Horne Gold Mines Ltd. Killag Gold Mines Ltd. Queens Mines Ltd. Rehabilitation Project (15 Mile Stream) Seal Harbour Gold Mines Ltd.

# QUEBEC Agaura Explorations Ltd. (x) Amm Gold Mines Ltd. Arntfield Gold Mines Ltd. Arrowhead Gold Mines Ltd. (x) Astonic Quebec Mines Ltd. (x)

Beattie Gold Mines Ltd. Belleterre Quebec Mines Ltd. Canadian Malartic Gold Mines Ltd. Central Cadillac Mines Ltd. Central Mining Corp. (x) Centremaque Gold Mines Ltd. (x) Chibmac Mines Ltd. (x) Claverny Gold Mines Ltd. Clerno Quebec Mines Ltd. (x) Consolidated Mining & Smelting Company of Canada Ltd. (x) Cook Gold Mines Ltd. (x) Cournor Mining Co. Ltd. Cromar Development Co. Ltd. (x) Dome Exploration Co. Ltd. (x) Dugold Mining Co. Ltd. (x) Dumico Gold Corp. (x) East Malartic Mines Ltd. Fabreor Ltd. (x) Flobec Gold Mines Ltd. (x) Francoeur Gold Mines Ltd. Galloway Gordon Lake Mines Ltd. (x) Gamma Mines (Que.) Ltd. (x)
Golconda Mines Ltd. (x)

Greater Malartic Gold Mines Ltd. (x)
Guess, H. A. (x)
Hollinger (Que.) Exploration Co. Ltd. (x)
Howey Gold Mines Ltd. (x)
Insco Mines Ltd. (x)
Inspiration Mining & Development Co.
Ltd. (x)
International Mining Corp. (Que.) Ltd. (x)
Joannes Gold Mines Ltd. (x)
Joliet-Quebec Mines Ltd. (x)
Kewagama Gold Mines Ltd.
Keyroc (Que.) Gold Mines Ltd. (x)
Kiena Holdings Ltd. (x)
La Mine d'Or Provencher Ltd. (x)

### Carleton

215 St. James St. W., Montreal, Que.
Box 247, Sydney
Goldenville
50 Sackville St., Halifax
1010 St. Catherine St. W., Montreal, Que.
297 Agricola St., Halifax
Nova Scotia Department of Mines, Halifax
75 St. Germaine Ave., Toronto, Ont.

Head Office Address

c/o Royal Trust Co., Montreal 80 King St. W., Toronto, Ont. Arntfield 240 St. James St. W., Montreal 70 St. Paul St., Quebec

25 King St. W., Toronto, Ont.
Belleterre
25 King St. W., Toronto, Ont.
717 Transportation Eldg., Montreal
465 St. John St., Montreal
R. 606 .. 407 McGill St., Montreal
152 St. James St. W., Montreal
1456 Drummond Bldg., Montreal
63 Main St., Hull

215 St. James St. W., Montreal
Belleterre
215 St. James St. W., Montreal
R. 616 Aldred Bldg., Montreal
Bourlamaque
Authier Ave., Amos
Box 250, Place d'Armes, Montreal
Norrie
41.25 St. Denis, Montreal
214 Turner Bldg., Hamilton, Ont.
941 Dominion Square Bldg., Montreal
36 Toronto St., Toronto, Ont.
Bourlamaque
276 St. James St. W., Montreal

Malartic 120 Broadway, New York Arntfield 901 Federal Hldg., Toronto, Ont. Box 640, Amos

Box 640, Amos
R. 1210 .. 360 St. James St. W., Montreal
New Liskeard, Ont.
R. 205 .. 200 Bay St., Toronto, Ont.
c/o Beattie Gold Mines Ltd.
36 Toronto St., Toronto, Ont.
R. 2810 .. 25 King St. W., Toronto, Ont.
Box 698, Rouyn

### Carleton

Halifax Co.
Guysborough Co.
Goldenville
Hants Co.
Halifax Co.
Queens Co.
15 Mile Stream
Guysborough Co.

Examinations
Cadillac
Beauchastel Tp.
Noranda
Rouyn and Louvicourt Tps.
Duparquet Tp.
Guillet Tp.
Fournier Tp.
Cadillac Tp.
N. W. Quebec
Bourlamaque Tp.
Beauchastel Tp.
Claverny
Rouyn Tp.

various Guillet Tp. Louvincourt Tp. Gaspe North various Dubuisson Tp. Duparquet Tp. Fourniere Tp. Fabre Tp. Guillet Tp. Beauchastel Tp. Dasserat Tp. Bourlamaque Tp. Duparquet-Destor Tps. N. W. Quebec options various Malartic Dufresnoy Tp.

exploration
Desjardins Tp.
Joannes Tp.
Rouyn Tp.
Kewagama
Rouyn
Dubuisson Tp.
Beauchatel

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFFROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing.

### Name

QUEBEC (Continued) -Lacoma Gold Mine (Quebec) Ltd. (x) Lake Expanse Gold Mines Ltd. (x) Lake Rose (Quebec) Mines Ltd. (x) Lamaque Mining Co. Ltd. Lapa Cadillac Gold Mines Ltd. Levalie Mines (Quebec) Ltd. (x) Leclerc, J. J. (x) Les Mines d'Ore Bellehumeur Ltd. (x) Lournet Mines Ltd. (x) Madison Gold Mines Ltd. (x) Malartic Gold Fields Ltd. Manitou Mines (Quebec) Ltd. (x) McWatters Gold Mines Ltd. Megiscane Mining Corp. (x) Mic-Mac Mines Ltd. (x) Mooshla Gold Mines Ltd. National Malartic Gold Mines Ltd. (x) Noralbo Exploration & Mining Co. Ltd. (x) Norcana Gold Mines Ltd. (x) Norgold Mines Ltd. (x) Normar Mines Ltd. (x) Northern Quebec Goldfields & Exploration Co. (x) O'Brien Gold Mines Ltd. Orcour Gold Mines Ltd. (x) Pandora Cadillac Gold Mines Ltd. Partenen Malartic Gold Mine Ltd. (x) Pascalis Gold Mines (Que.) Ltd. (x) Pelletier Lake Gold Mines Ltd. (x) Perron Gold Mines Ltd. Pershing Manitou Gold Mines Ltd. (x) Pontiac Rouyn Mines Ltd. (x) Powell Rouyn Gold Mines Ltd. Prospectors & Drillers Ltd. (x) Quebec Smelting & Refining Corp. (x) Radisson Gold Mines Ltd. (x) Regent Gold Syndicate Ltd. (x) Renault, August (x) Robinson, H. S. (x) Rochette Gold Mines Co. Ltd. (x) Rouleau Mines Ltd. (x) Scott Chibougamau Mines Ltd. (x) Senator-Rouyn Ltd. Senore Gold Mines Ltd. (x) Shawmaque Gold Mines Ltd. (x) Sigma Mines (Quebec) Ltd. Siscoe Gold Mines Ltd. Sladen-Malartic Mines Ltd. Stadacona Rouyn Mines Ltd. Sudbury Contact Mines Ltd. Sullivan Consolidated Mines Ltd. Teck Exploration Co. (x) Trivicour Gold Mines Ltd. (x) Valco Wines Co. (x) Val d'Or Extension (x) Val d'Oro Mines Ltd. (x) Varsen Gold Mines Ltd. (x)

