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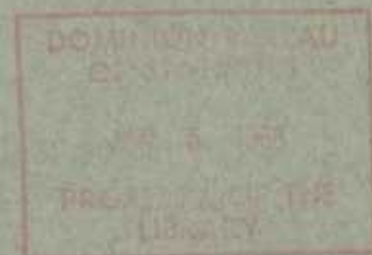
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CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

SUMMARY REVIEW
OF
THE GOLD MINING INDUSTRY
IN
CANADA
1934



Published by Authority of the HON. R. B. HANSON, K.C., M.P.,
Minister of Trade and Commerce.

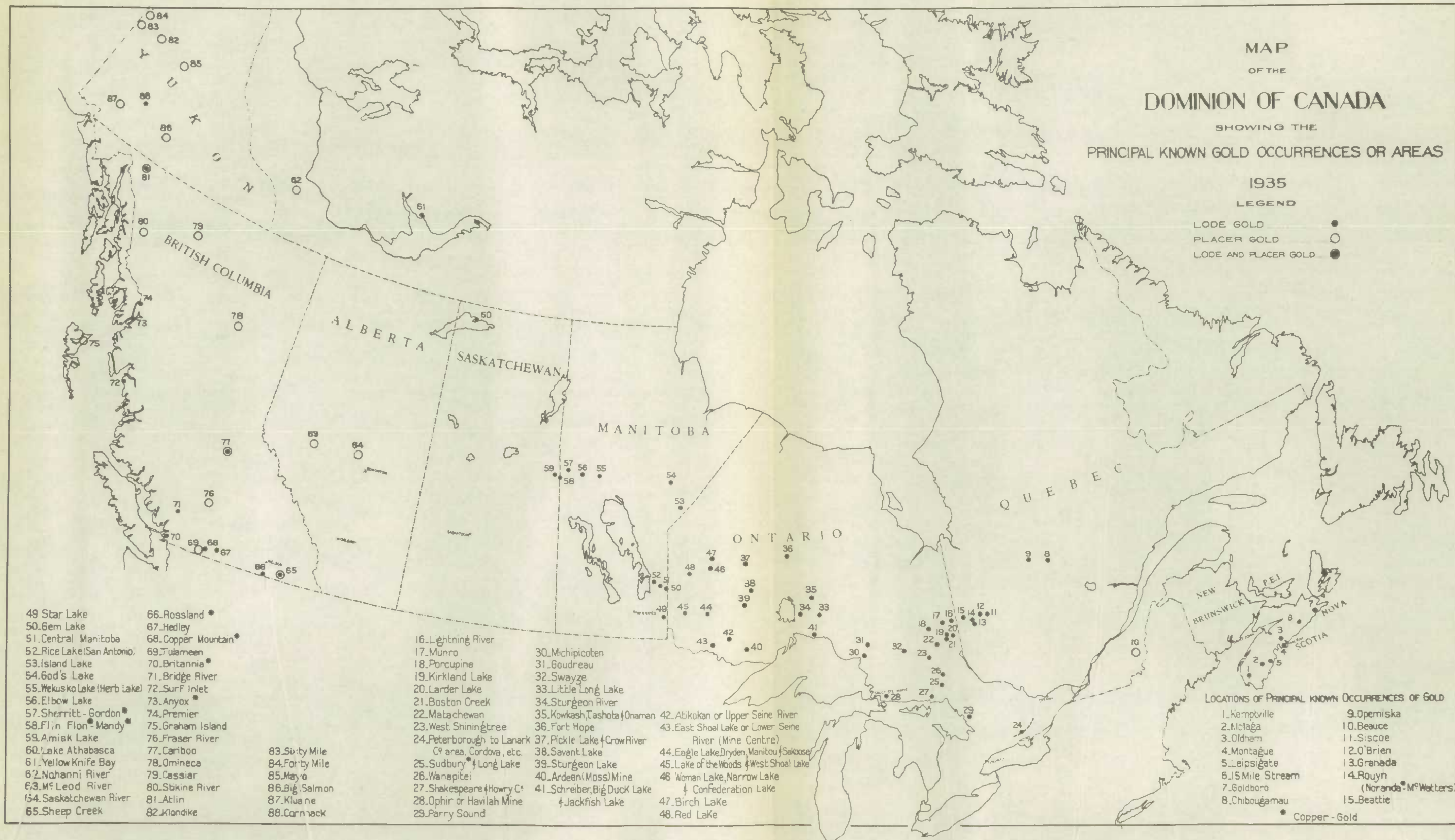
OTTAWA
1935

MAP
OF THE
DOMINION OF CANADA
SHOWING THE
PRINCIPAL KNOWN GOLD OCCURRENCES OR AREAS

1935

LEGEND

LODE GOLD ●
PLACER GOLD ○
LODE AND PLACER GOLD ●



49. Star Lake
50. Gem Lake
51. Central Manitoba
52. Rice Lake (San Antonio)
53. Island Lake
54. God's Lake
55. Wewusko Lake (Herb Lake)
56. Elbow Lake
57. Sherritt - Gordon
58. Flin Flon - Mandy
59. Amisk Lake
60. Lake Athabasca
61. Yellow Knife Bay
62. Nahanni River
63. McLeod River
64. Saskatchewan River
65. Sheep Creek
66. Rossland
67. Hedley
68. Copper Mountain
69. Tulameen
70. Britannia
71. Bridge River
72. Surf Inlet
73. Anyox
74. Premier
75. Graham Island
76. Fraser River
77. Cariboo
78. Omineca
79. Cassiar
80. Stikine River
81. Atlin
82. Klondike

83. Sixty Mile
84. Forty Mile
85. Mayo
86. Big Salmon
87. Klwana
88. Cornsack

16. Lightning River
17. Munro
18. Porcupine
19. Kirkland Lake
20. Larder Lake
21. Boston Creek
22. Matachewan
23. West Shiningtree
24. Peterborough to Lanark
C^a area, Cordova, etc.
25. Sudbury
26. Wanapitei
27. Shakespeare
28. Ophir or Havilah Mine
29. Parry Sound

30. Michipicoten
31. Goudreau
32. Swayze
33. Little Long Lake
34. Sturgeon River
35. Kowkash, Tashota
36. Fort Hope
37. Pickle Lake
38. Savant Lake
39. Sturgeon Lake
40. Ardeen (Moss) Mine
41. Schreiber, Big Duck Lake
42. Abikokan or Upper Seine River
43. East Shoal Lake or Lower Seine River (Mine Centre)
44. Eagle Lake, Dryden, Manitou
45. Lake of the Woods
46. Woman Lake, Narrow Lake
47. Birch Lake
48. Red Lake

42. Abikokan or Upper Seine River
43. East Shoal Lake or Lower Seine River (Mine Centre)
44. Eagle Lake, Dryden, Manitou
45. Lake of the Woods
46. Woman Lake, Narrow Lake
47. Birch Lake
48. Red Lake

LOCATIONS OF PRINCIPAL KNOWN OCCURRENCES OF GOLD

1. Kemptville
2. McLaughlin
3. Oldham
4. Montague
5. Leipsig
6. 15 Mile Stream
7. Goldboro
8. Chibougamau
9. Opemiska
10. Beauce
11. Siscoe
12. O'Brien
13. Granada
14. Rouyn
15. Beattie
Copper - Gold

Y₀X₁X₂X₃X₄X₅X₆X₇X₈X₉X₁₀X₁₁X₁₂X₁₃X₁₄X₁₅X₁₆X₁₇X₁₈X₁₉X₂₀X₂₁X₂₂X₂₃X₂₄X₂₅X₂₆X₂₇X₂₈X₂₉X₃₀X₃₁X₃₂X₃₃X₃₄X₃₅X₃₆X₃₇X₃₈X₃₉X₄₀X₄₁X₄₂X₄₃X₄₄X₄₅X₄₆X₄₇X₄₈X₄₉X₅₀X₅₁X₅₂X₅₃X₅₄X₅₅X₅₆X₅₇X₅₈X₅₉X₆₀X₆₁X₆₂X₆₃X₆₄X₆₅X₆₆X₆₇X₆₈X₆₉X₇₀X₇₁X₇₂X₇₃X₇₄X₇₅X₇₆X₇₇X₇₈X₇₉X₈₀X₈₁X₈₂X₈₃X₈₄X₈₅X₈₆X₈₇X₈₈X₈₉X₉₀X₉₁X₉₂X₉₃X₉₄X₉₅X₉₆X₉₇X₉₈X₉₉X₁₀₀X₁₀₁X₁₀₂X₁₀₃X₁₀₄X₁₀₅X₁₀₆X₁₀₇X₁₀₈X₁₀₉X₁₁₀X₁₁₁X₁₁₂X₁₁₃X₁₁₄X₁₁₅X₁₁₆X₁₁₇X₁₁₈X₁₁₉X₁₂₀X₁₂₁X₁₂₂X₁₂₃X₁₂₄X₁₂₅X₁₂₆X₁₂₇X₁₂₈X₁₂₉X₁₃₀X₁₃₁X₁₃₂X₁₃₃X₁₃₄X₁₃₅X₁₃₆X₁₃₇X₁₃₈X₁₃₉X₁₄₀X₁₄₁X₁₄₂X₁₄₃X₁₄₄X₁₄₅X₁₄₆X₁₄₇X₁₄₈X₁₄₉X₁₅₀X₁₅₁X₁₅₂X₁₅₃X₁₅₄X₁₅₅X₁₅₆X₁₅₇X₁₅₈X₁₅₉X₁₆₀X₁₆₁X₁₆₂X₁₆₃X₁₆₄X₁₆₅X₁₆₆X₁₆₇X₁₆₈X₁₆₉X₁₇₀X₁₇₁X₁₇₂X₁₇₃X₁₇₄X₁₇₅X₁₇₆X₁₇₇X₁₇₈X₁₇₉X₁₈₀X₁₈₁X₁₈₂X₁₈₃X₁₈₄X₁₈₅X₁₈₆X₁₈₇X₁₈₈X₁₈₉X₁₉₀X₁₉₁X₁₉₂X₁₉₃X₁₉₄X₁₉₅X₁₉₆X₁₉₇X₁₉₈X₁₉₉X₂₀₀X₂₀₁X₂₀₂X₂₀₃X₂₀₄X₂₀₅X₂₀₆X₂₀₇X₂₀₈X₂₀₉X₂₁₀X₂₁₁X₂₁₂X₂₁₃X₂₁₄X₂₁₅X₂₁₆X₂₁₇X₂₁₈X₂₁₉X₂₂₀X₂₂₁X₂₂₂X₂₂₃X₂₂₄X₂₂₅X₂₂₆X₂₂₇X₂₂₈X₂₂₉X₂₃₀X₂₃₁X₂₃₂X₂₃₃X₂₃₄X₂₃₅X₂₃₆X₂₃₇X₂₃₈X₂₃₉X₂₄₀X₂₄₁X₂₄₂X₂₄₃X₂₄₄X₂₄₅X₂₄₆X₂₄₇X₂₄₈X₂₄₉X₂₅₀X₂₅₁X₂₅₂X₂₅₃X₂₅₄X₂₅₅X₂₅₆X₂₅₇X₂₅₈X₂₅₉X₂₆₀X₂₆₁X₂₆₂X₂₆₃X₂₆₄X₂₆₅X₂₆₆X₂₆₇X₂₆₈X₂₆₉X₂₇₀X₂₇₁X₂₇₂X₂₇₃X₂₇₄X₂₇₅X₂₇₆X₂₇₇X₂₇₈X₂₇₉X₂₈₀X₂₈₁X₂₈₂X₂₈₃X₂₈₄X₂₈₅X₂₈₆X₂₈₇X₂₈₈X₂₈₉X₂₉₀X₂₉₁X₂₉₂X₂₉₃X₂₉₄X₂₉₅X₂₉₆X₂₉₇X₂₉₈X₂₉₉X₃₀₀X₃₀₁X₃₀₂X₃₀₃X₃₀₄X₃₀₅X₃₀₆X₃₀₇X₃₀₈X₃₀₉X₃₁₀X₃₁₁X₃₁₂X₃₁₃X₃₁₄X₃₁₅X₃₁₆X₃₁₇X₃₁₈X₃₁₉X₃₂₀X₃₂₁X₃₂₂X₃₂₃X₃₂₄X₃₂₅X₃₂₆X₃₂₇X₃₂₈X₃₂₉X₃₃₀X₃₃₁X₃₃₂X₃₃₃X₃₃₄X₃₃₅X₃₃₆X₃₃₇X₃₃₈X₃₃₉X₃₄₀X₃₄₁X₃₄₂X₃₄₃X₃₄₄X₃₄₅X₃₄₆X₃₄₇X₃₄₈X₃₄₉X₃₅₀X₃₅₁X₃₅₂X₃₅₃X₃₅₄X₃₅₅X₃₅₆X₃₅₇X₃₅₈X₃₅₉X₃₆₀X₃₆₁X₃₆₂X₃₆₃X₃₆₄X₃₆₅X₃₆₆X₃₆₇X₃₆₈X₃₆₉X₃₇₀X₃₇₁X₃₇₂X₃₇₃X₃₇₄X₃₇₅X₃₇₆X₃₇₇X₃₇₈X₃₇₉X₃₈₀X₃₈₁X₃₈₂X₃₈₃X₃₈₄X₃₈₅X₃₈₆X₃₈₇X₃₈₈X₃₈₉X₃₉₀X₃₉₁X₃₉₂X₃₉₃X₃₉₄X₃₉₅X₃₉₆X₃₉₇X₃₉₈X₃₉₉X₄₀₀X₄₀₁X₄₀₂X₄₀₃X₄₀₄X₄₀₅X₄₀₆X₄₀₇X₄₀₈X₄₀₉X₄₁₀X₄₁₁X₄₁₂X₄₁₃X₄₁₄X₄₁₅X₄₁₆X₄₁₇X₄₁₈X₄₁₉X₄₂₀X₄₂₁X₄₂₂X₄₂₃X₄₂₄X₄₂₅X₄₂₆X₄₂₇X₄₂₈X₄₂₉X₄₃₀X₄₃₁X₄₃₂X₄₃₃X₄₃₄X₄₃₅X₄₃₆X₄₃₇X₄₃₈X₄₃₉X₄₄₀X₄₄₁X₄₄₂X₄₄₃X₄₄₄X₄₄₅X₄₄₆X₄₄₇X₄₄₈X₄₄₉X₄₅₀X₄₅₁X₄₅₂X₄₅₃X₄₅₄X₄₅₅X₄₅₆X₄₅₇X₄₅₈X₄₅₉X₄₆₀X₄₆₁X₄₆₂X₄₆₃X₄₆₄X₄₆₅X₄₆₆X

Including:-

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

Definition of the Industry - Gold mining in Canada is 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.

GENERAL REVIEW - Production of new gold from all sources in Canada during 1934 amounted to 2,972,074 fine ounces, valued at \$61,438,220 as compared with an output of 2,949,309 fine ounces valued at \$60,967,626 in 1933 and 3,044,387 fine ounces worth \$62,933,063 in 1932, (gold valued at \$20.671834 per fine ounce). The quantity of metal recovered in 1934 represents only an increase of .8 per cent over the preceding year, however, the value of production, in Canadian funds, realized a 21.6 per cent gain over that for 1933.

The 1934 output originated as follows: gold contained in crude bullion made at gold mines, 2,335,132 fine ounces; alluvial gold, 59,284 fine ounces; gold in blister and anode copper and in base bullion made at Canadian smelters, 434,635 fine ounces; and the estimated recovery of gold in ores, matte, slags, residues and concentrates exported to foreign metallurgical plants, 143,023 fine ounces.

Of the total Dominion output, Nova Scotia contributed 3,525 fine ounces; Quebec, 390,097 fine ounces; Ontario, 2,105,339 fine ounces; Manitoba, 132,321 fine ounces; Saskatchewan, 5,405 fine ounces; Alberta, 393 fine ounces; British Columbia, 296,196 fine ounces and the Yukon Territory, 38,798 fine ounces.

Practically all of Canada's gold bullion is shipped by the mines to the Royal Canadian Mint at Ottawa. Up until April 19th, 1933, Canada shipped refined gold to New York accepting payment in United States funds at the coinage value, later after April 19th, on which date the United States went off the gold standard, this gold was consigned to London. The present practice, as that prevailing throughout 1934, is to ship gold to the most advantageous market, either London or New York. During the earlier movements of gold to New York the mining companies were paid a premium on the net value of their gold at a rate equivalent to the exchange premium in United States funds on the date of

deposit of the gold at the Mint. After April 19th, 1933, the Mint paid the producer the standard rate per fine ounce, less charges for melting, assaying and refining, and when the gold was sold in a foreign market the difference between the standard rate and the net amount realized, was returned to the producer or shipper. The average price in Canadian funds of gold in 1934, based on the average prices paid by New York or London, was \$34.50 as against \$28.60 in 1933 or in other words the value of the 1934 Canadian gold production amounted in Canadian funds to \$102,536,553 as against \$84,350,237 in 1933.

The more outstanding events associated with the recent rise in price of gold include the suspension of specie payments by Great Britain on September 21, 1931; the direct control and licensing of Canadian gold exports by the Canadian Government; the purchase by the Canadian Government of all new gold bullion produced in the Dominion with the payment to the miner of equalization exchange; the departure of the United States from the gold standard on April 19th, 1933, and the announcement of January 31st, 1934, by President Roosevelt, that thereafter the United States Treasury would purchase gold from any quarter at not less than \$35.00 per fine ounce and would be empowered by United States Congress to offer, if necessary, up to \$41.34 an ounce. The weight of the new United States gold dollar is 15-5/21 grains, nine-tenths fine, as compared with the former gold dollar of 25.8 grains, nine-tenths fine. The new dollar contains 1/35 of an ounce of gold and an ounce of fine gold is equivalent to \$35.00.