### Head Office Address

Senneterre R. 1207 .. 67 Yonge St., Toronto, Ont. Senneterre Bourlamaque 275 St. James St. W., Montreal R. 1107 .. 67 Yonge St., Toronto, Ont. Drapeau Bearn R. 301 .. 215 St. James St. W., Montreal 6401 Louis Hebert Ave., Montreal 355 St. James St. W., Montreal 78 Sparks St., Ottawa, Ont. Box 988, Haileybury, Ont. 726 Insurance Exchange Bldg., Montreal 275 St. James St. W., Montreal Box 290, Noranda R. 110 .. 215 St. Jemes St. W., Montreal 3825 Marlowe Aye., Montreal 5830 .. 5th Ave., Montreal 100 Adelaide St. W., Toronto, Ont. McWatters

Three Rivers Kewagama R. 503 .. 357 Bay St., Toronto, Ont. Box 700, New Liskeard, Ont. R. 314 .. 57 Queen St. W., Toronto, Ont. c/o Beattie Gold Mines Ltd. c/o Beattie Gold Mines Ltd. Perron 132 St. James St. W., Montreal 100 Adelaide St. W., Toronto, Ont. Box 300, Noranda R. 208 .. 266 St. James St. W., Montreal R. 301 .. 215 St. James St. W., Montreal 941 Dominion Square Bldg., Montreal Box 159, Rouyn Kanasuta 15 King St. W., Toronto, Ont. 132 St. James St. W., Montreal 726 Insurance Exchange Bldg., Montreal 215 St. James St. W., Montreal 187 Main St., Hull Perron 660 St. Catherine St. W., Montreal Bourlamaque 907 Dominion Square Bldg., Montreal 319 Ottawa Electric Bldg., Ottawa, Ont. 100 Adelaide St. W., Toronto, Ont. 1604 Aldred Bldg., Montreal 25 King St. W., Toronto, Ont. 4516 St. Catherine St. W., Montreal 65 St. Peter St., Quebec Box 913, Val d'Or Box 913, Val d'Or Amos

### Location

Tavernier Tp. Guillet Tp. Rose Lake Bourlamaque Cadillac Tp. Bourlamaque New Richmond Tp. Laverlocher Tp. Louvi court Tp. Louvicourt Tp. Dubuisson Tp. Bourlamaque Tp. McWatters Barry Tp. Bousquet Tp. Bousquet Tp. Fourniere Tp. Bousquet Tp. Hay Tp. Bousquet Tp. Bousquet Tp.

Bousquet Tp. Cadillac Tp. Louvicourt Tp. Cadillac Malartic Tp. Pascalis Tp. Rouyn Tp. Pascalis To. N. W. Quebec Rouyn Tp. Rouyn Tp. Lounay Dalquiere Tp. Arntfield Rouyn Tp. Dasserat Tp. N. W. Quebec Launay Tp. Barry Tp. Scott Tp. Rouyn Tp. Senneville Tp. Dubuisson Tp. Bourlamaque Tp. Varsen Tp. Fournier Tp. Rouyn Tp. Bousquet Tp. Dubulsson Tp. N. W. Quebec Louvicourt Tp. Cadillac Bourlamaque Tp. Louvicourt Tp... Varsan Tp.

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing

Name

### Head Office Address

Location

QUEBEC (Concluded) -Vicour Gold Mines Ltd. (x) Virita Porcupine Gold Mines Ltd. (x) West Malartic Mines Ltd. (x) Westwood Cadillac Mines Ltd. (x) Wood Cadillac Mines Ltd.

Box 225, Val d'Or 1706 Royal Bank Bldg., Toronto, Ont. 6998 Jeanne Mance St., Montreal 14 .. Ninth St., Noranda 437 St. James St. W., Montreal

Louvicourt Tp. Rouyn Tp. Cadillac Tp. Bousquet Tp. Cadillac Tp.

ONTARIO - Porcupine Area Aquarius Porcupine Gold Mines Ltd. (x)

Aunor Gold Mines Ltd. Broulan Porcupine Mines Ltd. Buffalo Ankerite Gold Mines Ltd. Conjaurum Mines Ltd. Delnaur Gold Mines Ltd. (x) Delnite Mines Ltd. De Santis Porcupine Mines Ltd. Devon Gold Mines Ltd. Dome Mines Ltd. Electra Porcupine Gold Mines Ltd. (x)

Faymar Porcupine Gold Mines Ltd. Hallnor Mines Ltd. Hollinger Consolidated Gold Mines Ltd.

Hoyle Gold Mines Ltd. (x) Kelrowe Gold Mines Ltd. (x) Lowell Porcupine Gold Mines Ltd. (x) Mace Gold Mines Ltd. (x) McIntyre Porcupine Mines Ltd. Moneta Porcupine Mines Ltd. Nakhodas Mining Co. Ltd. Naybob Gold Mines Ltd.

Nipissing Mining Co. Ltd. (x) North Whitney Mines Ltd. (x) Pamour Porcupine Mines Ltd. Paymaster Consolidated Mines Ltd.

Porcupine Lake Gold Mining Co. Ltd. Preston East Dome Mines Ltd. Skynner Lake Gold Mines Ltd. (x) White-Guyatt Mining Co. Ltd. (x)

Kirkland Lake Area Bidgood Kirkland Gold Mines Ltd. Brock Gold Mines Ltd. (x) Federal Kirkland Mining Co. Ltd. (x) Golden Gate Mining Co. Ltd. Hughmar Gold Mines Ltd. (x) Kirkland-Hudson Bay Gold Mines Ltd. (x) Kirkland Lake Gold Mining Co. Ltd. Kirkland Gold Rand Ltd. (x) Lake Shore Mines Ltd. Macassa Mines Ltd. Morris Kirkland Gold Mines Ltd.

R. 706 .. 100 Adelaide St. W., Toronto

1600 Royal Bank Bldg., Toronto 1705 Sterling Tower Bldg., Toronto Box 533, South Porcupine 25 King St. W., Toronto 1502 Sterling Tower Bldg., Toronto 42½ Second Ave., Timmins
1809 Royal Bank Bldg., Toronto Box 590, Timmins South Porcupine 100 Adelaide St. W., Toronto

R. 208 .. 200 Bay St., Toronto 1600 Royal Bank Bldg., Toronto 2 Timmins

25 King St. W., Toronto R. 208 .. 200 Bay St., Toronto 14 King St. E., Toronto 80 King St. W., Toronto Schumacher 67 Yonge St., Toronto
R. 208 .. 200 Bay St., Toronto 711 Federal Bldg., Toronto

> Cobalt R. 403 .. 100 Adelaide St. W., Toronto Pamour Box 508, South Porcupine

112 Yonge St., Toronto R. 207 .. 200 Bay St., Toronto 413 C.P.R. Bldg., Toronto c/o Wright Hargreaves Mines Ltd., Kirkland Lake

R. 504 .. 357 Bay St., Toronto 1101 Federal Bldg., Toronto Federal Bldg., Toronto R. 304 .. 19 Melinda St., Toronto 571 Bey St., Toronto New Liskeard 1314 Metropolitan Bldg., Toronto 1812 Royal Bank Bldg., Montreal, Que. Kirkland Lake 1001 Federal Bldg., Toronto Kirkland Lake 156 Yonge St., Toronto

German and Mac-Klem Tps. Deloro Tp. Pamour S. Porcupine Schumacher Deloro Tp. Deloro Tp. Ogden Tp. Matheson S. Porcupine German and Mac-Klem Tos. Deloro To. Whitney Tp. Timmins and Hislop Tps. Whitney Tp. Hislop Tp. Ogden Tp. Schumacher Schumacher Tisdale Tp. Tisdale Tp. Ogden and Deloro Tps. Ogden Tp. Pamour Pamour Deloro and Tisdale Tps. Whitney Tp. S. Porcupine Deloro Tp.

Matheson

Lebel To. Gauthier Tp. Teck Tp. Swastika Skead To. Teck Tp. Kirkland Lake Teck Tp. Lebel To.

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing.

	M GTHTO.

### ONTARIO (Continued) -Kirkland Lake Area (Concluded)

Northland Mines Ltd. (x)
Sylvanite Gold Mines Ltd.
Teck-Hughes Gold Mines Ltd.
Toburn Gold Mines Ltd.

Upper Canada Mines Ltd. Wright-Hargreaves Mines Ltd.

### Larder Lake Area

Anoki Gold Mines Ltd. (x)
Chesterville Larder Lake Gold Mining Co. Ltd.
Kerr-Addison Gold Mines Ltd.
Laguerre Gold Mines Ltd. (x)
Omega Gold Mines Ltd.
Sanymac Mining & Development Co. Ltd. (x)
Yama Gold Mines Ltd. (x)

### Matachewan Area Arbode Gold Mines Ltd. (x)

Hollinger Consolidated Gold Mines Ltd. (Young-Davidson) Matachewan Consolidated Mines Ltd.

### Sudbury Area

Consolidated Mining & Smelting Co. of Canada Ltd. (Golden Rose) Jerome Gold Mines Ltd. (x) Roche Long Lac Gold Mines Ltd. (x) Tyranite Mines Ltd.

Algoma Area
Amherst Gold Mines Ltd.
Cline Lake Gold Mines Ltd.
Deep Lake Gold Mines Ltd. (x)
Minto Gold Mines Ltd. (x)
Parkhill Gold Mines Ltd.
Ranson Mines Ltd. (x)

Regenery Metals (Alden-Goudreau)

Thunder Bay Area
Bandolac Mining Co. Ltd. (x)
Bankfield Cons. Mines Ltd.
Halport Mines Ltd. (x)

Hard Rock Gold Mines Ltd. Hutchison Lake Gold Mines Ltd. (x) Jellicoe Mines Ltd. Leitch Gold Mines Ltd.

Little Long Lac Gold Mines Ltd. MacLeod-Cockshutt Gold Mines Ltd. Magnet Cons. Mines Ltd.

### Head Office Address

80 King St. W., Toronto Box 670, Kirkland Lake 25 King St. W., Toronto 1809 Royal Bank Bldg., Toronto

1101 Federal Bldg., Toronto Kirkland Lake

1006 Concourse Bldg., Toronto
R. 404 .. 330 Bay St., Toronto
80 King St. W., Toronto
80 King St. W., Toronto
15 King St. W., Toronto
R. 512 .. 19 Melinda St., Toronto
R. 1004 .. 80 Richmond St. W., Toronto

R. 2 .. 422 Richmond St., London

Timmins 25 King St. W., Toronto

215 St. James St. W., Montreal R. 602 .. 390 Bay St., Toronto R. 1404 .. 80 Richmond St. W., Toronto Tyranite

907 Central Eldg., Toronto Lochalsh 109 North Union St., Akron, Ohio, U.S.A. c/o J. Knox, Arntfield, Que. Wawa Royal Bank Bldg., Sault Ste. Marie

c/o W. Regenery, Hawk Junction

La Belle Bldg., Windsor 1006 Concourse Bldg., Toronto R. 1207 .. 67 Yonge St., Toronto

Geraldton
R. 226 .. 200 Bay St., Toronto
R. 5100 .. 25 King St. W., Toronto
Beardmore

1300 .. 25 King St. W., Toronto 520 Bay St., Toronto Empire

### Location

Gauthier Tp.
Teck Tp.
Teck Tp.
Teck and Lebel
Tps.
Gauthier Tp.
Kirkland Lake

Gauthier Tp.
McGarry Tp.
McGarry Tp.
Larder Lake
McVittie Tp.
Katrine Tp.
McElroy Tp.

Argyle and Baden Tps.

Powell Tp. Powell Tp.

Afton Tp.
Osway Tp.
various
Tyrrell and
Knight Tps.

Goudreau
Algoma Dist.
Wawa
Gowganda
Wawa
Michipicoten
River
Mile 171 A. C.
and H.R.R.R.

Shebandowan
Errington Tp.
Eva and Summers
Tps.
Ashmore Tp.
Fulford Tp.
Geraldton
Eva and Summers
Tps.
Geraldton
Little Long Lac
Geraldton

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing.

Name

Head Office Address

Location

### ONTARIO (Concluded) -

Thunder Bay Area (Concluded)
Northern Empire Mines Co. Ltd.
Richgreen Gold Mines Ltd. (x)
St. Anthony Gold Mines Ltd.
Sand River Gold Mining Co. Ltd.
Sturgeon River Gold Mines Ltd.

Tombill Gold Mines Ltd.

Kenora-Rainy River Area
Kenopo Mining & Milling Co. Ltd.
Kenricia Gold Mines Ltd.
La-Re Exploration Co.
Nilson, A.
Pickard, Roy
Rebair Gold Mines Ltd. (x)
Seville-Ferrier Sydn. Ltd. (x)
Straw Lake Beach Gold Mines Ltd.
Upper Seine Gold Mines Ltd.
Wendigo Gold Mines Ltd.
Williams, M. C.

Patricia Dist. Albino Gold Mines Ltd. (x) Albany River Gold Mines Ltd. (x) Berens River Mines Ltd. Birch Bay Gold Mines Ltd. (x) Central Patricia Gold Mines Ltd. Coalton Gold Mining Synd. Ltd. (x) Cochenour Willans Gold Mines Ltd. Gold Eagle Gold Mines Ltd. Gold Frontier Mines Ltd. (x) Hanalda Gold Mines Ltd. (x) Hasaga Gold Mines Ltd. Howey Gold Mines Ltd. J. M. Consolidated Mines Ltd. Jalda Gold Mines Ltd. (x) Jason Mines Ltd. Madsen Red Lake Gold Mines Ltd.

McKenzie Red Lake Gold Mines Ltd.
McMarmac Red Lake Gold Mines Ltd.
McDonough Mining Synd. Ltd. (x)
Pickle Crow Gold Mines Ltd.
Sachigo River Exploration Co. Ltd.
Uchi Gold Mines Ltd.
Walker Patricia Gold Mines Ltd. (x)
Woco Gold Developments Ltd. (x)

Eastern Ontario
Consolidated Mining & Smelting Company
of Canada Ltd.
Mayboro Milling Co. Ltd.

Empire
36 Toronto St., Toronto
159 Bay St., Toronto
502 Bay St., Toronto
Jellicoe

Empire

Box 910, Kenora
25 King St. W., Toronto
Box 910, Kenora
545 .. 2nd Ave. S., Kenora
Kenora
9 Adelaide St. E., Toronto
403 Kent Bldg., Toronto
702 Kent Bldg., Toronto
Box 990, Kenora
Fort Erie N.

R. 704 .. 357 Bay St., Toronto 930 Bank of Commerce Bldg., Toronto 14 Wall St., New York, N.Y., U.S.A. 603 Royal Bank Bldg., Toronto Central Patricia 56 Givens St., Toronto 801 Dominion Bank Bldg., Toronto 802 Federal Bldg., Toronto 244 Bay St., Toronto 25 King St. W., Toronto R. 930 .. 25 King St. W., Toronto 901 Federal Bldg., Toronto 1116 Federal Bldg., Toronto 25 King St. W., Toronto 67 Yonge St., Toronto 67 Yonge St., Toronto

19 Richmond St. W., Toronto
402 Premier Trust Bldg., Toronto
67 Yonge St., Toronto
Pickle Crow
25 King St. W., Toronto
25 King St. W., Toronto
1608 Star Bldg., Toronto
R. 1504 .. 80 Richmond St. W., Toronto

215 St. James St. W., Montreal, Que. Box 817, Peterboro

Empire
Beardmore
Savant Lake
Beardmore
Irwin and Pipher
Tps.
Geraldton

Ewart Tp.
Kenora
Haycock Tp.
Kenora Dist.
Kenora
Atikokan
Tp. 82
Straw Lake
Atikokan
Kenora
Savant Lake

various Pickle Crow Favourable Lake various Central Patricia Honeywell Tp. Red Lake McKenzie Island Todd Tp. Uchi Gold Mine Red Lake Red Lake Patricia Dist. Uchi Gold Mine Casummit Lake Baird and Heyson Tps. McKenzie Island ·Dome Tp. various Pickle Crow Sachigo River Uchi Lake Pickle Lake Uchi Lake

Cordova Mines Madoc Tp.

### PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing.

Name

Head Office Address

Location

MANITOBA -Beresford

Beresford Lake Mines Ltd.
God's Lake Gold Mines Ltd.
Golden West Mines Ltd. (x)
Gunnar Gold Mines Ltd.
San Antonio Gold Mines Ltd.
Sunbeam-Kirkland Gold Mines Ltd.

SASKATCHEWAN -

Consolidated Mining & Smelting Company of Canada Ltd. Pamon Gold Mines Ltd. (MacDonald & Co.)

YUKON -Richards, T. C.

NORTHWEST TERRITORIES -

Bar-Bet Mining Development Co. Ltd.
Capmac Gold Mining Synd. Ltd. (x)
Consolidated Mining & Smalting Company
of Canada Ltd.
Conwest Exploration Co. Ltd. (x)
Giant Yellowknife Gold Mines Ltd.
Gypsy Yellowknife Synd. (x)
Negus Mines Ltd.
Mercury Gold Mines Ltd. (x)
Ptarmigan Mines Ltd. (x)
Rycon Mines Ltd.
Slave Lake Gold Mines Ltd. (x)
Thompson-Lundmark Gold Mines Ltd. (x)
Tundra Yellowknife Mining Synd. Ltd. (x)

BRITISH COLUMBIA -

Amandy Mine Anderson, E. A. Alpine Gold Ltd. Babine Gold Mines Ltd. Bayonne Cons. Mines Ltd. Berglund, S. Big Four Lessors Birtsch, Godfrey Bralorne Mines Ltd. Brunner, Herman Buccaneer Mines Ltd. (x) Bristol Mines Ltd. (x) British Gold Mining Synd. (x) Buena Vista Mining Co. Ltd. Canadian Belle Mining Co. Canadian Exploration Ltd. Cariboo Gold Quartz Mining Co. Ltd. Cariboo Ledge Mining Co. Ltd. (x) Carlson, A. (Bear) Carlson, Ole (Morning Star) Central Zeballos Gold Mines Ltd. Consolidated Mining & Smelting Company of Canada Ltd. (Red Rose) (x)

1 Somerset Bldg., Winnipeg 395 Main St., Winnipeg Box 246, Station "B", Montreal, Que. 80 King St. W., Toronto, Ont. 237 Curry Bldg., Winnipeg 67 Yonge St., Toronto, Ont.

Trail, B.C. Box 779, Flin Flon, Man.

Whitehorse

Yellowknife 36 Toronto St., Toronto, Ont.

Trail, B.C.
1001 .. 85 Richmond St. W., Toronto
80 King St. W., Toronto, Ont.
1207 .. 67 Yonge St., Toronto, Ont.
410 Royal Bank Bldg., Toronto, Ont.
3100 .. 25 King St. W., Toronto, Ont.
Trail, B.C.
Trail, B.C.
Star Bldg., Toronto, Ont.
Trail, B.C.
605 Central Bldg., Toronto, Ont.

Grand Forks Kimberley Box 191, Nelson 744 W. Hastings St., Vancouver 308 Pacific Bldg., Vancouver Westbridge Ymir (c/o Leo Madden) Nelson 555 Burrard St., Vancouver Box 570, Port Alberni Greenwood 555 Burrard St., Vancouver 425 Howe St., Vancouver 707 Bank of Toronto Bldg., Victoria Trail 505 Peyton Bldg., Spokane, Wash., U.S.A. Royal Bank Bldg., Vancouver 1007 Royal Bank Bldg., Vancouver 800 Hall Bldg., Vancouver Nelson 215-543 Granville St., Vancouver

Trail

Beresford Lake
God's Lake
Elbow Lake
Beresford Lake
Rice Lake
W. Hawk Lake

Lake Athabaska Beaver Lake

Mt. Free Gold

Wray Lake Yellowknife Dist.

Yellowknife Dist.
prospecting
Yellowknife Dist.
prospecting
Yellowknife Dist.
Wray Lake Dist.
Yellowknife Dist.
Yellowknife Dist.
Outpost Island
Thompson Lake
Yellowknife Dist.

Greenwood M.D. Fort Steele M.D. Nelson M.D. Omineca M.D. Nelson M.D. Greenwood M.D. Nelson M.B. Nelson M.D. Lillooet M.D. Alberni Dist. Greenwood M.D. Clayoquot M.D. Lillooet M.D. New Westminster M.D. Portland Canal M.D. Nelson M.D. Nanaimo M.D. Cariboo M.D. Cariboo M.D. Nelson M.D. Osoyoos M.D. Clayoquot M.D.

Omineca M.D.

#### DIRECTORY

# PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Continued)

Note - (x) Active but not producing.

Name

Head Office Address

Location

BRITISH COLUMBIA (Continued) -Consolidated Nicola Goldfields Ltd. Crown Gold Mining Synd. Dawson Cons. Mines Ltd. Erickson, Axel (Gold Bar)

Homeward Mines Ltd. (x)
Island Mountain Mines Co. Ltd. Kelowna Exploration Co. Ltd. Merr, James King Mineral Claim Kerr, James
King Mineral Claim
Kootenay Belle Gold Mines Ltd.

Kootenay Belle Gold Mines Ltd.

Bayonne Larsen, E. (Goldfinch-Crescent) Letain, Felix (Maple Lenf)
Letain, Felix (Maple Lenf)
Liberty Lorne Gold Mines Ltd. (x)
Little, A. F. (King Midas)

Elewett

Greenwood
Tofino
424 Second St., Nelson
Zeballos
Elewett

Mount Zeballos Gold Mines Ltd. Musketeer Mines Ltd. (x) Nicholson Creek Mining Corp. (x)
Noble Bear River Synd. (x)
Noble Five Mines Ltd. O'K. Leasing Co. (x) Oscarson, Roger O. Pedersen, E. B. (Bell #2)

506 Dunsmuir St., Vancouver 310 Union Bldg., Victoria 716 Hall Bldg., Vancouver Terrace

Ethiopia Synd.

Fisher, N. H. (Golden King)

Fuselier Mines Ltd. (x)

Gachain, J. P.

Gem Gold Mines Ltd. (x)

Gold Felt Mining Co. Ltd.

Gold River Mines Ltd. (x)

Gormley, G. T. (Catherine lease)

Grasshopper Mine Ltd.

Haywood, Harold D. (Red Cliffe)

C/ E R Manage Co. (Union)

C/ E R Manage Greenwood

Creenwood M.D.

Greenwood M.D.

Greenwood M.D.

Hall Creek

Clayoquot M.D.

Carmi

Gorange St., Vancouver

Clayoquot M.D.

See Stock Exchange Bldg., Vancouver

Clayoquot M.D.

Nelson

Nelson

Nelson

Nelson M.D.

Grasshopper Mine Ltd.