The increase in the price of gold is reflected in an almost general expansion in the Canadian gold mining industry, in the older camps the economic mining of lower grade materials has resulted in a very large increase in ore reserves while deposits in other areas previously considered of little commercial importance have been developed and brought into production. Prospecting and exploration in both old and virgin districts have been both widespread and intensive, resulting in the discovery and development of new mines. These developments, of very great economic importance, have given to gold mining a status comparable with those of the great basic industries of the nation. The economic importance of primary gold production to the Dominion may be better appreciated when it is stated that, in the preliminary estimate by the Bureau of Statistics of the balance of International Payments for Canada in 1934, the net value of gold exports was surpassed only by the favourable balance of exports in the entire commodity trade of the Dominion; the favourable balance of \$145,000,000 in the entire commodity trade being raised to \$239,200,000 when the balance of gold exports is included. Again the net value of gold exports equalled 41 per cent of the net interest and dividend payments to foreign holders of Canadian securities, whether government, municipal or corporation and were \$19,200,000 in excess of the Dominion's requirements to meet its capital payments on maturing bonds. It is also interesting to note that the value of Canadian gold production per capita has increased within the last decade from \$3.86 in 1925 to \$9.45 in 1934.

According to the Department of Mines, Ottawa, a decided impetus will be given to Canadian gold development as a result of the \$1,000,000 Dominion Government programme of geological field work to be undertaken during the 1935 season. The attention of the 180 parties to be placed in the field will be focussed mainly on areas where the geological occurrences are believed to be favourable to gold deposition. The programme constitutes the most ambitious effort ever undertaken by the Dominion Government toward assisting the prospector and engineer in the search for new sources of mineral wealth.

THE ECONOMIC IMPORTANCE OF CANADIAN GOLD PRODUCTION
as illustrated in the
ESTIMATED BALANCE OF INTERNATIONAL PAYMENTS FOR CANADA

PRELIMINARY STATEMENT FOR 1934

(000's omitted)

	Exports Visible and Invisible \$	Imports Visible and Invisible \$	Net Debit (-) or Credit (+)
1. Commodity Trade	645,000	500,000	+ 145,000
2. Exports of gold coin and bullion	95,000	800	+ 94,200
3. Freight payments and receipts, n.o.p. ...	47,000	68,000	- 21,000
4. Tourist expenditures	138,000	54,000	+ 84,000
5. Interest payments and receipts	60,000	290,000	- 230,000
6. Immigrant remittances	6,000	7,500	- 1,500
7. Government expenditures and receipts	8,000	9,250	- 1,250
8. Charitable and missionary contributions .	2,000	1,200	+ 800
9. Insurance transactions	16,000	12,000	+ 4,000
10. Advertising transactions	2,000	1,500	+ 500
11. Motion picture earnings .....	...	2,750	- 2,750
12. Capital of immigrants and emigrants	4,000	3,250	+ 750
13. Earnings of Canadian residents employed in U. S. A.	500	...	+ 500
14. Sundry items (direct magazine sub- scriptions, entertainers' receipts, radio programs, etc.) .....	...	4,500	- 4,500
15. Balancing items --			
(a) Net capital exports (see capital statement) .....	...	20,000	
(b) Net errors and omissions .....	...	48,750	
	1,023,500	1,023,500	+ 63,750 ^x

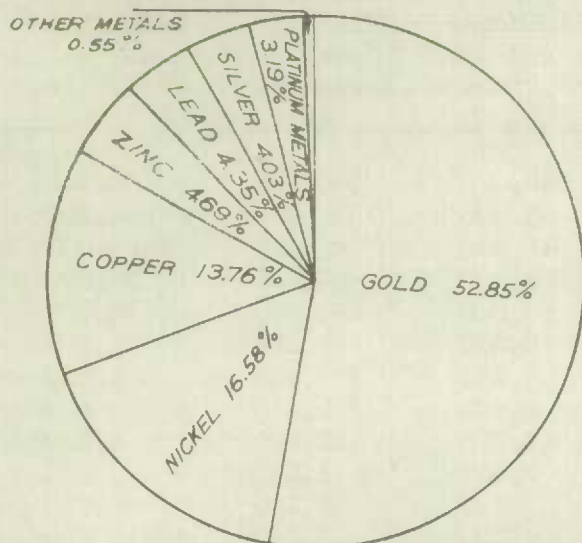
Capital Movement

(000's omitted)

	cr.	dr.	
1. Sale and purchase of securities	350,000	300,000	+ 50,000
2. Maturities .....	...	75,000	- 75,000
3. Direct investments	5,000	...	+ 5,000
4. Balancing item --			
Net outflow of capital funds	20,000	...	
	375,000	375,000	- 20,000

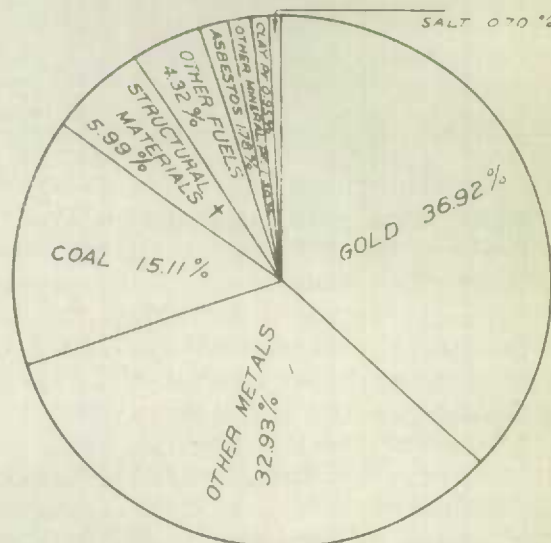
^x This net credit of \$68,750,000 is accounted for by net capital export amounting to \$20,000,000. The balance, \$48,750,000, cannot presently be traced and is attributed to errors and omissions.

**PERCENTAGE VALUE OF GOLD
PRODUCED IN CANADA DURING 1934
IN RELATION TO THE
VALUE OF TOTAL METAL OUTPUT**



TOTAL VALUE OF METAL PRODUCTION
1934
\$ 193,845,512 *

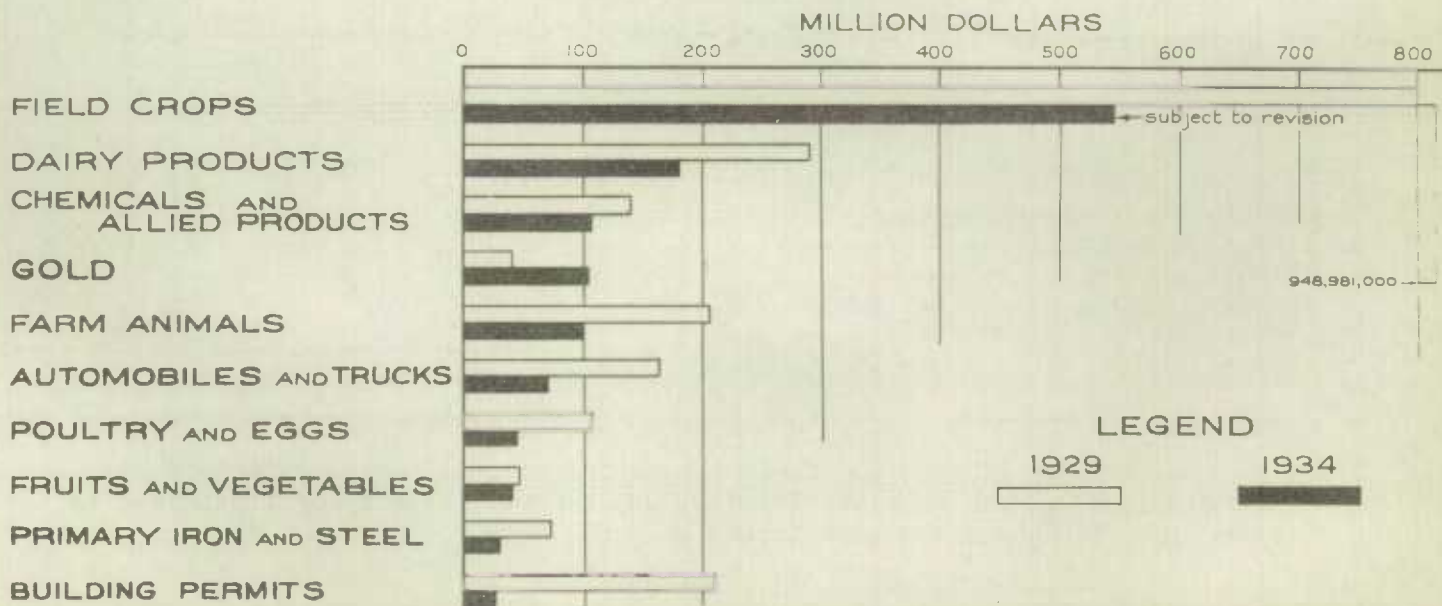
**PERCENTAGE VALUE OF GOLD
PRODUCED IN CANADA DURING 1934
IN RELATION TO THE
VALUE OF TOTAL MINERAL OUTPUT**



TOTAL VALUE OF MINERAL PRODUCTION
1934
\$ 277,492,263 *

*(PRELIMINARY FIGURES)
† CEMENT STONE LIME AND SAND ‡ GRAVEL

**THE INCREASING ECONOMIC IMPORTANCE OF CANADIAN GOLD PRODUCTION
AS ILLUSTRATED BY COMPARISON WITH
OTHER CANADIAN STATISTICAL DATA FOR THE YEARS
1929 AND 1934**



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

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 pieces have been issued). Gold was used only to an insignificant extent as a circulating medium in Canada, its monetary use being practically confined to reserves; \$5 and \$10 gold pieces weighing respectively 129 and 258 grains, 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, as 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 ounce fine on all other gold accepted as a deposit.

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

In addition to newly-mined Canadian gold there may be accepted at the Mint gold (over 1 ounce troy - fine) in the following forms:- old jewellery and dental scrap, provided it has not been melted or otherwise treated in any way to prevent its origin being readily recognized; scrap from manufacturers and refiners the result of processes carried out by them in the ordinary course of their business; gold coin which when 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 for silver in any week shall be one cent below the average for that week of the daily London quotation for standard silver from Monday to Friday, inclusive, converted into the equivalent for fine silver in Canadian funds at the daily rate of exchange between Montreal and London, calculated to the nearest one-eighth of a cent.

DOMINION TAX ON GOLD MINES.

The Special War Revenue Act was amended in April 1934 to provide for a tax on newly mined Canadian gold. It was felt that the unusually prosperous condition of the gold mining industry due to the rise in price of gold from \$20.67 per ounce to about \$35.00 per ounce provided a basis for a gold tax. The increase in the price of gold in terms of the Canadian dollar resulted from national and international monetary policies.

The tax as finally approved by Parliament provided that mines that had paid dividends in the calendar years 1932 and 1933 were to pay a tax of 25% of the premium value of the gold deposited for sale at the Royal Canadian Mint or exported under license. The tax was not to operate to reduce the amount received by the mine below \$30.00 per ounce.

Against the tax collected the tax-paying mines were allowed a deduction of an amount equal to the income tax payable by them for the year 1934, or, in those cases where the mine's fiscal year did not coincide with the calendar year, an amount equal to the income tax attributable to the calendar year 1934. The tax came into force on April 19, 1934, and was to continue until May 31, 1935.

In the Budget Speech of March 22, 1935, the Minister of Finance stated that the gold bullion tax would not be continued after May 31, 1935, and that important changes would be made in the depletion allowances allowed for Income Tax purposes to gold and silver mines. In future the allowance for depletion to mining companies, the principal product of which is gold or silver, is to be 33 1/3% instead of 50%. Furthermore, dividends received by shareholders are now to be taxed on the basis of a 20% depletion allowance instead of 50% as formerly.

The Centenary number of the Mining Journal, London, comments on a world gold mining commission as follows: "World economy, humanity and civilization would gain much if the world's mining industry was requested to co-operate in formulating the provisions of the new gold standard and in carrying into effect the necessary long-range planning programme. The gold mining industry is in a unique position to furnish the most reliable estimates of the world's gold ore reserves and accurately to forecast the annual production of newly mined gold over an extended period. Correct expectancy estimates are vitally important, since errors would result in monetary instability and in the recurrence of disturbed economic conditions. The interim committee which was appointed by the World Economic and Monetary Conference convened in London, July, 1933, might well consider the desirability of extending an invitation to the world's gold mining industries to select and authorize a standing World Gold Mining Commission to collaborate in formulating the provisions of the new gold standard and in developing long-range plans for its operation and maintenance. The commission should well represent geographically the world's gold mining industry. The basis for co-operation between the world's monetary and gold mining interests and specialists should be established at an early date, and the World Gold Mining Commission appointed and functioning, so that this most valuable assistance could be made available to the interim committee and to the next World Economic and Monetary Conference which may be convened in the near future. There is no field in which perspective and careful long-range planning and administration would yield greater dividends to humanity and world economy."

PRODUCTION OF NEW GOLD IN CANADA, BY PROVINCES AND SOURCES, 1933 and 1934.

(Gold at \$20.671834 per fine ounce)

	1	9	3	3	1	9	3	4
	Fine troy				Fine troy			
	oz.				oz.			
			\$				\$	
<u>NOVA SCOTIA -</u>								
In gold bullion and ores								
exported	1,382		28,568		3,525		72,868	
Estimated exchange equalization								
on gold produced .....	...		10,957		...		48,745	
<u>QUEBEC -</u>								
In blister copper, in ores								
shipped and in gold bullion	382,886		7,914,956		390,097		8,064,020	
Estimated exchange equalization								
on gold produced .....	...		3,035,583		...		5,394,327	

PRODUCTION OF NEW GOLD IN CANADA BY PROVINCES AND SOURCES, 1933 and 1934 - Concluded
(Gold at \$20.671834 per fine ounce)

	1933		1934	
	Fine troy oz.	\$	Fine troy oz.	\$
<u>ONTARIO -</u>				
✓ Porcupine area - In gold bullion	1,046,091	21,624,620	949,739	19,634,087
✓ Kirkland Lake - In gold bullion	1,007,036	20,817,281	988,046	20,424,723
✓ Other gold mines - In gold bullion	65,404	1,352,020	107,120	2,214,367
Copper-Nickel and other ores	36,988	764,610	60,374	1,248,041
TOTAL	2,155,519	44,558,531	2,105,339	43,521,218
Estimated exchange equalization on gold produced	...	17,089,312	...	29,112,977
<u>MANITOBA -</u>				
In gold bullion, ores shipped and in blister copper	125,310	2,590,388	132,321	2,735,318
Estimated exchange equalization on gold produced	...	993,478	...	1,829,757
<u>SASKATCHEWAN -</u>				
In ores shipped to Canadian smelters and crude gold to Royal Canadian Mint	5,400	111,628	5,405	111,731
Estimated exchange equalization on gold produced	...	42,812	...	74,741
<u>ALBERTA -</u>				
In alluvial gold	324	6,698	393	8,124
Estimated exchange equalization on gold produced	...	2,569	...	5,434
<u>BRITISH COLUMBIA -</u>				
In alluvial gold	19,142	395,700	20,145	416,434
In gold bullion	122,293	2,528,021	153,173	3,166,367
In blister copper	8,667	179,163	6,063	125,333
In base bullion and in matte and ores exported	88,893	1,837,581	116,815	2,414,781
TOTAL	238,995	4,940,465	296,196	6,122,915
Estimated exchange equalization on gold produced	...	1,894,792	...	4,095,847
<u>YUKON -</u>				
In alluvial gold	39,174	809,798	38,703	800,062
In ores exported	319	6,594	95	1,964
TOTAL	39,493	816,392	38,798	802,026
Estimated exchange equalization on gold produced	...	313,108	...	536,505
TOTAL FOR CANADA	2,949,309	60,967,626	2,972,074	61,438,220
TOTAL ESTIMATED EXCHANGE EQUALIZATION ON GOLD PRODUCED	...	23,382,611	...	41,098,333
GRAND TOTAL VALUE INCLUDING EXCHANGE	...	84,350,237	...	102,536,553

In 1933 the estimated average price of a troy ounce of fine gold in Canadian funds was \$28.60, in 1934 the corresponding price was \$34.50

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

PRODUCTION OF GOLD IN CANADA BY PRINCIPAL MINES, 1934

Property	Ore raised Tons	Ore treated Tons	Gold recovered Fine ounces	Mill capacity 24 hrs. Tons	See foot note
NOVA SCOTIA -					
Beacon Gold Mines	51	51	25	10	(a)
Corwin Gold Mines	150	50	7	...	(a)
Ross Mine (Cons. M. & S. Co.)	871	871	377	20	(a)
Banook Mining Co.	230	230	108	24	(a)
Guyssboro Mines Ltd. ....	...	...	31	50	(a)
Higgins & Lawlor (Moose River)	963	649	285	15	(a)
Lacey Gold Mining Co. Ltd.	1,000	240	(d)	35	...
Montague Gold Mines Ltd.	13,088	8,549	1,681	50	(a)(c)
Seal Harbour Gold Mines Ltd.	3,732	3,732	662	25	(a)
MacDonald Hudson Gold Mines	313	313	41	20	(a)
United Goldfields of N.S. (Brookfield)	2,282	2,282	117 ^x	25	(a)(c)
Other Producers	/	/	191	/	/
TOTAL NOVA SCOTIA .....	...	...	3,525	...	...
QUEBEC -					
Beattie Gold Mines Ltd.	360,900	359,200	52,240	1,200	(b)(c)
Bussieres Mining Co. Ltd.	55,879	38,047	5,039	190	(a)(c)
Granada Gold Mines Ltd.	36,266	35,424	6,864	100	(a)(b)(c)
Green Stabell Mines Ltd.	23,003	21,583	5,682	100	(a)(b)(c)
La Mine D'Or Venus Cons.	60	60	8	25	(c)
McWatters Gold Mines Ltd.	5,713	5,081	2,961	50	(a)
O'Brien Gold Mines Ltd. (e)	26,743	27,832	7,626	80	(a)(c)
Perron Gold Mines Ltd.	5,047	2,646	392	25	(a)
Siscoe Gold Mines Ltd.	124,846	124,151	63,394	340	(a)(b)
Sullivan Cons. Mines Ltd.	7,278	7,960	4,062	50	(a)(b)
Placer mines	/	/	43	/	/
Copper-gold mines .....	...	...	241,786	..	(c)
TOTAL QUEBEC .....	...	...	390,097	...	...
ONTARIO -					
Porcupine Camp -					
Anglo Huronian Ltd. (Vipond)	101,799	101,806	15,541	300	(b)
Buffalo Ankerite Gold Mines	125,134	125,134	20,603	350	(b)
Blue Quartz Mine (Amalg. Gold Fields)	dump	500	19	25	(b)
Coniaurum Mines Ltd.	138,114	138,114	28,436	500	(b)
Dome Mines Ltd.	547,600	547,600	206,153	1,500	(a)(b)
Hollinger Cons. Gold Mines Ltd.	1,900,341	1,900,490	434,257	6,000	(b)
Marbuan Gold Mines Ltd.	26,030	26,030	3,304	150	(b)
McIntyre Porcupine Mines Ltd.	851,345	851,345	239,099	2,000	(b)(c)
McLaren-Porcupine Gold Mines Ltd.	50	50	10	3-5	(a)
Munro-Croesus Gold Mines Ltd.	180	205	298	15	(a)
Paymaster Cons. Mines Ltd.	11,572	13,824	2,020	500	(b)
Miscellaneous	/	/	54	/	/
Total Porcupine Camp .....	...	3705,098	949,799	11,345	..
Kirkland Lake Camp -					
Barry-Hollinger Mines Ltd.	33,445	33,445	4,399	100	(b)
Bidgood Kirkland Gold Mines Ltd.	2,560	2,433	199	15	(b)
Kirkland Lake Gold Mining Co. Ltd.	64,952	64,952	20,316	170	(b)(c)
Lake Shore Mines Ltd.	836,023	836,023	471,762	2,300	(b)