475 Howe St., Vancouver

Haywood, Harold D. (Red Cliffe)

A765 Drummond Drive, Vancouver

Hecla Mining Co. (Union)

Hecla Mining Co. (Union)

C/o W. E. McArthur, Greenwood

Hedley Mascot Gold Mines Ltd.

Holm, Harold (Phoenix)

Fighland-Bell Ltd.

Sox 280, Greston

Homeward Mines Ltd. (x)

Told Royal Trust Plant

Portland Canal M.D.

Similkameen M.D.

Osoyoos M.D.

Trail Creek M.D.

Greenwood M.D.

Greenwood M.D.

Island Mountain M. Box 122, Rossland I.Y.L. Leasing Synd.

International Metals Development (x)

Box 122, Rossiand
703 Royal Trust Eldg., Vancouver
Hedley c/o J. P. Wukelick, Box 682, Penticton Osoyoos M.D.
916 Stock Exchange Bldg., Vancouver Nelson M.D.
Bayonne Greenwood Greenwood Livingstone Mining Co. Ltd.

Logan, John (Fern)

Lucky Strike Gold Mining Co. Ltd. (x)

Madden, Leo (Fern)

Mathew, Ed. (Jessie)

McArthur, W. E.

McCorkell, R. C.

McTavish, P. D. (x)

Menhinick, Cory

Morin, L. A. (Star)

Nelson M.D.

Clayoquot M.D.

Nelson M.D.

Nelson M.D.

Nelson M.D.

Nelson M.D.

Serenwood

Greenwood M.D.

Vancouver

Nelson M.D.

Vancouver

Nelson M.D.

Nelson M.D.

Nelson M.D.

Serenwood

Greenwood M.D.

Vancouver M.D.

Nelson M.D.

514 Royal Bank Bldg., Vancouver Clayoquot M.D. 607 Rogers Bldg., Vancouver Clayoquot M.D. Insurance Bldg., Seattle, Wash., U.S.A. Omineca M.D.
Abbotsford Hotel, Vancouver Clayoquot M.I
490 Baker St., Nelson Nelson Nelson M.D. Box 522, Rossland Erie Bank of Toronto Bldg., Calgary, Alta. Oscarson, Reger o.

Ballie

Bank of Toronto Bldg., Calgary, Alta.

Trail

Parkton Gold Mines Ltd. (x)

Pedersen, E. B. (Bell #2)

Salmo

Nicola Dist. Nanaimo M.D. New Westminster Portland Canal M.D. Cariboo M.D. Cariboo M.D. Skeena M.D. Osoyoos M.D. Greenwood M.D. Osoyoos M.D. Nelson M.D. Greenwood M.D. Greenwood M.D. Clayoquot M.D. Nelson M.D. New Westminster M.D. Clayoquot M.D. Trail Creek M.D. Nelson M.D. Osoyoos M.D. Slocan M.D. Clayoquot M.D.

Slocan M.D.

## DIRECTORY

## PRINCIPAL OPERATORS IN THE CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1940 (Concluded)

Note - (x) Active but not producing.

#### Head Office Address Name BRITISH COLUMBIA (Concluded) -Pickering, B. A. (Golden Eagle) Box 216, Nelson Penney, S. M. (Kalamalka) Pioneer Gold Mines of B.C. Ltd. Box 98, Vernon Pitre, R. A. (x) Polaris-Taku Mining Co. Ltd. Prident Gold Mines Ltd. (x) Privateer Mine Ltd. 475 Howe St., Vancouver 544 Howe St., Vancouver Prosperine Gold Mines Ltd. (x) Box 629, Greenwood Providence Mine Synd. Relief Arlington Mines Ltd. Reno Gold Mines Ltd. (Reno) (Central Zeballos) Robinson, Kenneth J. (W.W.W.) Rochfort, J. D. (Dunwell) Stewart

Schwarz, W. L. and Klemen Bros. Sheep Creek Gold Mines Ltd. Sherdahl, C. (Mogue) Stewart Canal Gold Mines Ltd.

Silbak Premier Mines Ltd.

Smith, Lloyd R. (Mayflower) (x) Spud Valley Gold Mines Ltd. Sterrett, Douglas B. (Iron Cap) Tate, F. F. (California) Taylor, R. R. United Prospectors Ltd. Venango Gold Mines Ltd. Venus-Juno Mine Watson, H. (Ymir Rockland) Wesko Mines Ltd. Whitehead, Geo. (Midway) White Star Mine Ltd. Windpass Gold Mining Co. Ltd. Winslow Syndicate Wukelick, J. P. (Grandoro) Ymir Commodore Mines Co. Ymir Yankee Girl Gold Mines Ltd. Zeballos (Pacific) Gold Mines Ltd. (x) Zeballos Oh Boy Gold Mines Ltd. (x)

#### Nelson M.D. Vernon M.D. 607 Rogers Bldg., Vancouver Lillooet M.D. 604 Bank of Toronto Bldg., Victoria Nanaimo Lakes 807 Lonsdale Bldg., Duluth, Minn., U.S.A. 602 Stock Exchange Bldg., Vancouver Atlin M.D. Zeballos Clayoquot M.D. Cariboo M.D. Greenwood M.D. 626 W. Pender St., Vancouver Nelson M.D. 216 Yorkshire Bldg., Vancouver Nelson M.D. Clayoquot M.D. 602 W. Hastings St., Vancouver Alberni M.D. Portland Canal M.D. Grand Forks Greenwood M.D. 616 Stock Exchange Bldg., Vancouver Nelson M.D. Box 563, Greenwood Greenwood M.D. Stewart Portland Canal M.D. Royal Trust Bldg., Vancouver Portland Canal M.D. Rossland Box 651, Penticton 703 Royal Trust Bldg., Vancouver Zeballos Kamloops Kamloops M.D. 2060 Santa Clara Ave., Alameda, Cal., U.S.A. Nelson M.D. 1598 Marpole Ave., Vancouver Lillooet M.D. 604 .. 1405 Douglas St., Victoria Alberni M.D. Box 296, Nelson Blewett 406 First St., Nelson Nelson M.D. Ymir Nelson M.D. 640 Pender St. W., Vancouver Nelson M.D. Marjie Fort Steele M.D. 811 Rogers Bldg., Vancouver Zeballos 608 Pacific Bldg., Vancouver c/o A F. Cumming, Penticton Boulder Lardeau M.D. Box 682, Penticton 2109 W. 4th St., Spokane, Wash., U.S.A. Osoyoos M.D. Nelson M.D. 208 Yorkshire Bldg., Vancouver Nelson M.D. 716 Stock Exchange Bldg., Vancouver Clayoquot M.D.

Location

Clayoquot M.D.

NOTE - In addition to operators listed, there were numerous small British Columbia shippers to Trail and Tacoma smelters.

603 Central Eldg., Victoria

### DIRECTORY

## OPERATORS IN CANADIAN COPPER-GOLD-SILVER MINING INDUSTRY, 1940

Note - (x) Active but not producing.

Name

Head Office Address

941 Dominion Square Bldg., Montreal

Location

Aldermac Copper Corporation Ltd. Chapman, J. E. (x) Cook-Copper Fluorite Corp. (x) Gervais, D. Lake Dufault Mines Ltd. (x) Macdonald Mines Ltd. (x) Noranda Exploration Go. Ltd. (x) Noranda Mines Ltd. Normetal Mining Corp. Ltd. Obalski Mining Corp. (x) Touton Mining & Exploration Co. (x) Waite Amulet Mines Ltd.

Box 439, Hawkesbury, Ont. Box 39, Bartonville, Ont. Box 263, Rouyn Duparquet 132 St. James St. W., Montreal Noranda 1600 Royal Bank Bldg., Toronto, Ont. Suite 602 .. 350 Bay St., Toronto, Ont. 438 Canada Cement Eldg., Montreal 500 Place d'Armes, Montreal Noranda

Beauchastel Tp. Cheneville Montbillard Tp. Beauchastel Tp. Dufresnoy Tp. Dufresnoy Tp. Holland Tp. (Gaspe) Rouyn Tp. Desmeloizes Tp. Chibougamean Dist. Fabre Tp. Dufresnoy Tp. Duprat Tp.

MANITOBA -Hudson Bay Mining & Smelting Co. Ltd. Sherritt Gordon Mines Ltd.

14 Finkle St., Woodstock, Ont. 25 King St. W., Toronto, Ont.

Flin Flon Sherridon

BRITISH COLUMBIA -Britannia Mining & Smelting Ltd. Consolidated Mining & Smelting Company

Britannia Beach

Box 629, Greenwood

Britannia Beach

of Canada Ltd. Conwest Exploration Co. Ltd. Granby Cons. Mining, Smelting & Power Co. Ltd. Greenwood Ore Concentrating Co. Ltd.

514 Royal Bank Bldg., Vancouver

Royal Bank Bldg., Vancouver

Rossland Omineca M.D.

Highland Basin Gold Mine Ltd. McTavish, P. D. (x) McArthur, W. E. Surf Inlet Cons. Gold Mines Ltd. Velvet Leasing Synd.

507 Stock Exchange Bldg., Vancouver 3890 Osler Ave., Vancouver Box 629, Greenwood 717 Pacific Bldg., Vancouver Rossland

Copper Mountain Customs mill Greenwood Omineca M.D. Pender Harbour Greenwood M.D. Skeena M.D. Rossland

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 Canadiam 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 statistical date utilized in recording the price curve shown on chart contained in this report were supplied by Cornell University.

#### THE HOUSE OF COMMONS OF CANADA.

#### BILL 78.

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

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

1. Paragraph (f) of subsection one of section two of The Excess Profits Tax Act, 1940, chapter thirty-two of the 5 statutes of 1940, is repealed and the following substituted therefor:—

"profits" in the case of a corporation.

R.S., c. 97.

"(f) 'profits' in the case of a corporation or joint stock company for any taxation period means the amount of net taxable income of the said corporation or joint 10 stock company as determined under the provisions of the Income War Tax Act in respect of the same taxation period, except that if a corporation or joint stock company is subject to the tax imposed by the Second Part of the Second Schedule to this Act, profits shall not 15 include, for the purposes of this Act, any dividends deemed to have been received by such corporation or joint stock company by virtue of section nineteen of the Income War Tax Act unless

(i) the capital of the corporation or joint stock com-20 pany including capital stock, bonds, debentures and any other securities issued by the said corporation or joint stock company is, to the extent of fifty per centum or more, held by or on behalf of individual holders numbering twenty-five or less, or

(ii) the said corporation or joint stock company is controlled directly or indirectly by any such number of individuals by means of the ownership or control of the majority of the voting stock of the said corporation or joint stock company

and unless the corporation or joint stock company which is being wound up, discontinued or reorganized, within the meaning of section nineteen of the *Income War Tax Act* aforesaid, is likewise controlled in the

#### EXPLANATORY NOTES.

1. This amendment removes from the profits subject to the 75% rate of taxation any constructive dividend received by a corporation as a result of the winding-up, discontinuance of business, or reorganization of another corporation. In order to prevent this exemption being used as a means of avoiding personal income taxes it is restricted to cases where the corporation receiving the dividend or the corporation paying the dividend is held or controlled by more than twenty-five shareholders.

manner described in sub-paragraph (i) or sub-paragraph (ii) hereof by individuals numbering twenty-five or less."

2. Paragraph (h) of subsection one of section two of the said Act is repealed and the following substituted there- 5

"standard period"

"(h) 'standard period' means the period comprising the calendar years one thousand nine hundred and thirtysix to one thousand nine hundred and thirty-nine, both inclusive, or such years or parts thereof since the first 10 day of January, one thousand nine hundred and thirtysix, during which the taxpaver was in business:

Proviso.

Provided that where the profits of a taxpayer in any one of such calendar years, after adjustment by the Minister pursuant to section four of this Act, were less 15 than fifty per centum of the average of the profits for the remaining years of the standard period the taxpayer may designate as his standard period the remaining years aforesaid of the standard period, and

Proviso.

Provided further that if the Minister is satisfied that 20 a taxpayer did not actually commence business operations until a date subsequent to the date of the nominal commencement thereof he may fix the date of the actual commencement of business operations as the date of commencement thereof for all purposes under this 25 Act."

3. Paragraph (i) of subsection one of section two of the said Act is repealed and the following substituted there-

"standard profits"

Proviso.

"(i) 'standard profits' means the average yearly profits 30 of a taxpayer in the standard period in carrying on 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 that for the purpose of this section profits shall be deemed to have accrued on an equal daily basis throughout any fiscal period or portion thereof which is in question; and

Proviso.

Provided further that losses incurred by the taxpayer 40 during the standard period shall not be deducted 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

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. This smendment-

(a) redefines 'standard period' to mean the calendar years 1936, 1937, 1938 and 1939. If a fiscal period does not coincide with these calendar years its profits are to be

apportioned to the calendar years;

(b) provides for the exclusion of one calendar year in the standard period if the profits of that year were less than 50% of the average of the profits of the other three (or two, if the taxpayer has been in business only three years) standard years;

(c) enables the Minister to designate the actual date of commencement of business operations rather than the

formal commencement of business.

3. This redefinition of 'standard profits' effects three changes in the existing definition:

(a) It enables the Minister to decide on the facts whether the business of the taxpayer in the standard period is of the same class as the business of the taxpayer in the taxation year, and

(b) it provides a minimum standard profits of \$5,000.00

(c) provides for the apportionment of profits to the calendar-year basis in accordance with the amendment to the definition of "standard period".

4. Paragraph (b) of subsection one of section four of the said Act is repealed and the following substituted therefor:—
((b) adjust the standard profits

Adjustments (b) ad to standard (i)

(i) in the case where any alteration in the capital 5 employed since the commencement of the last year or fiscal period of the taxpayer in the standard period has occurred, by adding to or deducting from (accordingly as the capital has been increased or reduced) the standard profits an amount equal to seven and one-10 half per centum per annum of the amount of the alter-

ation in the capital:

Provided that in the case of a corporation or joint stock company such adjustment may only be made if the alteration in capital was accompanied by an equiv- 15

alent alteration in capital stock; and,

Proviso

PROVIBO

Provided further that if an increase in capital to the extent of thirty-three and one-third per centum of the capital employed at the commencement of the year or fiscal period of the taxpayer next preceding the 20 taxation year or alternatively to the extent of thirty-three and one-third per centum of the capital employed at the commencement of the last year or fiscal period of the taxpayer in the standard period has been so made the taxpayer may apply under section five of 25 this Act to have his standard profits ascertained by the Board of Referees as if he had not been carrying on a

business during the standard period;

(ii) in the case where any increase in capital employed was made during the standard period, by adding to the 30 profits of the standard period or portions thereof, when such additional capital was not employed, an amount equal to seven and one-half per centum per annum of the said additional capital and in the case where any decrease in capital employed was made during 35 the standard period by deducting from the profits of the standard period or portions thereof during which the capital withdrawn was employed an amount equal to seven and one-half per centum of the said capital withdrawn:

Provided that in the case of any such decrease in the capital of a corporation or joint stock company such adjustment may only be made if the said decrease was accompanied by an equivalent reduction of capital stock.

Proviso

5. Paragraph (d) of subsection one of section four of the said Act is repealed.

Repeal.