PRODUCTION OF GOLD IN CANADA BY PRINCIPAL MINES, 1934 - Continued

Property	Ore raised Tons	Ore treated Tons	Gold recovered Fine ounces	Mill capacity 24 hrs. Tons	See foot note
<u>Kirkland Lake Camp - conc.</u>					
Macassa Mines Ltd.	63,057	66,557	32,056	200	(b)
Moffat Hall Mine	8,478	8,476	2,525	...	(b)(x)
Sylvanite Gold Mines Ltd.	111,767	111,767	50,337	350	(b)
Teck-Hughes Gold Mines Ltd.	442,745	442,745	167,412	1,300	(b)
Toburn Gold Mines Ltd.	36,230	36,230	20,401	100	(b)
Wright-Hargreaves Mines Ltd.	354,418	354,418	218,203	900	(b)
Miscellaneous	/	/	436	/	/
Total Kirkland Lake .....	...	1,957,046	988,046	5,435	...
<u>Other gold mines -</u>					
Algoma Summit Gold Mines Ltd.	/	421	144	$\frac{3}{4}$	(a)
Ardeen Gold Mines Ltd.	/	38,143	5,815	200	(b)
Ashlay Gold Mining Corp.	43,532	43,532	13,181	150	(b)(c)
Casey Summit Gold Mines Ltd.	/	4,094	888	50	(a)
Central Canada Mines Ltd.	200	350	21	12	(a)(m)
Central Patricia Gold Mines Ltd.	11,680	11,536	6,373	50	(b)
Dikdik Exploration Co. Ltd.	803	230	1,082	...	(c)
Duport Mining Co. Ltd.	/	25	65	...	(c)
Howey Gold Mines Ltd.	477,044	481,757	45,985	1,100	(b)
J. M. Cons. Gold Mines Ltd.	/	3,443	1,019	25	(a)(b)
Little Long Lac Gold Mines Ltd.	5,600	5,485	2,457	175	(a)(b)
McMillan Gold Mines Ltd.	12,313	12,313	1,959	100	(b)
Matachewan Cons. Mines Ltd.	10,605	4,680	679	100	(b)
Minto Gold Mines Ltd.	22,189	22,189	4,912	90	(b)
Northern Empire Mines Co. Ltd.	22,759	22,507	5,663	90	(a)(b)
Parkhill Gold Mines Ltd.	19,455	19,431	8,984	75	(b)
St. Anthony Gold Mines Ltd.	5,626	37,610(j)	3,571	125	(b)
Sol D'Or Gold Mines Ltd.	130	130	74	3	(a)
Young-Davidson Mines Ltd.	51,842	51,842	3,878	600	(b)
Miscellaneous .....	...	...	370	...	...
Total Other Ont. Gold Mines .....	...	359,718	107,120	2,949	...
Copper-Nickel mines .....	...	...	60,374	...	(c)
GRAND TOTAL ONTARIO .....	...	...	2,105,339	...	...
<u>MANITOBA -</u>					
Central Manitoba Mines Ltd.	48,406	43,862	12,560	150	(a)(b)(c)
Diana Gold Mines Ltd.	6,663	5,284	1,980	30	(a)
Island Lake Mines Ltd.	9,191	6,984	3,231	50	(a)(c)
Oro Grande Development Co. Ltd.	/	/	146	75	(a)
San Antonio Gold Mines Ltd.	66,457	64,294	21,638	225	(a)(b)
Copper-Gold ores and miscellaneous ...	...	...	92,766	...	...
TOTAL MANITOBA .....	...	...	132,321	...	...
<u>SASKATCHEWAN</u>					
Copper-Gold ores .....	...	...	5,405	...	...
<u>ALBERTA -</u>					
Placer gold .....	...	...	393	...	...

PRODUCTION OF GOLD IN CANADA BY PRINCIPAL MINES, 1934 - continued

Property	Ore raised Tons	Ore treated Tons	Gold recovered Fine ounces	Mill capacity 24 hrs. Tons	See foot note
BRITISH COLUMBIA -					
Bralorne Mines Ltd.	98,664	98,664	45,971	450	(a)(c)
Bunker Hill Gold Mines Ltd.	/	92(h)	56	...	(c)
Cariboo Gold Quartz Mining Co. Ltd. ...	28,447	27,693	10,263	100	(b)
Carmi Gold Mines Ltd. (3)	165	165(h)	86	...	(c)
Clubine Comstock Gold Mines Ltd.	102	102(h)	116	...	(c)
Columario Cons. Gold Mines Ltd.	2,300	2,300	483	90	(c)
Danzig Mines Ltd.	33	33(h)	67	...	(c)
Dawson Cons. Gold Mines Ltd.	/	8(h)	67	25	(a)(c)
Dentonia Mines Ltd.	22,610	22,464	3,784	135	(c)
Dynamo Mining & Milling Co. Ltd.	56	56(h)	20	...	(c)
Euphrates Mining Co. Ltd.	58	58(h)	100	...	(c)
Evening Star	197	198(h)	230	...	(c)
Gold Belt Mining Co. Ltd.	/	291(h)	608	...	(c)
Granby Point Mine	/	13,948	1,357	...	(c)
Grandoro Mines Ltd.	3,000	546(h)	576 ^x	...	(c)
Grange Mines Ltd.	3,330	3,330	545	50	(a)(c)
Hercules Cons. Mining, S. & P. Corp....	18	18(h)	31 ^x	...	(c)
Island Mountain Mines Co. Ltd.	2,894	2,894	1,591	50	(b)
I. X. L. Mine	127	127(h)	748	...	(c)
Jenny Long Gold Mines	200	100	/	30	(c)
Keystone Mine	/	105(h)	142	...	(c)
Kootenay Belle Gold Mines Ltd.	2,824	824(h)	1,529	60	(c)
Livingstone Mining Co. Ltd.	563	563(h)	436	...	(c)
Midnight Mine	266	266(h)	153	...	(c)
Minto Gold Mines Ltd.	2,878	1,439	345	50	(a)(c)
Morning Star Gold Mines Ltd.	2,652	2,652(h)	1,444	...	(c)
Nicola Mines & Metals Ltd.	6,095	6,095	775	50	(c)
Noble Fine Mines Ltd.	164	164(h)	175	...	(c)
Oscarson Bros. (Erie)	408	408(h)	507	...	(c)
Pioneer Gold Mines of B.C. Ltd.	130,066	130,198	87,536	300	(b)
Precambrian Gold Mines	3,154	3,100	1,178	25	(c)(i)
Premier Gold Mining Co. Ltd.	154,693	154,693	38,371	500	(c)
Relief-Arlington Mines Ltd.	14,614	11,663	5,787	25	(a)(c)
Reno Gold Mines Ltd.	26,895	26,895	15,979	100	(a)(b)(c)
Superior Gold Mines Ltd.	3,415	3,415	57	50	(c)
Surf Point Mine (N. A. Timmins)	7,814	5,658	3,582	20	(c)
Taylor Windfall Mining Co. Ltd.	83	83	185 ^x	5	(a)
Twin Lakes Gold Mining Co. Ltd.	5,471	5,471	1,675	40	(a)(c)
Union Mine (J. F. McCarthy)	/	18,143(j)	424	200	(b)(c)
Vancouver Island Gold Mines Ltd.	40	40(h)	116	...	(c)
Velvet Gold Mining Co.	2,000	740	747	50	(c)(k)
Vidette Gold Mines Ltd.	7,228	7,216	3,589	30	(c)
Waterloo Gold Mines Ltd.	/	59(h)	54	...	(c)
Wayside Cons. Gold Mines Ltd.	2,381	513	84	40	(a)
Wilcox Mine	3,320	1,660	651	20	(a)(c)
Windpass Gold Mining Co. Ltd.	9,005	11,316	7,819	40	(c)(k)
Ymir Cons. Gold Mines Ltd.	3,677	4,261(h)	2,254	100(1)	(c)
Ymir Dundee Gold Mining Co. Ltd.	313	313(h)	113	...	(c)
Ymir Yankee Girl	/	13,966(h) ^x	9,104(h) ^x	100(1)	(c)

PRODUCTION OF GOLD IN CANADA BY PRINCIPAL MINES, 1934 - concluded

Property	Ore raised Tons	Ore treated Tons	Gold recovered Fine ounces	Mill capacity 24 hrs. Tons	See foot note
<u>BRITISH COLUMBIA - concluded</u>					
Placer Mines	20,145	...	...
Copper-gold, silver-lead and other gold mines	24,541	...	...
TOTAL BRITISH COLUMBIA	296,196	...	...
<u>YUKON -</u>					
Placer	38,703	...	...
Other sources	95	...	...
TOTAL YUKON	38,798	...	...
TOTAL CANADA	2,972,074	...	...

NOTE -

- | | |
|-------------------------------|-----------------------------------|
| (a) amalgamation | (g) includes tailings, etc. |
| (b) cyanidation | (h) shipped |
| (c) shipments to smelter | (i) also includes bullion |
| (d) no clean up | (j) tailings |
| x subject to revision | (k) includes ore and concentrates |
| / information not available | (l) under construction |
| (e) includes O'Brien & Fowler | (m) concentrates also produced. |
| (f) cyanided | |

ESTIMATED AVERAGE MONTHLY VALUE OF AN OUNCE OF FINE GOLD EXPRESSED IN CANADIAN FUNDS.

	1931	1932	1933	1934
	\$	\$	\$	\$
January	20.71	24.24	23.64	33.05
February	20.67	23.67	24.74	35.29
March	20.67	23.11	24.78	35.08
April	20.68	22.98	25.33	34.93
May	20.68	23.30	27.75	34.94
June	20.73	23.83	28.24	34.73
July	20.74	23.73	30.58	34.59
August	20.73	23.61	30.09	34.19
September	21.55	22.88	31.79	34.18
October	23.22	22.65	31.48	34.27
November	23.22	23.73	32.68	34.16
December	25.01	23.85	32.14	34.57
Yearly average	21.55	23.47	28.60	34.50

^x Includes a relatively small quantity of gold contained in interprovincial shipments of gold ores to smelters.

Items	1933	1934
	\$	\$
IMPORTS -		
Coins and bullion --		
Coins, British and Canadian and foreign gold coins	822,236	708,010
Gold in bars, blocks, ingots, drops, sheets or plates, unmanufactured n.o.p.	35,316	56,343
TOTAL	857,552	764,353
Gold, other --		
Bullion fringe or gold fringe	4,554	8,456
Manufactures of gold and silver, leaf gold, silver and Dutch or schlag metal	52,790	61,908
Sweepings - Gold and silver	4,119	140
Manufactures, n.o.p.	17,729	23,860
Electroplated ware and gilt ware n.o.p.	260,176	384,400
Gold unmanufactured, for commercial purposes (from April 1st, 1933)	168,382	157,691
TOTAL	507,750	636,455

Coin and bullion -		
Gold coin		
Canadian	10	..
Foreign	5,963,594	83,480
Gold bullion		
Canadian n.o.p. - To United Kingdom	40,804,715	21,545,438
United States	15,197,546	69,463,563
Total Canadian bullion ^x	56,002,261	91,015,001
Foreign	877	..
TOTAL - Canadian coin and bullion	56,002,271	91,015,001
Foreign " " "	5,964,471	83,480
GRAND TOTAL COIN AND FINE GOLD BULLION	61,966,742	91,098,481

x In 1933 exports of Canadian gold bullion were valued at the standard price of \$20.67 per fine ounce while in 1934, the metal was valued at \$20.67 for the first three months only and at the actual world market value for the remainder of the year.

GOLD PRODUCTION OF THE WORLD, 1932 - 1934

(in fine ounces)

Supplied by the "American Bureau of Metal Statistics"

	1 9 3 2	1 9 3 3	1 9 3 4 ^x
Union of South Africa	11,558,532	11,013,713	10,479,857
Russia and Siberia	1,990,000	2,814,000	4,200,000
Canada	3,044,387	2,949,309	2,971,956
United States, including Philippines ..	2,449,032	2,536,913	2,916,373
Australia (including Tasmania)	710,447	823,312	873,127
Rhodesia	580,503	645,087	693,263
Mexico	584,487	637,727	662,000
Japan	401,779	433,800	467,500
Colombia	248,249	298,242	344,140
British India	329,682	336,108	325,000
British West Africa (a)	292,510	338,110	380,000
Chosen (Korea)	276,002	328,040	320,000
Belgian Congo	242,691	283,144	355,300
Sweden	132,458	288,643	315,000
New Zealand	166,354	161,755	152,000
Chile	37,778	147,052	238,547
Rumania	102,591	142,585	145,000
Brazil	115,258	110,000	102,000
Peru	55,587	84,066	108,000
Newfoundland	17,661	15,689	14,500
Other South America	222,097	230,975	260,000
Central America and West Indies	82,238	87,075	110,000
Other Asia	231,462	299,529	294,100
Other Oceania (b)	121,071	173,000	223,000
Other Africa	122,832	152,090	201,700
Other Europe	149,826	183,861	194,000
TOTAL WORLD	24,265,514	25,513,645	27,346,363

(a) includes Gold Coast

(b) includes New Guinea

^x subject to revision.

PRODUCTION OF SOME OF THE MORE IMPORTANT FOREIGN GOLD MINES, 1934/

	Tons milled	Yield, Fine ounces	Estimated working profit per ton milled, s d	
TRANSVAAL				
Brakpan Mines	1,479,000	404,410	17	0
City Deep	1,204,000	236,210	5	3
Cons. Main Reef	1,189,300	279,366	9	10
Crown Mines	3,558,000	1,001,618	18	9
Daggafontein	959,900	323,923	24	2
Durban Deep	626,000	151,774	8	7
East Geduld	972,500	331,492	28	2
East Rand Prop.	2,102,500	477,712	9	5
Geduld Proprietary	1,116,000	324,135	25	2
Geldenhuis Deep	996,900	162,301	4	10
Government Areas	2,482,000	915,852	33	1
Langlaagte Estate	1,007,000	197,536	7	11
Luipaards Vlei	487,100	107,500	9	8
Modder B.	1,008,000	192,435	11	4
Modder Deep	568,500	192,538	31	3
Modder East	1,023,500	234,495	11	1
New Kleinfontein	649,600	113,844	2	0
New Modderfontein	2,145,000	554,118	20	10
New State Areas	1,122,000	440,678	33	8
Nigel	66,550	20,963	16	11
Nourse Mines	852,000	200,607	8	2
Randfontein	3,791,000	730,935	7	0
Robinson Deep	1,200,000	301,017	14	11
Rose Deep	764,500	137,585	4	3
Simmer and Jack	1,073,900	245,161	9	9
Springs Mines	1,077,700	421,689	33	3
Sub Nigel	516,400	424,281	77	8
Van Ryn Estate	657,000	95,941	3	6
Van Ryn Deep	944,000	220,415	12	11
West Rand Cons.	1,430,000	339,589	15	4
West Springs	1,104,200	173,515	5	9
Witwatersrand	958,000	152,483	3	2
Witwatersrand Deep	590,800	116,434	5	1
Glynn's Lydenburg	91,700	35,085	20	8
Transvaal G. M. Estate	241,200	57,127	11	11
Miscellaneous Producers .....	...	171,629	..	..
TOTAL TRANSVAAL	40,055,750	10,486,393	15	9
NEW ZEALAND				
Waihi	266,933	57,448	..	..
Grand Junction	21,916	5,887	..	..
Golden Dawn	6,720	4,105	..	..
Blackwater	31,862	15,588	..	..
Talisman-Dubbo	2,094	2,477	..	..
Alexander	2,164	1,807	..	..
Big River	1,009	671	..	..
BRAZIL				
Morro Velho	(h)	105,100	..	..
Passagem (7 months)	(h)	5,061	..	..

PRODUCTION OF SOME OF THE MORE IMPORTANT FOREIGN GOLD MINES, 1934/ - concluded

	Tons milled	Yield, Fine ounces	
PANAMA			
Eraguas Mines	13,275	14,979	
INDIA			
Mysore Gold Mining Co.	177,035	92,506	
Champion Reef Gold Mines ^x	134,770	62,283	
Nundydroog Mines Ltd.(a)	220,020	109,974	
Ooregum Gold Mining Co. Ltd.(b) .	147,053	37,944	
WEST AFRICA			
Asuanti Goldfields Corp. Ltd.(c).	173,350	186,847	
Gold Coast- all gold mines	503,902	308,960	
KOREA			
Chosen Corp. (Nurupi, Tong Chang and Kapam)	145,665(d)	...	6.63 dwt.(e)
AUSTRALIA			
Wiluna Gold Corp. Ltd.	469,362(d)	...	29s 1.36d (e)
UNITED STATES			
Homestake (S.D.)	1,432,195(f)	...	\$12,900,317(g)
Empire Star Mines (Cal.)	(h)	100,000/	

NOTE -

x In addition 4,117 oz. were recovered from 159,109 tons of tailings.