4. This amendment alters the basis of adjusting standard profits by reason of changes in capital employed by providing—

(a) a fixed rate of  $7\frac{1}{2}\%$  of the capital added or with-drawn:

(b) a basis for taking full cognizance of changes in capital

made during the standard period.

A proviso gives the right of applying to the Board for a standard profits as a new business if new capital to the extent of 33\frac{1}{3}\frac{1}{2}\cap{\cap{c}}\_{\cap{c}}\ has been added.

5. The paragraph to be repealed reads as follows:—
"(d) adjust the standard profits by reference to any increase or decrease in depreciation allowances or other charges to such a basis that the said charges during the standard period are comparable with similar charges during the taxation period."

Ascertainment of utendard profits by Board of Referees.

Depressed

is substituted therefor: 6. Section five of the said Act is repealed and the following

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

accordance with the First Schedule to this Act. five nor more than ten per centum per annum on the equal to the average yearly profits of the taxpayer during amount as the Board thinks just, being however an amount sole discretion, ascertain the standard profits at such an the Board of Referees and the Board shall thereupon, in its he may direct that the standard profits be ascertained by business of the taxpayer was depressed or that the standard period as computed by the Board in its sole discretion in last year or fiscal period of the taxpayer in the standard amount of capital employed at the commencement of the the standard period or to interest at the rate of not less than profits as computed by the taxpayer are fair and reasonable Provided that if the Minister is not satisfied that the 25 20

Standard profits for new businessed. satisfied that the taxpayer was not carrying on business during the standard period or that the profits of the standard taxpayers during the standard period in similar circumas the Board thinks just, being an amount equal to a return stances engaged in the same or an analagous class of busiis subject to taxation under this Act at the rate earned by ment of the first year or fiscal period in respect of which he on the capital employed by the taxpayer at the commence- 45 thereupon ascertain the standard profits at such an amount by the Board and the Board shall in its sole discretion seven, he may direct that the standard profits be ascertained day of December, one thousand nine hundred and thirtysection two of this Act was subsequent to the thirty-first Minister pursuant to paragraph (h) of subsection one of the taxpayer or the date of commencement fixed by the because the actual date of commencement of business by liability of the taxpayer under this Act by reference thereto 35 period were so low that it would not be just to determine the (2) If on the application of a taxpayer the Minister is , the capital of the taxpayer to be computed by the 50 8

> changes: 6. The re-enactment of section 5 effects the following

(a) It enables taxpayers whose businesses were depressed of their returns and payment of their self-estimated of their standard profits and so proceed with the filing employed is retained, and the Minister is given the during the standard period to make a prelimary estimate taxpayer to be too high; he considers the self-estimated standard profits of the right to refer any case to the Board of Referces where The limitation of a maximum of 10% on capital

(b) the category of new businesses is enlarged to include of the taxpayer were not commenced prior to January Bill has determined that the actual business operations these where the Minister acting under section 2 of this

(c) power is given to the Board of Referees to deal with of earnings is inapplicable cases of exceptional hardship where a capital standard

d) the provision that the decision of the Board is not operative until approved by the Minister is restated in a separate subsection which also adds a new procedure in cases where the Minister disagrees with the decision of

Board of Referees in its sole discretion in accordance with the First Schedule to this Act:

New gold mines and oil wells. Provided, however, that 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 bundred 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 10 period equal to the average selling price of the said product during the standard period.

Standard profits for cases where a capital standard is inapplicable. (3) If on the application of a taxpayer whose business either was depressed during the standard period or was not in operation prior to the first day of January, one thousand 15 nine hundred and thirty-eight, 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 20

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 25 the taxpayer the Minister may 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 30 circumstances engaged in the same or an analagous class of business.

Decisions of Board not final until approved by Minister or by Treasury Board.

Proviso.

(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 ap-35 proved by the Minister whereupon the said decisions shall be final and conclusive:

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 40 Treasury Board shall be final and conclusive."

**7.** Paragraph (b) of subsection one of section six of the said Act is repealed and the following substituted therefor:—

laventory reserve.

"(b) such reasonable provision as a reserve against 45 future depreciation in inventory values as the Minister in his discretion may allow having regard to a normal

7. This amendment changes the inventory-reserve provision in the following respects:—

(a) The maximum quantity which may be protected is changed from a 'basic quantity' to a 'normal quantity' as indicated by the average quantity on hand during the standard period:

(b) The reserve may provide against a decline in inventory values down to the closing inventory prices of the taxpayer at the end of his 1939 fiscal period, or if that period ended subsequent to August 31st, either his closing 1939 prices or the prices prevailing during the month of August, 1939, whichever the taxpayer chooses.

quantity of stock in trade necessary for the business as indicated by the quantities on hand during the standard period:

Proviso.

Provided that no such deduction shall be allowed which provides against a decline in inventory values below the inventory prices of goods on hand either at the end of the fiscal period of the taxpayer ending in the year one thousand nine hundred and thirty-nine or in case the fiscal period of the taxpayer ends after the thirty-first day of August, during the said month 10 of August one thousand nine hundred and thirty-nine, and.

Proviso.

Provided further that any reduction in such reserve shall for purposes of taxation under this Act be added to the profits of the year in which such reduction takes 15 place and any portion of such reserve remaining at the end of the year or fiscal period when this Act ceases to apply to the taxpayer shall be available to the taxpayer to meet declines in inventory values during the next following year and if not exhausted by the end thereof 20 the remaining portion shall be added to the taxpayer's profits of the last year or fiscal period when this Act applies to the taxpayer."

8. Paragraph (c) of subsection two of section six of the said Act is repealed and the following substituted there-25 for:—

Inventory reserve.

Schedule of this Act, such reasonable provision as a reserve against future depreciation in inventory values as the Minister in his discretion may allow having 30 regard to a normal quantity of stock in trade necessary for the business as indicated by the quantities on hand during the standard period:

Proviso.

Provided that no such deduction shall be allowed which provides against a decline in inventory values 35 below the inventory prices of goods on hand either at the end of the fiscal period of the taxpayer ending in the year one thousand nine hundred and thirty nine or in case the fiscal period of the taxpayer ends after the thirty-first day of August, during the said month of 40 August one thousand nine hundred and thirty-nine, and,

Proviso.

Provided further that any reduction in such reserve shall for purposes of taxation under this Act be added to the profits of the year in which such reduction takes place and any portion of such reserve remaining at the 45 end of the year or fiscal period when this Act ceases to apply to the taxpayer shall be available to the taxpayer to meet declines in inventory values during the next following year and if not exhausted by the end thereof the remaining portion shall be added to the 50 taxpayer's profits of the last year or fiscal period when this Act applies to the taxpayer."

8. This provision is the same as section 7, except that it applies to unincorporated taxpayers.

**9.** Paragraph (c) of section seven of the said Act is repealed and the following substituted therefor:—

Small businesses '(c) the profits of taxpayers who in the taxation year do not earn profits in excess of five thousand dollars before providing for any payments to proprietors, partners or shareholders by way of salary, interest or otherwise:

Froviso.

Provided that if the tax exigible under this Act reduces the profits of the taxpayer below five thousand dollars in the taxation year, before providing for any payments to proprietors, partners, or shareholders by 10 way of salary, interest or otherwise then to the extent that it would so reduce the profits below five thousand dollars such tax shall not be payable."

10. Section seven of the said Act is amended by adding thereto the following paragraph:—

Diversified Investment Corporations

Proviso.

"(f) the profits of any corporation or joint stock company which throughout the taxation year satisfies the following conditions:

 (i) the corporation or joint stock company shall have no outstanding bonds, debentures or other securities 20 evidencing funded indebtedness;

(ii) the capital thereof shall to the extent of eighty per centum or more be invested in stocks, bonds or securities, or held in cash;

(iii) the gross income of the corporation or joint stock 25 company shall to the extent of not less than ninety-five per centum be derived from investments mentioned in sub-paragraph (ii):

(iv) the capital of the corporation or joint stock company shall to the extent of not more than ten per 30 centum thereof be invested in the stocks, bonds or securities of any one corporation or debtor: Provided however that this restriction shall not apply in the case of investments in the securities of the Dominion of Canada or of any province or municipality in 35 Canada, provided that this condition shall be deemed to be met, for purposes of the 1941 taxation period and fiscal periods ending therein, if satisfied by October first, nineteen hundred and forty-one;

(v) the shares of the corporation or joint stock company shall be held by persons numbering fifty or more of whom none holds more than twenty-five per centum of the whole capital stock, provided that this condition shall be deemed to be met, for purposes of the 1941 taxation period and fiscal periods ending 45 therein, if satisfied by October first, nineteen hundred and forty-one.

(vi) the net income of the said corporation or joint stock company excluding therefrom unsold dividends or interest received otherwise than in cash 50 9. This amendment adds a proviso to prevent the tax from reducing the profits of a taxpayer below \$5,000.00.

10. This exempts the profits of diversified investment corporations if they comply with the requirements of the section.

shall have been distributed within one hundred and twenty days after the close of the year or fiscal period to the shareholders to the extent of eightyfive per centum or more in each taxation year."

11. Subsection one of section nine of the said Act is 5

repealed and the following substituted therefor:-

Deduction of excess profits taxes paid abroad.

"9. (1) A taxpayer shall be entitled to deduct from the tax that would otherwise be payable by him under this Act the amount paid to Great Britain or any of its self-governing dominions or dependencies for excess profits tax in respect 10 of the profits of the taxpayer derived from sources therein, and the amount paid to any foreign country for excess profits tax in respect of the profits of the taxpayer derived from sources therein if such foreign country in imposing such tax allows a similar credit to persons in receipt of profits derived 15 from sources within Canada:

Proviso.

Provided that the Minister may in his discretion allow a taxpayer to deduct from the sum total of his income tax and excess profits tax the sum total of the income tax and excess profits tax paid to Great Britain or to any of its self-20 governing dominions or dependencies or to any foreign country if such foreign country in imposing such taxes allows a similar credit to persons in receipt of profits derived from sources within Canada".

12. Subsection two of section nine of the said Act is 25

repealed and the following substituted therefor:-

Limitation.

"(2) Such deduction shall not exceed the same proportion of the tax otherwise payable under this Act or the sum total of the income tax and excess profits tax otherwise payable under this Act and the *Income War Tax Act* as provided for 30 in the proviso to subsection one hereof as that which the taxpayer's net profits from sources within such country and taxed therein bears to his entire net profits from all sources."

1940 returns.

13. The said Act is further amended by adding the 35 following section immediately after section eleven thereof:—

"11A. Notwithstanding the provisions of this Act and the provisions of the *Income War Tax Act* made applicable to the making of returns and the payment of tax under this Act, every person liable to pay excess profits tax in respect 40 of a fiscal period ending in the year one thousand nine hundred and forty prior to the thirty-first day of December of that year may file returns and pay the tax as if such fiscal period ended on the thirty-first day of December, one thousand nine hundred and forty".

14. Paragraph (b) of section three of the First Schedule to the said Act is repealed and the following substituted therefor:—

11 and 12. These sections restate the provision against double taxation with the additional safeguard against double taxation due to the existence of both income taxes and excess profits taxes in most of the countries which give reciprocal allowance with respect to Canadian taxes.

13. This new section implements the procedure outlined on April 8th, 1941, whereby all taxpayers, notwithstanding when their fiscal periods closed, are given the right to file their returns and pay their taxes with respect to their 1940 taxation periods as if their periods ended on December 31st, 1940.

14. This amendment provides for the deduction from the original asset values of the depreciation or the depletion which on the facts can reasonably and properly be said to have been incurred by the taxpayer.

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Depreciation and depletion.

- "(b) A deduction of the total amount of depreciation which, since the first day of January, one thousand nine hundred and seventeen, has been or should have been taken into account in accordance with the practice and regulations of the Income Tax Division of the 5 Department of National Revenue, in ascertaining profit or loss for purposes of the Income War Tax Act, plus any accumulated depreciation reserves as at the first day of January, one thousand nine hundred and seventeen, recognized by the Minister for the purposes 10 of the said Income War Tax Act and in addition such amount on account of depletion as the Board of Referees deems fair and reasonable."
- 15. Paragraph (c) of section three of the First Schedule to the said Act is repealed and the following substituted 15 therefor:-

Debts and borrowed money.

Changes in

period.

"(c) a deduction of any borrowed money and debts of the taxpayer other than dividends declared but unpaid at the commencement of the taxation period, except the amount of indebtedness represented by income bonds 20 or income debentures, the interest on which is not allowed as a deduction under paragraph (k) of subsection one of section six of the Income War Tax Act and except the amount of indebtedness represented by a noninterest-bearing advance from a corporation to its sub- 25 sidiary which the Minister, in his sole discretion, determines to be in the nature of permanently invested capital."

16. Section four of the First Schedule to the said Act is

repealed and the following substituted therefor:

"4. Capital as hereinbefore defined shall be increased or capital during decreased by a portion of any bona fide additions to or reductions of the assets of the business made during the taxation period other than additions or reductions resulting from profits or losses of the said period, such increase or 35 decrease to be made pro rata for the time such additions were employed in or decreases withdrawn from the business. provided however, that dividends paid in cash during such period shall constitute a deduction from the capital employed at the commencement of the said period to the 40 extent of one-half the total amount of dividends paid during the said period."

> 17. The First Part of the Second Schedule to the said Act is repealed and the following substituted therefor: "FIRST PART-

Rate of tax

Twenty-two 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 25924 - 2

15. The addition to this paragraph is the provision whereby if the facts so warrant the Minister may recognize as permanently invested capital the amount of capital furnished by a parent to a subsidiary corporation which is of a permanent nature, and non-interest bearing, and otherwise qualifies as invested capital rather than borrowed capital.

16. The amendment to this paragraph is a restriction of the direction that dividends constitute a diminution of capital employed to the extent of one-half thereof to cases where such dividends are paid in cash; stock dividends do not constitute a diminution of capital employed.

Coming into force 18. (1) Sections one to nine inclusive, eleven and twelve, fourteen, fifteen and sixteen of this Act shall be applicable to the profits of the nineteen hundred and forty taxation 5 period and of fiscal periods ending therein and of subsequent periods.

(2) Section ten of this Act shall be applicable to the profits of the nineteen hundred and forty-one taxation period and of fiscal periods ending therein and of subsequent 10

periods.

(3) Section seventeen of this Act shall be applicable to the profits of the nineteen hundred and forty-one taxation year and of fiscal periods ending therein and of subsequent years and fiscal periods, provided however that if any fiscal 15 period ends prior to December thirty-first, one thousand nine hundred and forty-one, the twenty-two per centum tax imposed by section seventeen of this Act shall apply to only that portion of the profits of the one thousand nine hundred and forty-one fiscal period which the number of 20 days of such fiscal period in the calendar year one thousand nine hundred and forty-one bears to the total number of days of such fiscal period, and the twelve per centum tax as imposed by the First Part of the Second Schedule to the said Act as enacted by Chapter thirty-two of the statutes 25 of one thousand nine hundred and forty, (second session). shall apply to that portion of the profits in the said fiscal period which the number of days of such fiscal period in the calendar year one thousand nine hundred and forty bears to the total number of days of such fiscal period.