/ Subject to revision.

(a) In addition 2,139 oz. were recovered from tailings.

(b) In addition 12,358 oz. were recovered from dumps, etc.

(c) For the year to September 30th.

(d) To year ended March 31st, 1934.

(e) Grade - per ton.

(f) Mined

(g) Value

(h) Data not available.

COMPARATIVE FIGURES OF GOLD PRODUCTION FOR THE WORLD SINCE THE DISCOVERY OF AMERICA,
TRANSVAAL, UNITED STATES AND CANADA.

Period	Transvaal Since the Commencement of Fields(b) Fine Ounces	^x United States Fine Ounces	Canada Since the Recording of Production in 1858 Fine Ounces	(a) World Since the Discovery of America Fine Ounces
1493 - 1600	-	-	-	24,266,820
1601 - 1700	-	-	-	29,330,445
1701 - 1800	-	-	-	61,088,215
1801 - 1840	-	-	-	20,488,552
1841 - 1850	-	1,187,170(c)	-	17,605,018
1851 - 1860	-	-	220,039	64,482,933
1861 - 1870	-	58,279,778(d)	1,477,999	61,098,343
1871 - 1880	-	15,281,264(e)	904,093	55,670,618
1881 - 1890	1,070,651	15,808,339	584,102	51,280,184
1891 - 1895	6,870,158	9,106,834	291,564	39,412,823
1896 - 1900	12,578,869	15,728,572	3,469,791	62,234,698
1901 - 1905	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	(	405,517	19,977,260
1908	7,056,266	(22,993,218	476,112	21,422,244
1909	7,295,108	(	453,865	21,965,111
1910	7,527,108	(	493,707	22,022,180
1911	8,249,461	4,687,053	473,159	22,397,136
1912	9,107,512	4,520,719	611,885	22,605,068
1913	8,798,336	4,299,784	802,973	22,928,579
1914	8,394,322	4,572,976	773,178	21,875,618
1915	9,093,902	4,887,604	918,056	23,010,348
1916	9,296,618	4,479,057	930,492	22,400,370
1917	9,018,084	4,051,440	738,831	20,457,475
1918	8,418,292	3,320,784	699,681	18,701,294
1919	8,331,294	2,918,628	766,764	17,376,201
1920	8,158,226	2,476,166	765,007	16,130,273
1921	8,128,681	2,422,006	926,329	16,006,695
1922	7,009,767	2,363,075	1,263,364	15,576,270
1923	9,148,771	2,502,632	1,233,341	17,977,807
1924	9,574,918	2,528,900	1,525,382	18,667,063
1925	9,597,573	2,411,987	1,735,735	18,734,102
1926	9,954,762	2,335,042	1,754,228	19,251,794
1927	10,122,459	2,197,125	1,852,785	19,180,231
1928	10,354,157	2,233,251	1,890,592	19,399,124
1929	10,412,326	2,208,386	1,928,308	19,585,536
1930	10,716,349	2,285,603	2,102,068	20,836,318
1931	10,877,708	2,395,878	2,693,892	22,329,525
1932	11,557,858	2,449,032	3,044,387	24,150,881
1933	11,017,495	2,556,246	2,949,309	24,962,408
1934	10,486,393	2,916,373/	2,972,074	27,339,233/
TOTAL	294,099,895	231,798,644	49,277,285	1,161,729,403

x Including Philippine Islands production received in United States.

/ Preliminary estimate - American Bureau Metal Statistics.

(a) Supplied by United States Mint.

(c) 1792 - 1847.

(b) Supplied by Transvaal Chamber of Mines.

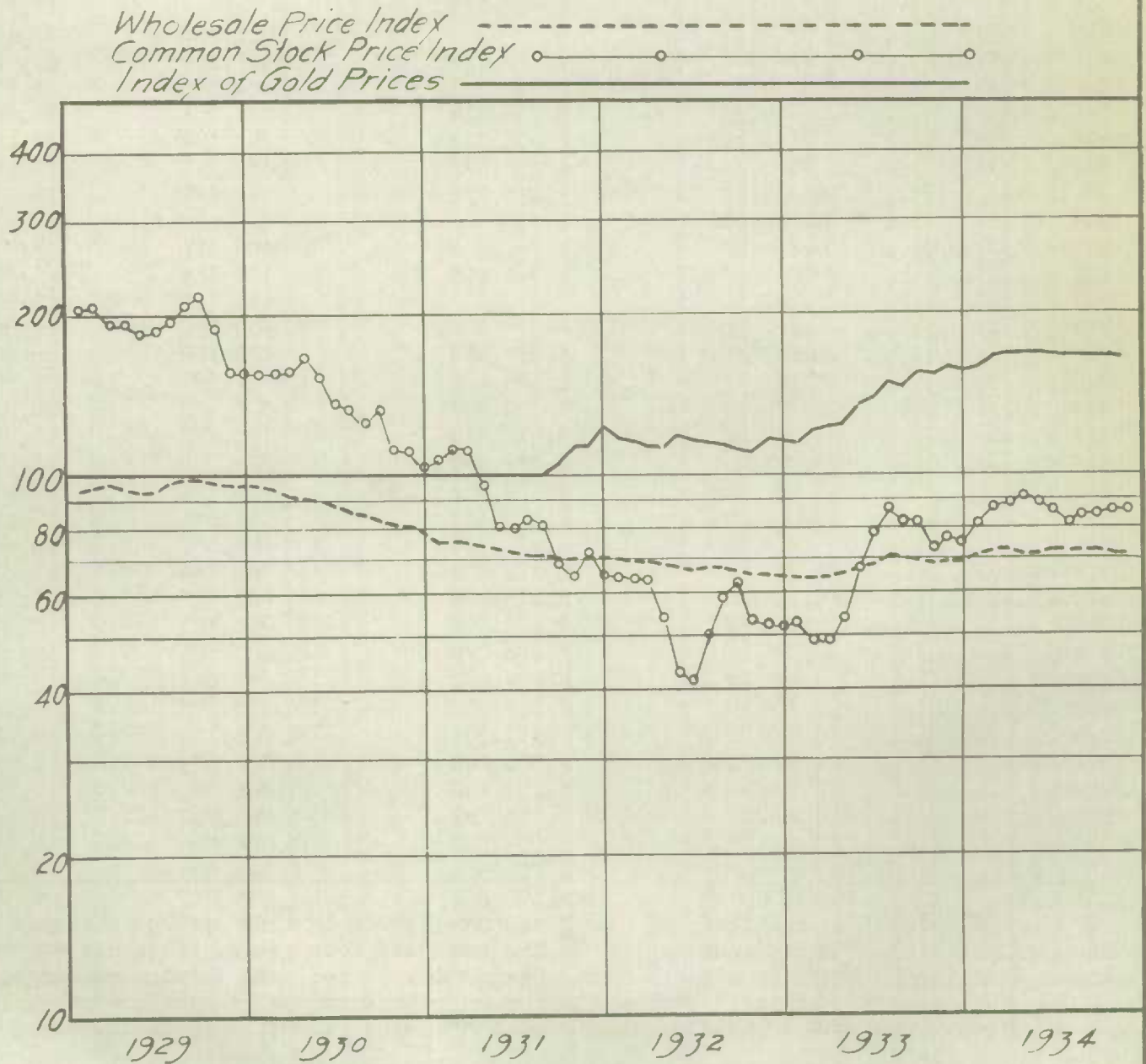
(d) 1848 - 1872.

(e) 1873 - 1880.

Canadian Price Index Numbers 1929 - 1934

1926 = 100

(Logarithmic Scale)



NOTE REGARDING RATIO CHART

The chart on the preceding page shows ratio changes in the price of gold, common stock prices, and wholesale commodity prices. It indicates that the percentage increase in common stock prices has been considerably greater than that for gold, since the beginning of 1933. The increase in wholesale commodity prices has, on the other hand, been materially less than the advance in gold.

CANADIAN SECURITY PRICE INDEX NUMBERS 1929 - 1934
1926 = 100

	Common Stocks		Bond yields of province of Ontario	Common Stocks		
	Total	Indus- trials		Mines Total	Gold	Base Metals
<u>1929</u>						
October	186.4	255.4	103.3	90.1	59.3	...
December	156.5	210.0	102.3	74.5	54.3	...
<u>1930</u>						
December	103.1	120.3	93.9	59.2	57.8	...
<u>1931</u>						
December	64.8	74.3	108.6	59.0	59.0	...
<u>1932</u>						
December	52.2	58.9	102.7	63.1	62.7	...
<u>1933</u>						
March	48.9	59.1	100.0	68.4	66.6	76.9
July	86.5	122.3	96.7	106.9	99.7	133.5
October	73.3	103.6	94.6	112.2	108.6	131.8
<u>1934</u>						
January	81.6	118.6	97.2	108.9	104.7	128.3
February	86.5	123.8	96.0	114.4	110.1	134.2
March	88.0	128.5	90.1	128.1	124.3	147.1
April	90.7	133.0	87.7	137.2	132.0	162.3
May	88.6	128.0	84.8	129.8	124.2	156.5
June	87.2	126.1	85.4	138.5	133.4	164.2
July	81.3	116.6	83.1	137.2	133.3	158.3
August	83.8	120.1	82.3	141.1	137.4	161.7
September	83.8	118.8	82.0	139.2	136.7	154.9
October	85.2	122.0	82.9	133.5	132.9	141.4
November	86.0	125.3	81.0	125.5	125.7	129.0
December	86.2	125.6	76.2	124.9	124.7	129.6

The relative stability of Canadian price levels in 1934 offered a marked contrast to the violent changes occurring in the preceding four years. This new movement toward equilibrium could be discerned in common stock prices, and foreign exchange, as well as in commodity markets. A pronounced rise in bond prices, indicative of a plentiful supply of investment funds, furnished the only major exception to the tendency in other price fields.

It is a striking fact that the steadiness in price levels followed closely after gold prices began to move within narrow limits at approximately 65 p.c. above the former mint price of \$20.67 per ounce. The premium on gold averaged 68 p.c. in February 1934, as compared with 20 p.c. in February 1933. During the last ten months of 1934, gold prices varied less than 2 p.c., and fluctuations of the official Canadian wholesale price index were within even narrower limits. Between February 1933 and February 1934, wholesale prices had advanced 13.5 p.c., a much less pronounced increase than that recorded for gold.

Mining stock prices advanced rapidly during the first quarters of 1934, and were fairly steady during the second and third quarters. They declined rather sharply in October and November, but advanced moderately during December. An index of gold stock prices showed a net increase for the year of roughly 24 p.c. Gold stocks continued to advance for six months after prices for gold itself had ceased to rise, and similarly the total appreciation in gold stock prices since the mint par of \$20.67 per ounce was abandoned, has been very much greater than the currency premium established on gold. An index of base metal stock prices was 129.6 in December, as compared with 128.3 in January, and 164.2 in June, when prices were at the highest point of the year.

Lower interest rates were accompanied by a rise in bond prices to the highest levels seen since 1911, and of course a corresponding decline occurred in bond yields. An index of yields on high grade Province of Ontario bonds fell from 97.2 in January to 76.2 for December.

FOREIGN EXCHANGE, 1934.

The outstanding feature of 1934 foreign exchange history from a Canadian point of view, was the gradual approach of the £ sterling, the United States dollar and the Canadian dollar towards their previous exchange parities. Although all three of these units are now worth only about 60 p.c. of former gold values, the end of 1934 found the Canadian and American dollars practically at par, and the £ sterling commanding close to \$4.86 at both New York and Montreal. This situation has not been paralleled since September, 1931. During the year a small premium on American dollars at Montreal gradually gave place to a discount which for a short time in September exceeded 3 p.c. Sudden weakness in Canadian funds in December reduced this discount to about 1 p.c. The premium on sterling increased from 4.5 p.c. in January to about 6 p.c. in April, but by September, the pound was fluctuating narrowly around \$4.86. Subsequent weakness in the dollar caused sterling again to rise to a premium of about 1 p.c. towards the middle of December. During 1934, in countries formally adhering to old gold parities (including France, Belgium, Holland and Germany) most exchanges appreciated by approximately 4 p.c. The Italian Lira however, showed no net appreciation during this period. The Scandinavian currencies, the Australian, New Zealand, and South African pounds, the Indian rupee, and the Brazilian milreis moved closely in line with the £ sterling. The Japanese yen followed the general movements of sterling, but due to a weak tendency registered a net decline of 6 p.c. at Montreal for 1934; this decline was 2 p.c. greater than the fall in sterling.

EXCHANGE QUOTATIONS AT MONTREAL, 1934

	New York funds	London Sterling	France Franc	Germany Reichsmark	Italy Lira	Japan Yen
		4.8666	.0392	.2382	.0526	.4985
January	1.0047	5.0702	.0625	.3781	.0839	.3046
February	1.0084	5.0777	.0652	.3931	.0869	.3022
March	1.0022	5.1065	.0660	.3978	.0861	.3019
April .....	.9979	5.1476	.0661	.3954	.0856	.3039
May .....	.9982	5.1002	.0661	.3942	.0852	.3030
June .....	.9922	5.0122	.0656	.3813	.0855	.2980
July .....	.9883	4.9851	.0652	.3818	.0849	.2959
August .....	.9769	4.9509	.0651	.3862	.0848	.2943
September .....	.9714	4.8551	.0649	.3917	.0845	.2904
October .....	.9791	4.8431	.0649	.3964	.0844	.2822
November .....	.9761	4.8724	.0644	.3925	.0835	.2846
December .....	.9878	4.8865	.0652	.3970	.0844	.2855

NOTE - The nominal closing quotations in Canadian funds upon which these averages are based have been supplied by the Bank of Montreal.

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

Year		Year		Year	
1700	14.81	1885	19.41	1920	20.8
1750	14.55	1890	19.75	1925	29.78
1800	15.68	1895	31.60	1930	53.74
1850	15.70	1900	33.33	1931	71.25
1875	16.64	1905	33.87	1932	73.29
1880	18.05	1910	38.22	1933	59.06
		1915	40.48	1934	72.69

* Estimated on averages in Canadian funds.

WORLD'S MONETARY STOCKS OF GOLD AT THE CLOSE OF 1932 and 1933 (Subject to Revision)
(Compiled by United States Mint from Available Data)
(Stated in United States Money)

Country	Total Gold Stock		Total Gold Stock	
	Value, 1932	Per Capita	Value, 1933	Per Capita
	\$	\$	\$	\$
United States	4,513,001,000	36.04	4,322,599,000	34.63
Canada	124,265,000	11.97	113,880,000	10.97
Belgium	360,842,000	44.59	379,960,000	46.56
Denmark	35,693,000	10.01	35,689,000	9.94
France	3,254,247,000	77.78	3,022,242,000	72.24
Germany	209,015,000	3.23	109,411,000	1.69
Great Britain	582,950,000	12.62	932,843,000	20.19
Italy	307,158,000	7.45	466,280,000	11.15
Netherlands	415,101,000	51.69	370,615,000	45.72
Norway	38,658,000	13.73	38,404,000	13.64
Poland	56,344,000	1.75	53,359,000	1.66
Portugal	23,829,000	3.54	34,080,000	5.07
Rumania	57,161,000	3.17	59,373,000	3.26
Russia (Soviet Union)	367,692,000(a)	2.26	415,622,000(b)	2.51

WORLD'S MONETARY STOCKS OF GOLD AT THE CLOSE OF 1932 and 1933 (Subject to Revision)
(Compiled by United States Mint from Available Data)
(Stated in United States Money)
(Concluded)

Country	Total Gold Stock		Total Gold Stock	
	Value, 1932	Per Capita	Value, 1933	Per Capita
	\$	\$	\$	\$
Spain	435,904,000	18.23	436,443,000	18.52
Sweden	55,409,000	9.02	99,416,000	18.06
Switzerland	505,890,000	123.84	385,678,000	93.60
British India	161,933,000	.45	164,148,000	0.46
Japan (including Chosen, Taiwan, Kwantung)(c)	211,953,000	2.34	211,834,000(c)	2.29
Netherland East Indies ...	41,749,000	.68	43,568,000	0.71
Egypt	32,936,000	2.22	30,848,000	2.06
Australia	42,573,000	6.52	2,433,000	0.37
New Zealand	24,600,000	16.17	24,600,000(f)	16.91
Other Countries	710,888,000	...	881,386,000	...
TOTAL	12,569,701,000	6.34(d)	12,634,726,000	6.31(e)

(a) On August 31, 1932

(b) On January 1, 1934

(c) Incomplete

(d) "world population estimated at 1,931,764,000

(e) " " principally from the U. S. Commerce Yearbook

(f) Gold and silver.

GOLD HELD BY THE CANADIAN MINISTER OF FINANCE, CALENDAR YEARS, 1919-1934. /

Calendar Year	Gold Reserve	Gold Held for	Total Gold
	Held on Postal Savings Bank Deposits (a)		Held by Minister of Finance
	\$	\$	\$
1919	4,909,675	118,439,692	123,309,367
1920	4,067,897	98,751,773	102,819,670
1921	3,666,009	84,568,064	88,234,073
1922	3,293,287	89,939,108	93,232,395
1923	3,154,358	120,651,627	123,805,985
1924	3,308,575	107,257,428	110,566,003
1925	3,241,490	119,744,819	122,986,309
1926	3,162,930	109,369,550	112,532,480
1927	3,083,440	107,417,631	110,501,071
1928	2,994,001	89,218,454	92,212,455
1929	2,709,169	59,345,233	62,054,402
1930	2,483,959	79,000,297	81,484,256
1931	2,405,030	74,209,510	76,614,540
1932	2,324,246	66,854,214	69,178,460
1933	2,311,866	69,793,861	72,105,727
1934	2,257,367	70,249,952	72,507,319

/ Yearly averages.

(a) In the Savings Bank Act (c.15, R.S.C., 1927) it is provided that the Minister of Finance shall hold 10 per cent gold reserve against postal savings bank deposits.

COMPOSITION OF CANADIAN GOLD RESERVES ON DECEMBER 31, 1923-1934.

December 31st.	British Coin \$	U.S. Coin \$	Canadian Coin \$	Bullion \$	Total \$
1923	27,212,790	41,090,395	3,336,490	46,026,852	117,666,527
1924	26,342,019	77,173,105	3,327,125	34,905,387	141,747,636
1925	29,894,943	67,135,310	3,315,730	37,512,195	137,858,178
1926	32,133,941	72,423,610	3,221,930	23,415,643	131,195,124
1927	28,948,085	51,179,390	3,089,010	47,516,079	130,732,564
1928	34,163,297	31,018,970	2,931,835	25,202,771	93,316,873
1929	32,164,284	10,995,220	2,801,520	17,034,256	62,995,280
1930	30,634,058	28,748,085	2,733,150	34,096,809	96,212,102
1931	17,736,296	4,270,780	2,732,880	42,220,192	66,960,148
1932	17,638,240	4,271,355	2,704,930	48,429,889	73,044,414
1933	17,637,435	4,266,835	2,704,880	47,356,454	71,965,604
1934	17,637,445	4,266,850	2,704,865	49,291,619	73,900,779

CONCENTRATION OF NATION'S GOLD RESERVES

With the opening of the Bank of Canada on March 11, 1935, important changes took place in connection with the monetary gold reserves of the Dominion. The Dominion transferred the gold held against Dominion Notes to the Bank of Canada to an amount of \$69,455,439.44. The Dominion's liability for Dominion Notes outstanding was assumed by the Bank of Canada.

Under section 28 of the Bank of Canada Act the chartered banks were required to transfer to the Bank of Canada all gold coin or bullion owned and held in Canada. The amount transferred to the Bank of Canada was \$37,480,404.46. The gold so transferred was valued at the standard price of \$20.67 per ounce. There was provision made, however, (section 30, Bank of Canada Act) that any profits resulting from the sale by the Bank of Canada of gold coin and bullion transferred to the Bank by the chartered banks or from an increase in the value of such gold resulting from any change in the monetary standard, shall belong to the chartered banks if the Governor in Council is satisfied that the said gold was at the time of transfer being held against liabilities elsewhere than in Canada. The Governor in Council directed that 40% of the gold so held was against foreign liabilities. In addition, in the case of two banks additional concessions were made on account of special deposits of gold that were ear-marked against definite external liabilities.

Thus for the first time all the gold reserves of the country are held by the one institution which will henceforth be responsible for regulating the volume of credit and currency in Canada, and for protecting the external value of the national monetary standard.

THE ALLUVIAL GOLD MINING INDUSTRY IN CANADA, 1934.

Placer gold was reported in Canada as early as 1823 when the metal was discovered on the Chaudiere river, Quebec. Later, in 1855, alluvial gold was found at the mouth of Pend d'Oreille river, B.C., by the ex-servants of the Hudson's Bay Company and by 1859 placer miners had penetrated to Cariboo and Quesnel. Later years witnessed many important discoveries of placer gold in both British Columbia and the Yukon, the most outstanding of which was the finding of the sensationally rich Klondike deposits in 1896. At the present time the greater part of the Canadian production of alluvial gold comes from the Yukon Territory and British Columbia; smaller amounts are recovered in Alberta and Quebec.

QUEBEC - Placer gold production in Quebec during 1934 was confined to the counties of Compton and Beauce. In the first mentioned county small shipments of crude alluvial gold were made by the Gold River Mining Co. Ltd., from its workings in Ditton township, the property of this company was reported at the close of the year as temporarily shut down. In the Seigniorie Rigaud Vaudreuil, Beauce county, the Unit Company Ltd., was in operation from July 21 to November 1st, both underground and surface operations were conducted and a small recovery of gold reported. At St. Simon les Mines, Gilbert river, placer gold shipments were also made by Cooke and Lloyd.

ALBERTA - Placer gold was discovered on the North Saskatchewan river in 1859 or 1860 and mining has been carried on, chiefly by hand methods and partly by the use of dredges, at intervals down to the present time. In 1934 the greater part of Alberta's gold production originated in the dredging operations of the McLeod River Mining Corp. Ltd. This company operated from May 1st to September 10th, 155,000 cubic yards of slough bed material being handled by the single dredge. During the year the company conducted extensive exploration of river leases and it was stated that much greater values per cubic yard, than on the beach lands were indicated with coarser gold in evidence.

BRITISH COLUMBIA - The British Columbia Department of Mines reports that while placer output in 1934 was approximately the same as in 1933 it is worthy to note that two larger-scale operations in the Cariboo are under way and an increase may be reasonably expected in 1935. In the Northwestern mineral survey district placer prospecting was very active but no new discoveries in new areas were made; numerous individuals, syndicates and companies were engaged and in this regard the British Columbia Department of Mines stresses that placer prospecting in this district is no easy task and requires not only experience but a grub stake and funds to see the prospector through the season in the event of failure.

A marked general increase in placer-mining activity featured the year in the Northeastern survey district. Much additional plant was installed during the year by various operators, including several drag-lines, and two small dredges of new type. Operating control of two well-known mines was secured by different English interests, the property of Consolidated Gold Alluvials of British Columbia, Ltd. (Wingdam) on the one hand, and that of Bullion Placers Ltd. (Bullion) on the other. In the Omineca Mining Division activity continued in the Manson section; in the McLeod river area operations were carried on by the Northern Reef Gold Mines Ltd., on McDougall river. Operations were also conducted in the Two Brothers Lake area this being the most northerly operation in the district and is served by aeroplanes based on Takla lake. A considerable recovery of placer gold was made by the many individual bar-workers on the Fraser and other rivers.

YUKON - According to a report issued by the Comptroller of the Yukon Territory the amount of placer gold mined during the year ending March 31, 1935, in the Territory on which royalty export tax was paid was 48,887.45 ounces, produced as follows:- Dawson District, 47,464.90 ounces; Mayo District, 752.17 ounces; Whitehorse District, 670.38 ounces. The royalty collected was \$18,332.85. During the year six hundred and sixty-two new placer location grants were issued; ninety-seven relocation grants and 2,094 renewal grants were also issued. Two new dredging leases were issued covering twenty miles; four dredging leases were renewed covering twenty-three miles; and six hydraulic leases were renewed. This reflects the greater interest in placer mining and indicates the increase in the area of alluvial deposits now being held for development.

The Yukon Consolidated Gold Corp. Ltd., operated three electric sixteen cubic foot dredges throughout the season on hydraulic lease No. 18, on the Klondike river, one seven and one-half cubic foot dredge on Upper Dominion creek and one seven and one-half cubic foot dredge at Granville. No hydraulic operations were conducted by the company. Data pertaining to 1934 dredging operations are as follows:

Dredge	Location	Started digging	Shut down	Cu. yds. handled
Canadian No. 2	Klondike River	May 8th	Nov. 28	2,061,735
Canadian No. 3	Klondike River	May 22nd	Oct. 31	1,115,189
Canadian No. 4	Klondike River	May 3rd	Nov. 13	1,879,892
N. W. No. 1	Upper Dominion	May 16th	Oct. 21	299,138
N. W. No. 2	Granville	May 11th	Oct. 28	669,231

The ground ahead of Canadian No. 3 was frozen and was thawed by water points. Thawing plants were also operated ahead of Northwest dredges No. 1 and 2.

Reconstruction of one five cubic foot dredge and one seven and one-half cubic foot dredge was started in 1934 and will be completed in 1935.

The Holbrook Dredging Company continued operations on Sixtymile river with a steam driven dredge commencing on June 1st and continuing to November 6th, 1934.

Material handled amounted to 207,216 cubic yards and 4,817.80 ounces of gold dust were recovered, the value being \$156,936.54 for gold and \$396.69 for silver. Two thousand feet of hydraulic pipe was laid to a creek on the right limit of Sixtymile opposite creek claims No. 13 above Discovery, to convey water for cold water thawing and stripping.

At Miller creek, McDonald, McCormick and Stewart moved 1,825 cubic yards of dirt by tunnelling and sinking, 6,444 yards by drifting and 45,200 yards by hydraulicing. the maximum number of men employed in these operations was 13.

On Iron Creek, a tributary of Nisutlin river the Inca Mining Corp. Ltd. constructed some 20 miles of road, 6,500 feet of flume and 2,000 feet of pipe line. this corporation employing three monitors moved 75,000 cubic yards of gravel before the freeze up in 1934.

More individuals were mining during the year on the old placer creeks in the Territory than for many years past, and all appear to have met with a certain measure of success. No new discoveries of any importance have been made, but the new high price received for gold has made it profitable to work old diggings over again, as well as the lower grade ground hitherto unworked.

SUMMARY STATISTICS OF ALLUVIAL GOLD MINING IN CANADA, 1933 and 1934.

	1933			1934		
	British Columbia	Yukon	(a) Quebec and Alberta	British Columbia	Yukon	Quebec and Alberta
Number of firms and indi-						
vidual operators /	65	3	5	85	4	4
in operation-months ..	6-10	6-8	6-8	6-10	6-8	6-8
Capital employed	\$ 3,854,721	6,539,997	6,187	2,074,138	10,117,273	2,124,290
Number of employees	254	189	11	352	248	15
Salaries and wages paid ..	\$ 268,119	431,533	4,499	442,957	571,423	13,189
Fuel and electricity used. \$	17,045	18,101	19	29,334	42,139	5,142
Electricity generated for						
own use .....K.W.H.	95,002	11,206,000	...	325,000	11,926,000	100,000
Crude gold recovered -						
crude ounce	23,928	48,967	504	25,181	48,379	293
Platinum recovered -						
crude ounce	40	...	...	53	...	...
Value of platinum re-						
covered	1,400	...	...	2,051	...	...
Quantity of material						
handled .....Cu.yds.	1,326,721	5,605,522	(c) 2,034,522	6,315,070	155,000	
Length of ditches - miles(d)	84	125	...	124	25	...
Total value of alluvial						
products (b)	408,176	832,439	8,568	430,128	822,443	7,912

/ In addition to the number shown in the table, there were several other small operators from whom no returns were obtainable.

(a) Includes data relating to one property in Nova Scotia.

(b) Value of crude gold based on statutory price of the metal (\$20.67) and estimated at \$17.00 per crude ounce.

(c) Information not available.

(d) Includes flume.

THE AURIFEROUS QUARTZ MINING INDUSTRY

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 increasing 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 was largely of placer origin until recent year.. 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 increase of approximately 67 per cent in the price of gold since 1930 is distinctly reflected in the almost steady expansion in gold mining during recent years. Number of auriferous quartz mines in operation in 1934 totalled 416 an increase of 93 per cent over 1933. employment in 1934 totalled 17,762 as compared with 12,823 in the preceding year and salaries and wages amounted to \$27,156,887 as against \$20,536,012 in 1933.

Ore milled in 1934 totalled 7,475,278 tons and the gold content of bullion, ores, etc., shipped amounted to 2,490,513 fine ounces, a comparison of these figures with corresponding data for 1929 is especially interesting in that they show a decline in the gold content of ores milled of from .42 ounces per ton in 1929 to .33 ounces per ton in 1934. This decrease results directly from the milling of lower grade ores made economically permissible by the increase in gold prices. Dividends reported by the auriferous quartz mines as being distributed in 1934 totalled \$27,888,731 as compared with \$20,030,200 in 1933, total dividends paid by these mines to the end of 1934 totalled \$299,064,915.

The Department of Mines, Ottawa, reports that the cost of small milling plants in Canada ranges from \$800 to \$2,000 per ton of ore treated daily, depending on factors such as location, new or second-hand machinery installed, the size of the unit and the type of plant, the department also stresses the importance of having the ore investigated for treatment methods before building a milling plant. The Dominion Department of Mines maintains ore dressing and metallurgical laboratories for this purpose.

NOVA SCOTIA - The Department of Public Works and Mines for Nova Scotia reports that a great amount of interest was taken in the gold deposits of the province during the fiscal year ended September 30th, 1934, some notable developments were conducted and the output for the next twelve months should show a very material increase. In the province the modern powdered coal plant will no doubt supply a large percentage of the cheap power required for mining in the future. This type of power plant will be situated near the collieries and will be used to augment the power supplied by Hydro-developments. In Guysboro county development or exploration work was conducted on gold properties in the Cochran Hill, Country Harbour, Forrest Hill, Ecum Secum, Gegogan, Goldenville, Isaac's Harbour, Little Liscombe Lake, Liscombe Mills, Lower Seal Harbour, Sangster Lake, Upper Seal Harbour and Wine Harbour districts. Properties were active in Halifax county in the districts of Beaver Dam, Caribou, Killag, Lake Catcha, Lawrencetown, Montague, Mooseland, Moose River, Oldham, Salmon River and Waverly; work was especially intensive at the Montague mine where extensive underground mining was conducted, milling commenced at this property in May. In Hants county mining operations were carried on in the Central Rawdon, East Rawdon, Mount Uniacke, South Uniacke and Renfrew districts. Mining operations in Lunenburg county were conducted in the Blockhouse, Gold River and Ovens districts. More prominent among the developments in Queens county were the operations conducted by the United Gold Fields of Nova Scotia Ltd., this company completed extensive underground work and commenced milling in February of 1934, in the same county exploration work was conducted on properties in the districts of Fifteen Mile Brook, Mill Village, Molega, West Caledonia, Westfield and Whiteburn. For more comprehensive information regarding gold mining in this province communicate with the Department of Public Works and Mines, Halifax, Nova Scotia.

NEW BRUNSWICK - The only gold mining activity reported in this province during 1934 was the examination of a prospect on Guagus stream, a branch of the North Branch Little South West Miramichi River, its commercial possibilities were not indicated.

QUEBEC - Gold mining operations were particularly widespread and varied in N. W. Quebec during 1934. Particulars relating to some of the more important developments are as follows: "After ore had been found by Lamaque Gold Mines Ltd., on all levels that had been opened up to a depth of 700 feet, plans were made in August 1934, for a construction and mine development program designed for an initial treatment capacity of 225 tons of ore per day to commence June 1st, 1935. The company reports a technical estimate of "positive ore" reserves at January 1st as follows:-

	Tons	Average grade Pennyweights per ton	Total gold in pennyweights
Blocked ore	53,263	6.08	323,985
Broken ore in mine	669	12.88	8,604
Broken ore on surface	20,563	6.48	133,111
Totals and average	74,495	6.25	465,700

Canadian Malartic Gold Mines Ltd., reported that the first seven months of the year were devoted to exploration and development for the purpose of establishing an ore reserve position that would warrant the construction of a mill, subsequent to August 1st, underground work was confined to mine preparation. The mill under construction will be an all cyanide unit having a treatment capacity of 125 to 150 tons daily. The crushing section will have a capacity of 400 tons daily. The estimated ore reserves as of December 1st are as follows:

		Value gold at \$34.00
Assured ore Reserves	198,000 tons at .238 oz.	\$8.07
Indicated ore	340,000 tons at .186 oz.	\$6.32
Total	538,000 tons at .205 oz.	\$6.97

During 1934 active exploration work was carried on by Beattie Gold Mines Ltd., and it is reported that the property of this company is now at a stage where development work during 1935 should add materially to the already large reserves of ore. It was stated at the end of the year that the metallurgical treatment of the ore still remained the chief problem at the mine. The fineness of the mineral particles and the refractory nature of the ore presents great obstacles to a satisfactory recovery by simple flotation and cyanidation and much work was still necessary before the best method could be evolved. The fundamental question of ore reserves is reported sound, the mill treated 359,200 tons averaging 0.1812 ounces per ton for an operating profit of \$491,425.90 after very liberal expenditures on mine development of \$224,123.88.

In June, 1934, it was reported that Siscoe Gold Mines Ltd., had completed shaft sinking to the 1,350 foot level, with three new levels established. The present program of development it was reported consists in developing, both horizontally and downward, the ore bodies already discovered and in the exploration of new territory. As a result of the development work ore reserves were increased 37 per cent to a total of 283,426 tons having an average value of \$15.56 per ton. The mine and mill were both in continuous operation throughout 1934, the company employing both amalgamation and cyanidation.

The Bussieres mine in Louvicourt township was active throughout the year, 5,065 ounces of crude gold were recovered by amalgamation and 277 tons of concentrates shipped to the Noranda smelter. At the McWatters gold mine a 50 ton amalgamation mill was erected and placed in operation in September. Since the beginning of 1935 it was decided to add a cyanide unit to the present mill and on completion of this work tonnage will be stepped up to 100 tons per day. It is reported that from stope developments and mill results, there exists an unbroken reserve of 50,000 tons of \$25 (gold at \$35) ore. In addition there are 6,768 tons on the surface ore dump estimated to average \$15 (gold at \$35).

Arntfield Gold Mines Ltd., conducted extensive underground and surface operations during 1934 and it was reported that the new 125 ton mill under construction at the property would be ready to turn over in July, 1935.

The Green Stabell mine located in Dubuisson township was productive throughout the year, 4,099 ounces of crude gold were recovered by amalgamation and 2,298 crude ounces by cyanidation, concentrates were shipped to the Noranda smelter; a progress report issued in April, 1934, estimated two years ore reserves averaging approximately 0.4888 ounces per ton.

In Cadillac township the mine and mill of the O'Brien Gold Mines Ltd., were in continuous operation throughout the year. recoveries were made by amalgamation and concentrates were shipped to the Deloro Smelting and Refining Co., for experimental purposes.

Perron Gold Mines Ltd., located in Pascalis township carried out extensive underground and surface operations and commenced milling operations in July, amalgamation is employed in this mill.

Mining and milling operations commenced in May, 1934, at the Sullivan Mine located in Dubuisson township, the company recovered 2,430.71 ounces of crude gold by amalgamation and 3,470.15 ounces by cyanidation. Milling capacity will be increased to 100 tons per day. The company estimates probable ore reserves at 46,300 tons at .467 ounces per ton; presently possible and possible ore, 22,000 tons, expected to be of average mine grade. In the Chibougamau area extensive prospecting and exploratory operations were conducted by Consolidated Chibougamau Goldfields Ltd., and other companies.

For more detailed particulars relating to gold mining in Quebec, mining laws, etc., communicate with the Bureau of Mines, Quebec, P. Q.

ONTARIO - The Department of Mines, Ontario, reports that the year 1934 showed marked improvement in gold mining and while the ounces recovered in the province declined the quantity of ore treated increased, moving up from 5,621,000 tons during 1933 to 6,505,000 tons in 1934. The performance indicates the increased milling facilities and also the ability of operators to treat much lower grade ore, thereby increasing the life of the mines and the communities now dependent on this industry. At Porcupine the average value per ton of ore treated at the Canadian price of gold was \$8.56, at Kirkland Lake, \$17.18 per ton, in Matachewan, \$6.13 and in Northwestern Ontario, \$4.82 per ton. While the output from the Northwestern portion of the province was small and mainly produced by one mine, the Howey, it is of interest to record the reopening of many old properties which were producers in the nineties. In addition important new mines including the Little Long Lac have recently come into production. When it is remembered that favourable gold formations are known to exist and that new finds are becoming general over a wide area, the developments in gold mining in this part of the province promise to be of considerable importance during the next few years. In the late summer new finds were reported from the Sturgeon river area, east of Lake Nipigon. A gold "rush" followed and hundreds of claims were staked and recorded. Very rich veins on the claims of the Sturgeon River Gold Mines have been found both on surface and by diamond drilling. Favourable developments at Little Long Lac mine and also at the Central Patricia and Pickle-Crow mines near the Albany river, with continued interest at Red Lake suggest a general revival of gold mining in the Northwestern part of Ontario. McKenzie Red Lake, the second producer at Red Lake, turned over its new 125 ton mill in February, 1935, and expects to be in production in March. The 100 ton cyanide mill of the Matachewan Consolidated Mines Ltd., was brought into production in 1934. As soon as the mine has been opened up sufficiently and ore conditions warrant, it is the plan of the company to increase the daily tonnage to around 300 tons per day, indicated ore reserves are estimated

at 1,170 tons per foot of depth, averaging 0.199 ounces gold per ton. The following figures show mill feed and production for the months of November and December.

	Ore delivered	Waste sorted	Ore treated	Head sample average grade
November	2,302	260	2,042	0.22 oz.
December	2,712	74	2,638	0.26 oz.

The mill of the Young-Davidson Mine at Matachewan went into operation September 8, 1934, open pit operations were continued throughout the winter, but under many difficulties, and plans are under way for underground mining during this season. The gold content in the ore has been \$1.76 on the \$20.67 basis or \$2.88 on the new price. Ore treated to the end of 1934 amounted to 51,842 tons and operating profits amounted to \$53,605.

The Hollinger Consolidated Gold Mines Ltd., reported that operations at the Hollinger Mine, Timmins, were carried on at all levels from the surface to the 3,950 ft. level; 35.8 per cent of the ore milled came from above the 800 foot level, during the year 877,837 tons of backfill were placed. Ore reserves on December 31, 1934, consisted of 7,061,926 tons of a total value of \$51,440,260, having an average value of \$7.28 per ton; at the end of 1933 the reserves were 6,487,559 tons of a total value of \$48,430,451, having an average value of \$7.47 per ton. Total cost per ton of ore milled in 1934 was \$3.9281. In the calculations dealing with ore reserves, the statutory price of gold, \$20.67 per ounce, was used and the same minimum ore grade as used in former years continued; the net profits of the company for 1934 from all sources was \$6,505,363.

Dome Mines Ltd., hoisted 587,200 tons of ore, of this 547,600 tons were milled and 39,600 tons waste, 16,200 tons of waste were dumped into old stopes. The 547,600 tons of ore milled yielded bullion containing 203,896.878 ounces of gold, the yield per ton being 0.3723 ounces. The ore reserves are estimated at 2,000,000 tons. Ore in the sediments is estimated at 212,000 tons and the ore in the greenstones and contact is estimated at 1,788,000 tons. Ore from stopes wholly in the sediments yielded in 1934, 95,171 tons, averaging 7.45 dwt. per ton. Ore from stopes wholly in the greenstones and partially in the greenstones yielded 402,829 tons averaging 7.88 dwt. per ton. Operating costs for the year were \$3.877 per ton milled. The net operating profit, before depreciation and income taxes, for the year was \$4,549,617.

In its report for the fiscal year ended March 31, 1935, McIntyre Porcupine Mines Ltd., states "that in accord with the policy projected previously, development work and stoping operations were further extended into what was previously considered marginal ground. While this had the effect of decreasing the grade of ore treated, we increased the mill capacity to an extent sufficient to compensate, and the gross value of our production closely approximates the total of a year ago". Data pertaining to operations of the company during the past year are as follows:

Ore treated	862,100 tons
Value per ton (.294 oz. at \$34.67)	\$ 10.23
Gold recovered, per ton ..... .281 oz.	\$ 9.79
<u>Operating costs</u>	<u>Costs per ton ore milled</u>
Exploration	\$ 0.0922
Development	\$ 0.5122
Breaking and stoping	\$ 2.7461
Total mining	\$ 3.3505
Milling	\$ 0.7187
Administration and general	\$ 0.1193
GRAND TOTAL	\$ 4.1885

Ore reserves were reported as follows:-

	<u>Tons</u>	<u>Fine oz. gold</u>
Estimated	3,219,460	1,046,226
Broken	211,021	57,600
Total	<u>3,430,481</u>	<u>1,103,826</u>
Average per ton .....		.3217

In the Kirkland Lake camp, Lake Shore Mines Ltd., reports that for the fiscal year ending June 30, 1934, receipts from bullion amounted to \$16,382,274 from 836,991 tons of ore milled, giving a value per ton of \$19.57. The production in ounces amounted to 485,384 gold and 99,041 silver. Dividends and bonuses for the period totalled \$6,000,000. Ore hoisted from development totalled 29,571 tons and from mining, 809,878 tons. The company states that the very considerable tonnage of lower grade material made available for mining to a large extent by the increase in the world price received for gold, has removed, for the immediate future, the necessity of intensive explorations in lower horizons of the mine. All of the ore mined was extracted by cut and fill methods or over stulls in narrow sections of No. 1 vein. Back fill to the extent of 407,835 tons was placed during the period. The total cost per ton of ore mined and milled was \$7.168. Broken ore reserves stood at 230,808 tons with a value of .81 ounces per ton, reserves of ore in place, available for immediate mining were fully maintained.

During the fiscal year ending August 31, 1934, the Teck-Hughes Gold Mines, Ltd., treated 474,700 tons of ore, the recovery of bullion and precipitate was the equivalent of 181,453 Troy ounces of fine gold which realized \$5,877,974. After the addition of other income the gross revenue was \$5,983,525 or \$12.60 per ton of ore milled. After making provision of \$224,016 for taxes and adding \$19,104, a profit derived from the sales of bonds, the surplus was \$3,048,602. The estimate of gold in "positive ore" decreased from 375,495 ounces at August 31, 1933, to 323,088 ounces at August 31, 1934. Mine workings within the ore zone were deepened from 5,074 feet to 5,735 feet. The company states that while decreasing earnings from gold production may be expected, present indications are that the Teck-Hughes mine can be profitably operated for several years to come. The following is an analysis of operating costs:

	<u>Cost per ton of ore treated</u>	<u>Cost per ounce of gold produced</u>
	\$	\$
Development and exploration	0.93	2.44
Mining	2.79	7.29
Milling	0.96	2.52
General expense	0.49	1.27
Examination of new properties	0.05	0.13
Depreciation	0.53	1.39
TOTAL	<u>\$5.75</u>	<u>\$15.04</u>

Miscellaneous operating data supplied by Howey Gold Mines, Ltd. are as follows for 1934:-

Tonnage milled and sorted	481,757
Tonnage discarded by sorting	85,648
Tonnage milled	396,109
(x) Value a ton hoisted	\$2.20
(x) Value a ton material discarded	\$0.21
(x) Value a ton ore milled	\$2.64
(x) Loss in tailings a ton milled	\$0.214
(x) Loss a ton of ore hoisted (in milling or sorting)	\$0.213
Net percentage recovery a ton of ore hoisted	90.8
(x) Gold at \$20.67 per ounce.	

Analysis of Howey costs is as follows:

	Cost per ton \$
Mining operation	1.032
Outside exploration	0.005
Crushing and conveying	0.093
Ore sorting	0.049
Milling	0.452
General expense	0.133
Total plant cost	1.764
Total costs including depreciation, etc.	2.396

Broken ore reserves in the Howey mine as of December 31, 1934 amounted to 301,990 tons and unbroken reserves totalled 1,853,097 tons. The value of broken and unbroken reserves is estimated to be approximately \$3.50 per ton based on the current price of gold.

The three-compartment vertical shaft at the Little Long Lac Mine reached its objective of 719 feet during August. The following is a concise summary of the results on the second, third and fourth and fifth levels as at December 30, 1934.

Level	Ore length feet	Average width feet	Average grade oz.
Second	364	5.85	0.688
Third	760	4.80	0.735
Fourth	754	5.04	0.678
Fifth	245	5.27	0.840

Milling commenced at the mine in November, 1934. The same year also witnessed the bringing into operation of new mills at the Central Patricia and St. Anthony mines.

For more complete information relating to gold mining in Ontario, Ontario mining laws, etc., communicate with the Ontario Department of Mines. Toronto, Ontario.

MANITOBA - Mining activities were almost general throughout the gold bearing areas of Manitoba in 1934. Idle properties in the older camps were investigated as to their economic possibilities under the current price for gold and development and exploration programmes were intensified in the newer areas.

The mine and mill of the Central Manitoba Mines Ltd., were operated continuously in 1934, the mill recovered 10,033.66 ounces of crude gold by amalgamation and 15,050.50 crude ounces by cyanidation from 43,862 tons of ore; considerable diamond drilling was conducted on the property. Ore reserves were estimated in June, 1934, at 17,836 tons averaging .324 oz. gold to the ton.

San Antonio Gold Mines Ltd., operated throughout the year, 66,457 tons of ore were raised and 21,638 fine ounces of gold recovered by amalgamation and cyanidation from 64,294 tons of ore milled. It was announced at the close of the year that the joint operation of the company and Forty-Four mines in which a drive is being made from the company's 600 foot level into Forty-Four ground was progressing favourably, this intersected three veins which otherwise might not have been touched for years. Ore reserves were estimated at December 31, 1933 to be 154,000 tons averaging .425 oz. per ton. At the close of 1932 costs were estimated at \$7.21 a ton milled.

Mining and milling were recommenced in June by Diana Gold Mines, Ltd., 6,663 tons of ore were hoisted and 1,980 ounces of pure gold recovered by amalgamation from 5,284 tons of ore milled. Extensive surface and underground work was conducted throughout the year by God's Lake Gold Mines Ltd., and it was announced that an initial mill unit to handle 150 tons daily is being planned, the mill is expected to be in operation in the fall of 1935.

According to the second annual report of the company, indicated ore reserve as at the end of 1934 is as follows:

	Tonnage	Ounces grade	Value at \$34 per oz.
Total	63,400	.52	\$17.68
Allowing for possible 20% dilution in mining	76,000	.43	\$14.62

Salvage work on the small high-grade lenses of gold ore was carried on during the year by Island Lake Mines Ltd., together with further underground development work and diamond drilling. Mining operations were continuous and milling commenced in April; 6,984 tons of ore were milled for a recovery, by amalgamation, of 2,931 ounces of fine gold and in addition ore shipments were made to the Flin Flon smelter. It was announced in 1935 that the main vein had been intersected beyond the fault, the first hole showed three feet averaging 3.0 oz. gold and the second hole cut 5.7 feet averaging 1.05 oz. gold.

Other important gold mining developments in 1934 included those of Gunnar Gold Mines Ltd., in the Beresford Lake section; Laguna Gold Mines Ltd., at Herb Lake; Smelter Gold Mines Ltd., God's Lake; Vanson Manitoba Gold Mines Ltd., Rice Lake district; Wingold Mines Ltd., Bisset; Oro Grande Development Co. Ltd., Beresford Lake and Gabrielle Mines Ltd., at Bisset. For further information pertaining to gold mining in Manitoba communicate with the Department of Mines and Natural Resources for Manitoba, Winnipeg, Manitoba.

SASKATCHEWAN - Gold mining activities in this province were reported from Amisk, Douglas and Wekach Lakes sections in the eastern part of Saskatchewan while encouraging results were stated to have been obtained from prospecting and exploration work in the Lake Athabaska district, no production in 1934 was reported from properties in these areas. For further information apply to the Department of Natural Resources, Regina, Saskatchewan.

BRITISH COLUMBIA - The British Columbia Department of Mines reports that in the northwestern mineral survey district prospecting was carried on at the La Porte group near Port Essington and the Mastodon group at Hastings Arm, in both of which values in gold are present. In the Liard area a lode discovery on Quartz Creek, tributary to McDames Creek, was reported late in the season and resulted in a small stampede. In the Alice Arm area gold showings were prospected on the Homestake and Gold Reef groups. Though this area has been comparatively inactive the gold aspects of the west side of the Upper Kitsault valley area are attracting the attention of examining engineers. In the Skeena division construction and renovation work has been carried out at the old Surf Inlet mine and in the Portland Canal area a crew of about 60 men have been employed on the Big Missouri and work was done on the Unicorn, Troy, Salmon Gold, and Portland groups. Development of the Atlin Pacific Mining Company's property (Norgold) continued throughout the season and it is anticipated that the old Engineer mine will be opened up in 1935. Production from lode operations in the district came chiefly from the Premier and Dunwell mines, Stewart, Granby Consolidated and Surf Point mine. During 1934 the Premier Gold

Mining Co. Ltd., mined and milled 154,693 tons with an average assay content of 0.25 ounces of gold and 4.3 ounces silver per ton. The estimated ore reserves as of December 31, 1934 were as follows:- ore broken in stopes, 50,113 tons, averaging 0.20 ounces of gold and 6.4 ounces of silver; assured and probable unbroken ore down to the 6th level of the present mine workings amounts to 130,687 tons, averaging 0.26 ounces of gold and 5.0 ounces of silver; exploration and development by the company during 1934 represented 10,203 feet of diamond drilling at a cost of \$1.39 per foot and 10,992 feet of drifting, cross-cutting and raising at a cost of \$11.43 per foot.

In the Northeastern Mineral Survey District prospecting and development of lode gold properties were carried out at Hudson Bay Mountain, near Smithers, Dome Mountain near Telkwa, near Babine lake and in the northern part of the district. Two encouraging discoveries were made during the year:- that of the Patmore group near Doreen in the Skeena section and that of the Timber line group near McKee lake, in the Horsefly section. In the Cariboo section, it may be said of lode gold operations generally that although some have been discontinued, a comparison between the present position and that of two years ago showed clearly that real progress has been made. The discovery of the markedly auriferous pyrite replacement deposit in limestone at the property of Island Mountain Mines Co. Ltd., last year and development there this year has aroused much interest at this property and as that of the Cariboo Gold Quartz Mining Co. Ltd., at which mineralization of similar type, although less extensive, has been found.

The greatest activity in numbers 3 and 4, Mineral Survey Districts took place in the Hedley, Osoyoos and Greenwood areas where known deposits of gold occur and where practically all the facilities for mining are at hand. Many old mines have been reconditioned and extended exploration has produced more ore. The Hedley mine has been rejuvenated by the Kelowna Exploration Co. and more ore discovered.

In the Kamloops mining division recent discoveries on the Sweet Home claim belonging to the Windpass mining company are most attractive and appear to suggest extensive exploration of the region near Chu-Chua. Taking the district as a whole, developments have been favourable and the British Columbia Department of Mines state that several mines should come into production in the future.

Gold mining in No. 5, the Eastern district has contributed in an important degree to the improvement in the district employment situation. Production of gold for 1934 was better than any year since large scale production by the Consolidated Company ceased at Rossland. The gold mining industry of the district is now showing evidence of permanence with increased production when milling operations such as at the Yankee Girl (Ymir-Yankee Girl Gold Mines Ltd.), Kootenay Belle Gold Mines Ltd., and Queen (Sheep Creek Gold Mines Ltd.) get under way. Shipments were suspended from the first two mentioned properties and the Woodenough (Ymir Consolidated Gold Mines Ltd.) pending consummation of milling plans. Expansion to say 60 or 70 tons a day may occur at the Second Relief Mill (Relief-Arlington Mines Ltd.), though this is dependent upon the results of exploration under way by the Premier Gold Mining Co. Ltd. A substantially larger annual production from the Reno Gold Mines Ltd., now no longer handicapped by power shortage, is assured. Increased output can also be expected from some of the properties entering the production stage such as the Gold Belt Mining Co., and Ymir-Dundee. Lode Gold development and exploration were conducted on numerous prospects in the Nelson Mining Division and at points in the Fort Steele Division. Long dormant properties in the area south of Nelson are being investigated and exploration resumed at former producers such as the Porto Rico and Fern.

In the Lardeau division mill construction was announced by the Meridian Mining Co. A satisfactory feature in the district is the provision of adequate and dependable power in the Nelson-Ymir-Salmo-Erie area through the newly constructed transmission lines of the West Kootenay Power and Light Co.

Gold Mining activities in No. 6, the western mineral survey district, were widespread, at the Vidette mine a 35 ton milling plant was operating on an ore stated to average about 0.75 ounces of gold to the ton; gold production also came from the Grange Property near Clinton where a 25 ton mill, more recently stepped up to 30 tons, was in operation for some months. A small production also came from the Taylor-Windfall mill (3 ton) in the Taseke Lake country. The Wayside property was equipped with a 35-50 ton milling plant of the amalgamation type and the Minto Gold Mines recently completed the installation of a 50 ton mill. In the Shoal Bay-Phillips Arm section the Hercules Consolidated Mining, Smelting and Power Corp., and the Shoal Bay Syndicate were active. In the main Bridge River camp the Principal Producers Pioneer and Bralorne increased their ore reserves substantially; particularly interesting have been the developments in the lowest level of the Pioneer mine and the present programme of shaft-sinking which is to go to the 3,100 foot level should result in important developments, total ore reserves were reported in 1934 at 432,000 tons averaging .95 oz. per ton. In the latter part of May the Pioneer increased its milling rate to 400 tons per day.

In the Bralorne mine interesting and very promising sections have been opened up on the 6th, 7th, 8th, 9th and 11th levels. The new milling plant at the property was placed in operation and tonnage was gradually being raised to a production rate of approximately 400 tons per day. In 1935 it was stated that the west drift on the 11th level was in an excellent grade of ore, fully as good as that mined up on the 8th and 10th levels, and it was decided to deepen the main shaft another 200 feet and open up the 12th level. Indicated ore reserves as at December 31, 1933, were reported at 230,000 tons, averaging around .60 oz. of gold per ton. The company ratified an agreement whereby 26 claims being the southerly and eastern portion of the company's properties would be acquired by a new company to be known as Bradian Mines Ltd. In December, 1934, it was announced that operations of this company were proceeding satisfactorily with both shafts completed to their objectives.

In the Bridge River camp, outside of the two producing mines and a few other properties, it may well be considered that most of the work being done is primarily of a prospecting nature. For more complete information relating to the gold mining industry in this province communicate with the British Columbia Department of Mines, Victoria, British Columbia.

YUKON TERRITORIES - The Lands, Northwest Territories and Yukon Branch of the Department of the Interior, Ottawa report that one hundred and ninety-one quartz grants were issued in the Dawson District during the fiscal year. Many claims were staked for which grants are pending. The staking was done principally in the Carmacks area. At the close of the fiscal year in that area there were two hundred and seventy-eight mineral claims in good standing.

The N. A. Timmins Corp. have taken options on four groups comprising about thirty-five claims in the Carmacks area. About thirty-five miles of winter sled road was grubbed out connecting Mt. Free gold with the overland trail, and about seventy-five tons of equipment and supplies were hauled into the new camp by tractors. A Diesel engine and compressor were installed and work was started on the "La Forma" group. To date about 800 feet of tunnel have been driven and unofficial reports indicate the results are satisfactory. Prospecting by individual claim owners and several syndicates now working should prove the value of this district in the near future. For more complete information relating to mining in the Yukon Territory apply to the Lands, Northwest Territories and Yukon Branch, Department of the Interior, Ottawa.

THE AURIFEROUS QUARTZ MINING INDUSTRY

Principal Statistics of the Auriferous Quartz Mining Industry in Canada,
1923 and alternate years to 1933-1934.

	No. of active oper- ators	No. of oper- ating plants or mines	Capital employed \$	Number of employ- ees	Salaries and Wages \$	Cost of fuel and electri- city \$	Net value of bullion, ore, concentrates or residues shipped from mines \$
1923	65	65	77,574,976	5,524	8,961,434	1,497,197	25,021,837
1925	52	52	84,964,062	7,052	11,931,948	1,836,050	35,035,361
1927	72	76	118,381,468	8,022	12,935,719	2,222,085	37,452,995
1929	80	85	135,166,105	8,660	14,258,733	2,579,481	37,275,986
1931	68	69	109,933,164	9,636	16,467,165	2,700,326	49,144,578
1933	214	216	158,599,931	12,823	20,536,012	3,330,137	69,151,535
1934	408	416	214,068,359	17,762	27,156,887	4,249,296	83,761,440

Ores Mined and Milled, Crude Bullion Recovered and Crude Bullion and Concentrates
Shipped in the Auriferous Quartz Mining Industry, 1933 and 1934.
Ton = 2,000 lb.

1 9 3 3	Nova Scotia Saskatchewan and Manitoba	Quebec	Ontario	British Columbia	Canada
Number of Producing Mines	12	7	28	40	87
Ore Mined .....Tons	117,130	360,041	5,632,869	418,814	6,528,854
Ore Milled .....Tons	106,719	344,747	5,612,199	383,111	6,446,776
Tailings retreated .....Tons	...	...	...	3,658	3,658
Concentrates Produced .....Tons	7	11,428	1	18,812	30,248
Bullion recovered by amal- gamation .....Crude ounces.	12,203	80,238	186,365	36,689	315,495
Bullion recovered by cyani- dation .....Crude ounces.	37,942	5,564	2,523,309	128,124	2,694,939
Bullion shipped ....Crude ounces.	50,538	86,468	2,711,059	164,813	3,012,878
Content of bullion shipped -					
Gold .....Fine ounces.	37,305	76,919	2,116,142	122,293	2,352,659
Silver .....Fine ounces	6,070	5,918	404,744	26,579	443,311
Value\$	770,215	1,591,596	43,897,662	2,544,653	48,806,211
Exchange Premium\$	293,653	655,973	15,503,709	1,001,456	17,454,791
Net value of ores, slags and residues sold\$	1,075	554,480	165,088	2,169,890	2,890,533
Total Value of all Shipments ...\$	1,067,028	2,802,049	59,566,459	5,715,999	69,151,535

1 9 3 4

Number of Producing Mines	15	10	42	81	148
Ore Mined .....Tons	152,945	653,035	6,451,743	589,131	7,846,854
Ore Milled .....Tons	135,111	621,984	6,290,836	427,347	7,475,278
Tailings retreated .....Tons	...	...	9,092	18,143	27,235
Concentrates Produced .....Tons	474	24,895	304	22,875	48,548
Bullion recovered by amal- gamation .....Crude ounces	21,519	95,778	191,317	51,171	359,785
Bullion recovered by cyani- dation .....Crude ounces	34,086	19,645	2,609,813	143,089	2,806,633

**Ores Mined and Milled, Crude Bullion Recovered and Crude Bullion and Concentrates
Shipped in the Auriferous Quartz Mining Industry, 1933 and 1934 (concluded)**

	Nova Scotia, Saskatchewan and Manitoba	Quebec	Ontario	British Columbia	Canada
1934 (concluded)					
Bullion shipped .....Crude ounces	65,815	115,423	2,784,296	211,592	3,177,126
Content of bullion shipped -					
Gold Fine ounces	42,349	98,166	2,039,445	151,862	2,331,822
Silver Fine ounces	6,489	8,061	418,115	31,081	463,746
Value \$	876,064	2,032,084	42,362,320	3,153,879	48,424,347
Exchange premium \$	580,992	1,283,535	26,497,278	2,084,059	30,445,864
Net value of ores, slags and residues sold \$	17,180	1,307,820	140,585	3,425,644	4,891,229
Total Value of all Shipments.. \$	1,474,236	4,623,439	69,000,183	8,663,582	83,761,440

**Gold Content of Bullion, Ores, Concentrates, Etc., Shipped and Ore Milled by Auriferous
Quartz Mines In Canada, with Average Price of Gold in Canadian Funds, 1929-1934.**

Year	Tonnage Milled	Gold Content fine oz.	Oz. of fine gold per ton	Average price of Gold
1929	4,252,994	1,771,526	.42	\$ 20.67
1930	4,306,869	1,884,791	.44	\$ 20.67
1931	5,450,576	2,271,278	.42	\$ 21.55
1932	5,924,359	2,502,327	.42	\$ 23.47
1933	6,446,776	2,455,365	.38	\$ 28.60
1934	7,475,278	2,490,513	.33	\$ 34.50

**Purchases of Mining and Milling Equipment and General Supplies in 1934 by the Alluvial
and Auriferous Quartz Mines of Canada.**

(PRELIMINARY)

	Value f.o.b. plant \$
Belting of all kinds, including elevator, conveyor, transmission, etc., and fasteners for same	83,759
Bolts, nuts, rivets, studs, washers, coach, set and machine screws, etc.	85,718
Castings - unfinished iron and steel	102,818
Unfinished brass castings; brass and copper rods and sheets, babbitt and non-ferrous metals of all kinds	29,854
Cars and locomotives and mechanical parts for same	189,735
Track materials:- rails and fittings, switches, spikes, bolts, etc. ..	198,539
Explosives:- powder, fuse and detonators	2,741,587
Rock drills and parts	600,758
Drill and tool steels	373,487
Pipe and fittings, plumbing supplies and valves	655,415
Iron and steel bars, sheets, plates, and all structural steel	491,928
Wire rope and fittings	170,840
Diamonds and bort for drilling	126,516
Safety equipment and apparel:- safety hats, boots, gloves, goggles, respirators, etc.; miners' lamps and accessories and lamp rentals ...	91,128
Fuel:- coal, coke, charcoal and wood	481,813

Purchases of Mining and Milling Equipment and General Supplies in 1934 by the Alluvial and Auriferous Quartz Mines of Canada (concluded)

(PRELIMINARY)		Value f.o.b. plant
		\$
Fuel oil, kerosene and gasoline		418,464
Lubricants:- oil, grease and waste		187,442
Lumber and timber of all kinds		1,500,496
Building materials:- cement, brick, tile, roofing and building paper, insulating material, building hardware, glass, putty, paints, varnishes and brushes, wood screws, nails, screw hooks and eyes, sand, lime, and miscellaneous		565,801
Electrical equipment and supplies:- motors, batteries, wire and cable, etc.		947,924
Crushing, grinding and screening machinery and parts; ball and tube mill liners, roll shells, etc.		628,978
Filter cloth, rotor covers and ore dressing blankets		75,211
Balls and rods for grinding		711,813
Machinery, mill, n.o.p., and parts		996,833
Machinery, mine, n.o.p. and parts:- steel shop equipment, hoists, mine pumps, etc.		872,119
Machinery, smelter, n.o.p. and parts .....		...
Machinery, miscellaneous, and parts: machine, blacksmith, carpenter shop and general surface equipment		419,122
Motor cars, trucks and accessories		121,596
Tools:- brooms, picks, shovels, hammers, handles, saws, wrenches, machinists' tools, etc.		176,621
Welding and cutting equipment and accessories:- oxygen, acetylene welding, rods, tips, etc.		80,484
Rubber goods, suits, boots, hose and accessories, pump valves, launder linings, etc. (not including belts)		129,393
Flotation reagents		125,633
Cyanide and cyanide plant chemicals		769,143
Acids and chemicals, n.o.p.		132,336
Refractories:- brick, cement, fireclay, etc.		25,614
Smelter fluxes:- fluorspar, limestone, quartz, sand, etc.		31,826
Hospital equipment and medical supplies		24,193
Stationery, office equipment and supplies, survey and drafting equipment and supplies		149,185
Miscellaneous materials, n.o.p. Includes all materials NOT OTHERWISE PROVIDED FOR in any other item		997,094
Power - electric		2,866,940
Freight (a) incoming - only amounts paid direct to Railway Company ...		1,274,966
(b) outgoing		105,645
Express (a) incoming - only amounts paid direct to Express Company ..		29,957
(b) outgoing		72,108
Insurance (a) Fire		287,370
(b) Sickness and accident		38,034
(c) Group		118,596
(d) Workmen's compensation		731,072
(e) Bullion		50,855
(f) Other		27,280
TOTAL		22,114,039

THE COPPER-GOLD-SILVER MINING INDUSTRY

The mining of copper-gold-silver ores in 1934 was confined to the provinces of Quebec, Manitoba, Saskatchewan and British Columbia. It is to be noted, however, that a considerable quantity of gold is recovered from copper-nickel ores mined in the Sudbury area of Ontario; statistics relating to this industry are contained in the bulletin "Nickel-Copper Mining and Smelting." A summarized review of the copper-gold mining industry in Canada, by provinces, follows:-

QUEBEC - At Eustis in the Eastern Townships, the Consolidated Copper and Sulphur Company operated its mine and mill throughout the entire year; 71,709 tons of ore were raised and 9,701 tons of copper concentrates and 46,626 tons of iron-pyrites concentrates produced. Concentrates of this company are exported to the United States.

In Boischatel township, Aldermac Mines Ltd., conducted mining operations at its property at Arntfield from March 1 to November 11. Considerable work was carried out underground and the mill was in operation from May 1st to November 11th; 33,604 tons of ore were raised and milled and 1,624 tons of copper concentrates and 7,312 tons of iron pyrite concentrates produced. The copper concentrates were shipped to both Canadian and United States smelters and the iron pyrites to a chemical plant.

At Rouyn, exploration at the Horne Mine by Noranda Mines, Ltd., was largely confined to the work of further outlining and developing the "lower H" ore body below the 2,475 foot level, and to the investigation on a number of levels of the area immediately west of No. 4 shaft, to determine the suitability for a location of a proposed new shaft.

The tonnages and average grade of ore shipped from the Horne mine to the smelter and concentrator in 1934 were as follows:-

	Gold	Copper	Gold per ton	Silver per ton
		%	oz.	oz.
Direct smelting sulphide ore	471,861	3.20	0.232	0.43
Concentrating sulphide ore	918,288	2.34	0.125	0.32
Silicious fluxing ore	386,872	0.31	0.134	0.13

The above total represents an increase of 15.2 per cent over that for the previous year.

During 1934 the smelter treated 1,050,684 tons of ore, concentrate and refinery slag (1933 -- 1,010,629 tons) and produced 70,607,764 pounds of anodes, the average analysis of which was 99.39% copper, 7.04 oz. gold per ton, and 15.66 oz. silver per ton. During 1934 the concentrator treated 920,363 tons of ore from the Horne Mine, the average assay of which was 2.34% copper, 0.125 oz. gold per ton and 0.32 oz. silver per ton, from which 181,938 tons of concentrates were produced and sent to the smelter. In April, 1934, the rated daily capacity of the concentrator was increased from 2,000 to 3,000 tons and following an extensive campaign of research a hundred ton experimental cyanide unit designed to extract additional gold from the pyrite residue of the retreated mill tailing was constructed and placed in operation in June, 1934. The results obtained were so satisfactory that it was decided to construct a separate 500 ton cyanide mill to treat the entire pyrite portion of the tailing and it was expected that this would be completed and ready for operation in April, 1935. From the information obtained in drifting, diamond drilling, inclined

raising and other openings in the various ore bodies, there is now indicated above the 2,725 level the following tonnage of ore:-

	<u>Tons</u>	<u>Copper</u> %	<u>Gold per ton</u> oz.
Sulphide ore over 4% copper	6,826,000	7.25	0.166
Sulphide ore under 4% copper	20,497,000	1.04	0.191
Silicious fluxing ore	982,000	0.15	0.142

The above estimate means that 6,258,000 tons of new sulphide ore were developed or put in sight in 1934. This increase is made possible largely by the fact that the increased price of gold, together with decreased operating costs, permitted the inclusion of material that was formerly too low grade. At the present rate of mining sulphide ore, the reserve tonnage is sufficient to keep the plants operating for 18 years.

Encouraging ore discoveries were reported to have been made in 1934 by Opemiska Copper Mines Ltd. The number of high grade leases of copper-gold-silver ore was increased by four excellent new showings, one of which proved to be the best so far found. Its full limits have not yet been disclosed, but so far it is claimed to show close to 17% copper and about \$7.00 in gold and silver across seven feet for a length of 150 feet.

The property of Normetal Mining Corp. Ltd., located in Desmeloizes Tp., was under active development during the year, the shaft being completed to 950 feet and new levels opened up on the 675 and 800 foot horizons. The ore is heavy sulphide in character, the average tenor is 2% copper, 12.5% zinc, 3.9 oz. silver and .04 oz. gold. Development has proven sufficient tonnage to justify the installation of a mill of 500 tons daily capacity and consideration will be given to the installation of such a plant when metal prices justify. Other copper-gold-silver mines active during the year included those of Clericy Cons. Mines Ltd., Bagamac Rouyn Mines Ltd., Astoria Rouyn Mines Ltd., and Robb-Montbray Mines Ltd. The Waite-Amulet Mines were not re-opened in 1934 as the prices of copper and zinc were considered too low to make profitable operation possible.

MANITOBA AND SASKATCHEWAN - Production of copper-gold-silver ores in the provinces of Manitoba and Saskatchewan during 1934 came entirely from the Flin Flon Mine of the Hudson Bay Mining and Smelting Co. Ltd. This property is rather unique in that the interprovincial boundary between the provinces passes through the deposit and production by the company is divided between Manitoba and Saskatchewan according to the location of ore mined. The mine and mill were in continuous operation throughout the year, 1,477,341 tons of ore were raised, 1,463,716 tons milled and 921,388 tons of tailings cyanided. Copper concentrates produced totalled 250,615 tons and zinc concentrates 76,149 tons. Metal content of ore, concentrates, etc., sent to the copper smelter and zinc plant was as follows: gold, 107,509 oz.; silver, 1,593,953 oz.; copper 43,528,759 pounds and zinc 69,331,636 pounds. At the annual meeting in 1933, it was stated that the company had 12 to 13 years of ore ahead, without considering any new development.

The Sherritt-Gordon mine remained inactive in 1934; a report issued by the company in October stated that some sales of copper were made at prices better than those now prevailing and the shut-down expense at the property, although considerable, was being kept at the lowest possible point compatible with the proper care of such a valuable and extensive plant. The actual cost price of copper on hand is reported by the company at 6.2429 cents.

BRITISH COLUMBIA - The system of leasing at the Centre Star and other properties of the Consolidated Mining and Smelting Co. of Can. Ltd., was continued;

some sixty leases being in operation, with the employment of 200 to 225 men; shipments to Tadanac totalled 39,397 tons. In general the leasees were able to make wages, and the operations were of considerable benefit to the community. The Coast Copper property of the Consolidated Mining and Smelting Co. of Can., was not worked in 1934, the plant and equipment were, however, kept in condition by watchmen.

At Britannia Beach in the Vancouver mining division the mine and mill of the Britannia Mining and Smelting Co. Ltd., were operated continuously throughout the entire year, 786,412 tons of ore (wet) were raised and 759,697 tons of dry ore milled. Copper concentrates produced totalled 22,536 tons, zinc concentrates, 5,662 tons, iron pyrites, 26,746 tons and copper precipitate 988 tons. The copper concentrates and the greater part of the iron pyrites production of this company went to United States metallurgical plants while the zinc concentrates were consigned to Japan.

In the Nass river mining division the Granby Consolidated Mining, Smelting and Power Co. Ltd., conducted continuous mining operations at the Bonanza and Hidden Creek mines. The mill of the company treating ores from both deposits was in operation throughout the year. Ore shipments from the Bonanza Mine totalled 133,476 tons from which were produced 8,584 tons of copper concentrates. Shipments of ore from the Hidden Creek mine amounted to 1,744,524 tons of which 1,742,324 tons were milled for the production of 112,047 tons of copper concentrates. Concentrates produced from ores of both mines were treated in the Anyox smelter of the company. The British Columbia Department of Mines in its Report on the Mineral Industry of the Province for 1934 refers to the Anyox operations as follows: "During 1934 the continued low copper price has adversely affected the Granby operations at Anyox and the bulk of the blister output has necessarily been stored. A generally lower tenor of ore has been met by a slight increase of tonnage to the mill, which towards the end of the year was treating about 5,200 tons of ore per day. About 1,100 men are employed at Anyox with a pay-roll of \$135,000 per month. In view of the discouraging low copper price and outlook for this metal; at a share holders' meeting held in December the directors were empowered to cease operations at any time in accordance with their discretion". The Allenby property of the company continued inactive in 1934, it has been reported that this deposit has a known life of about ten years with copper higher than 10 cents per pound.

PRINCIPAL STATISTICS OF THE COPPER-GOLD-SILVER MINING INDUSTRY IN CANADA, 1923 and alternate years to 1933-1934.

Year	No. of active opera- tors	No. of operating plants or mines	Capital employed \$	Number of employ- ees	Salaries and wages \$	Cost of fuel and electricity \$	Net value of ores and con- centrates shipped by mines \$
1923 ..	14	14	19,108,072	1,790	3,004,292	334,696	4,361,486
1925 ..	40	41	23,200,580	2,374	3,555,844	413,767	7,758,990
1927 ..	118	125	24,232,169	4,083	5,260,095	596,137	9,822,881
1929 ..	144	152	52,546,697	5,243	8,498,755	1,035,133	21,859,907
1931 ..	53	56	37,127,920	3,351	4,958,317	726,502	15,951,103
1933 ..	28	29	40,228,626	2,841	3,938,778	404,625	7,703,570(a)
1934 ..	21	23	39,892,387	3,169	4,869,801	542,670	8,265,071

- (a) The considerable decrease in the value of 1933 and 1934 shipments as compared with those for previous years results largely from low copper prices and through companies reporting costs rather than estimates of market prices for metal contents. This practice of reporting costs is confined to some of the larger base metal mining companies which operate both mines and metallurgical plants. Decreases of this nature in the value of mine products are compensated for by increases in the non-ferrous smelting and refining industry and thereby do not affect the grand total representing the net value of Canadian mineral sales.

SHIPMENTS FROM COPPER-GOLD-SILVER MINES OF CANADA, 1933 and 1934.

		Total metal content as determined by settlement assay					
	Quantity	Net	Gold	Silver	Copper	Sulphur	Zinc
	Tons	value	Fine oz.	Fine oz.	Pounds	Tons	Pounds
	\$						
<u>1 9 3 3</u>							
9 mines shipped to Canadian plants -							
Ores	867,732	(a) 914,642	223,494	328,918	39,561,914	...	...
Copper concen- trates	495,370	4,859,812	171,954	1,619,387	107,952,457	...	...
Zinc concentrates .	80,780	565,460	...	...	...	...	55,938,867
Iron pyrites con- centrates .....	...	...	...	...	...	...	...
4 mines shipped to Foreign plants -							
Ore .....	...	...	...	...	...	...	...
Copper concentrates	28,541	1,104,146	12,933	65,969	14,654,498	...	...
Zinc concentrates .	8,929	70,460	...	...	...	...	9,374,675
Iron pyrites con- centrates.....	58,604	189,050	...	...	...	28,178	...
TOTAL	1,540,013	7,703,570	408,381	2,014,274	162,168,869	28,178	65,313,542
<u>1 9 3 4</u>							
8 mines shipped to Canadian plants -							
Ores	868,467	829,308	162,797	282,391	33,173,070	...	...
Copper concen- trates	553,515	5,769,226	194,664	1,918,638	120,185,486	...	...
Zinc concentrates..	76,149	451,563	5,417	144,559	1,324,297	...	69,331,636
Iron pyrites con- centrates	1,199	3,769	...	...	...	593	...
3 mines shipped to Foreign plants -							
Ores .....	...	...	...	...	...	...	...
Copper concen- trates	31,866	1,039,511	11,261	79,358	15,348,073	...	...
Zinc concen- trates .	5,889	72,493	...	...	...	...	5,374,023
Iron pyrites con- centrates	35,957	99,201	2,889	...	84,697	4,908	...
TOTAL	1,573,042	8,265,071	377,028	2,424,946	170,115,623	5,501	74,705,659

✓ Includes some cyanide precipitate.

(a) See foot note under preceding table.

INTERNATIONAL REVIEW

(SUMMARY)

Some notes, of an abridged nature, relating to gold mining in countries other than Canada are appended. It is hoped that these may prove of some interest or importance for comparative purposes.

UNION OF SOUTH AFRICA

Excerpts from the address of the President of the Transvaal Chamber of Mines, March 29, 1935.

Analysis of income and expenditure of producing mines; Witwatersrand and Heidelberg, 1932 - 1934:

	<u>1932</u>	<u>1934</u>	Increase(✓) or Decrease(-) over 1932	<u>per cent</u>
Tonnage milled	34,906,450	39,722,850	4,816,400(✓)	13.8(✓)
Gold won - fine oz.	11,378,064	10,304,923	1,073,141(-)	9.4(-)
Yield per ton milled (dwts.)	6,481	5,147	1,334(-)	20.6(-)
Value of gold won (£)	48,985,740	71,111,000	22,125,260(✓)	45.2(✓)
Working profit (£)	15,306,034	32,400,000 ^x	17,093,966(✓)	111.7(✓)
Total working costs (£) ...	33,526,059	38,593,213	5,067,154(✓)	15.1(✓)

^x Preliminary

"The tonnage milled, the currency value of gold won, the working profit and the total working costs were all, in the past year, the highest on record. The advantages that would follow the ability to mine lower-grade ore were frequently emphasized long before South Africa suspended the gold standard, and in the last two years they have materialized to a remarkable degree.

The determining factor in the price of gold in the past year has been the monetary and commercial policy of the United States of America. By first raising its buying price for gold and then fixing it at \$35.00 to the ounce, the United States Treasury established itself as the final buyer of gold--the price of gold, was therefore set by the value of the American dollar, because the American dollar was always exchangeable for gold at a fixed rate, and the value of the American dollar in terms of other currencies was always tending to appreciate. Now the price of gold which matters for us--and, I might also say, for the greater part of the world--is its price in sterling. This price has increased from 126s 5d per fine ounce at the beginning of 1934 to say 145s per fine ounce at the present time; and this increase is the direct result of the fixing of the dollar price of gold in February, 1934, and the subsequent strength of the dollar in the exchanges. Taxation of the mines remains up on an exceedingly high level, representations for a general reduction having been unsuccessful. It is true that the actual collections of last year were considerably less than budget anticipations. Although the average price of gold for 1934 was £6 18s 0d per fine ounce compared with £6 4s 9d for 1933, total profits did not increase correspondingly, owing to the lowering-of-grade policy followed by the mines. In addition, the large appropriations from profits which were devoted to underground capital expenditure were allowed as a deduction for taxation purposes. The object of this allowance was to encourage the re-investment of profits in underground schemes calculated to enlarge the scale of operations and extend the life of the industry,

and this feature of the excess profits taxation was an undoubted incentive in connection with many important capital expenditure programmes undertaken by different mines. It has now been stipulated that the capital expenditure appropriated from profits that will be so allowable shall be restricted to £1,500,000 for the current year, which is probably not more than one-half the sum that would be admissible for deduction in absence of arbitrary limitation. It should, however, be explained that capital allowance, or the allowance for reduction in grade, is not designed to operate at the expense of Government taxation revenue. For taxation purposes, the Government regards the mines as a unit, and, having decided to take 50 per cent of the so-called excess profits of the industry considered as a whole, a formula has been devised to secure that net amount. Any allowances made are not intended to reduce the total taxation, they merely affect its distribution, so that to the extent one mine receives an allowance, another mine, or other mines, have their own taxation liability increased correspondingly. Expansion on a large scale, of the gold mining industry, continued during the year. The producing mines substantially increased their tonnage output. Due to a further fall in the grade of ore milled, the total yield of gold showed a reduction. On the other hand, a vast amount of work is in progress that will enlarge the operating capacity of many existing mines and bring a number of new mines into the producing category....."

RUSSIA

According to the "American Bureau of Metal Statistics" the Russian-Siberian gold output in 1934 at 4,200,000 fine ounces represents 49.3 per cent increase over 1933 and established Russia as the world's second greatest producer of this precious metal.

Details relating to the operations of individual mines are not available and the following notes are from official publications used by the United States Chamber of Commerce:

"Beyond Lake Baikal, on the River Unda, lies the rich Balei gold field, previously known, but developed only since the revolution. A large plant has now risen in the "Taiga" including an amalgamation plant with a Crowe-Merrill apparatus. A large new American plant for treatment of the poorer ores is under construction. Five years ago the population of this district consisted of a few gold prospectors living in sod huts. Now there are 5,000 workers at the plant and a total of 22,000 in the town.

The Aldan gold fields, discovered in 1923 in the midst of the "Taiga" have brought to this district a consistently gaining population; from 300 natives in 1923 the number of inhabitants has risen to about 40,000. The first road in this section, the Amur-Yakut highway, opened it to access from the Lena River and the railroad. In 1925 two old steam dredges were brought in, and gold recovery was started by all possible methods, washing sands, electrical recovery, dredging, and hydraulic mining. Prospectors no longer work alone, but in groups (artels) with special privileges as to food and taxes.

A geological expedition organized by efforts of local authorities at Irkutsk has completed its work, and will soon present its report. The expedition consisted of 470 members, forming 17 parties, which studied the western part of Eastern Siberia. As a result of their work over 150 deposits of gold, copper, iron and manganese ores, etc., were located.

The Mining Journal, London, states that one of the major questions in connection with the world's gold production today is the determination of the real

production of gold by the Soviet States. This uncertainty has been greatly increased by the fact that from the year 1927-1928 up to 1932 production statistics were entirely suspended. There can be no doubt that the Russian gold production has increased largely, but the magnitude of the claims made for it, unsupported by detailed statistics, have caused all these suggestions of percentage increases to be accepted with very great reserve. The great increase in production of the gold industry is due to the discovery of new gold deposits, an increase in the proved metal reserves in the old workings, and the mechanization of mining..... Alongside of the state enterprises, the private gold prospectors have in recent years played a considerable part in the gold production. In the interest of a rapid increase in the Russian gold output which was evidently required by the great need since 1931 for means of paying foreign obligations, the party leaders and the Soviet Government issued a number of decrees, with the purpose of attracting the people to seek and recover gold in such deposits as it did not seem worth while for the Government itself to work.

UNITED STATES

Gold production in the United States (including the Philippines and Puerto Rico) in 1934 exceeded in dollars the value of the peak quantity year, namely, 4,887,604 ounces at \$20.6718 per ounce, or \$101,036,000 in 1915. From January 1 to January 15, 1934, the Reconstruction Finance Corporation bought gold, both domestic and foreign, at a daily posted price which remained unchanged at \$34.06 per ounce. On January 15, the R. F. C. ceased dealing in the foreign gold market and the buying of domestic gold was turned over to the Treasury Department. From January 16 to January 31, the Treasury Department through the Federal Reserve Bank bought domestic gold at the unchanging price of \$34.45 an ounce. From February 1 to December 31 the United States Mint bought both domestic and foreign gold at the fixed price of \$35.00 an ounce, under the Gold Reserve Act of 1934, under which the President, on January 31, fixed the weight of the gold dollar at 15-5/21 grains nine-tenths fine and took title for the government of all the supplies of American-owned monetary gold. Thus was born the 59.06/ cent dollar, arrived at by dividing \$20.6718 (the old statutory price of an ounce of gold) by \$35.00. The average weighted price paid for United States gold in 1934 is calculated at \$34.95. The average weighted price in 1933 was calculated at \$25.56.

The United States Bureau of Mines reports that the high gold price has, in some instances, saved whole communities from extinction, and in other instances, and for the same reason, revived dead or nearly dead gold districts. That is, the high gold price has lifted certain gold ores out of the sub-marginal (below profit) class into a small but certain profit class.

While the practical effect of the Gold Reserve Act of 1934 served to augment the nation's gold and silver reserves, other factors reduced the availability of gold from the complex ores; for example, within the thirteen western states and Alaska, 62,140,835 tons of copper ore in 1929 yielded 434,986 ounces of gold and 18,020,842 ounces of silver, as compared with 8,363,586 tons yielding 108,727 ounces of gold and 5,854,510 ounces of silver in 1933. The adoption of the N.R.A. code which went into effect on April 26, 1934, and resulted in fixing the copper price in the United States at 9 cents a pound, materially helped copper production in some of the states and contributed a slightly increase gold (and silver) output from copper ores as compared with 1933 results.

SOUTHERN RHODESIA

The Government Mining Engineer for Southern Rhodesia reports that in 1931 the outlook of the gold mining industry in that country was completely changed by the advent of the premium on gold, since that time the industry has steadily expanded to the unparalleled position of to-day. The premium has given a great impetus to prospecting, the re-opening of old mines previously unpayable and to the exploiting of large low-grade propositions.

The effect of the premium is best seen by the increase in the numbers of small workers whose number rose from 286 in 1930 to 1,107 in 1933 and to 1,350 in 1934. This rise is also noticeable in the medium sized mines which have increased from 36 in 1930 to 71 in 1933 and 83 in 1934. The number of large mines remain more or less constant but should increase in the next year or two.

TANGANYIKA

The output of gold in Tanganyika in 1934 was more than six times greater in weight and nine times greater in value than the total production of the metal in 1926. This expansion has mainly resulted from discoveries and production by small workers, but many companies are now examining and developing properties. The respective areas of gold fields, with known reefs or mines which are either producing gold or are being developed to prove their value are as follows: Lupa Goldfields, South West Mwanza, East Mwanza Goldfield, Musoma Goldfield and Selenke-Iramba Goldfield. The output of the Lupa field to the end of May, 1934, had been entirely alluvial gold, of which it had produced about 128,000 ounces, valued at about £659,000. The extensive reef sources are only beginning to be developed.

KENYA GOLDFIELDS

One of the features of 1934, according to the Mining Journal, London, was the throwing open to prospectors of No. 2 area. During the year notable progress was made in the development of the Western Kenya Goldfields. At Kimingini extensive development work was conducted and great progress made on the famous 35 mile concession by East African Concessions Ltd. Near Kakamega Town milling operations were conducted by the Rosterman Co. and Risks Ltd. Considerable developments have been made during the past year in the Lolgorien District. In Marigoli the Edzawa Ridge Ltd., have been milling ore for several months with satisfactory results.

SUDAN

Cyaniding operations were commenced in August, 1934, at the property of the Gabait Gold Mines situated about 150 miles north of Port Sudan on the Red Sea. The output from the mine from February 1, 1933, to January 1, 1934, was 5,751 tons, which yielded 3,621 oz. of gold. The ore milled from February 1, 1934 to January 31, 1935 was 7,517 tons from which 4,220 oz. of gold were obtained.

GOLD COAST

Dr. N. R. Junner, Director of the Gold Coast Geological Survey, states that producing mines now are making good profits, and developments in most of the mines during the past two or three years have been promising. The Bibiani mine, which produced more than £900,000 from shallow depths, has been re-opened and is again producing. The Cinna-mon Bippo and Obuom mines, which yielded nearly £400,000 and £90,000 of gold, respectively, from depths of less than 250 feet and Fanti, Tamsu, Eduapriem and other dormant mines have also been re-opened. In addition intensive prospecting is going on in many parts of

the country. Conditions to-day on the Gold Coast are vastly different from what they were twenty years ago. There are now 500 miles of railway and some 6,000 to 7,000 miles of good motor roads--health conditions and methods of mining and recovery of gold have greatly improved and mining costs considerably reduced.

It is interesting to note that the ore reserves of Ashanti Goldfields Corporation at September 30, 1934, were 584,818 tons of an average value of 24 dwts. per ton; it is hoped during 1935 to increase the monthly output of this company to 16,500 tons.

INDIA

At the present time, with the exception of a very small output from scattered native workings the only gold produced in India comes from the famous Kolar Goldfield in the state of Mysore in Southern India. The auriferous quartz veins here are found in a narrow strip of ancient hornblendic schists, surrounded by a complex of gneissic and granitic rocks. A feature of the Kolar field is the persistence in depth of the gold content of the quartz, and in some instances the workings have been taken down one and a half miles from the surface, but nevertheless, especially under the favourable conditions which now prevail in the gold mining industry, there is every reason to anticipate, states the Mining Journal, London, that the mines will remain valuable producers of the metal for very many years to come.

KOREA

During the past few years gold mining in Korea has been mainly confined to the areas controlled by the Oriental Consolidated Co. and by the Chosen Corporation Ltd. Recently the chief work of the Chosen concession has been carried out on the Great Nurupi, East Nurupi, Moo-Dong-sang and Sok-sa-Kol mines all in the Nurupi area, and the Yun-Ja-Kol and Moon Ji Ryong in the Kapam area. A 13,000 ton per month mill is in operation on the property. It is confidently anticipated that the Nurupi mine will continue to produce its present quota of gold for many years, the deepest workings of the Great Nurupi mine have reached a depth of 11,100 feet vertically and 17 levels have been driven. In the Sok-sa-Kol, Moo-Dong-Sang, Pak-Tal-Ko and Moo-Ka-Kal properties the Corporation owns four young mines which are expected to prove valuable.

AUSTRALIA

In Western Australia mining activity was intensive on the Golden Mile at Kalgoorlie. The Lake View and Star Ltd., the leading company, is treating more than 50,000 tons monthly at a profit of more than £1 per ton. Development work on the numerous lodes at depth are reported as very satisfactory and to-day ore reserves exceed 2,400,000 tons assaying 8dwts. The Great Boulder Proprietary Ltd., erected a 12,000 ton per month treatment plant using fine grinding-flotation-roasting-cyanadation method. Ore reserves of this company are reported to exceed 500,000 tons. The Sons of Gwalia Ltd., at Lenora are re-modelling its mill and at the Wiluna, three orebodies have been developed at depth from the main shaft. The mill at this property is treating 42,000 tons per month at a cost of less than 20s per ton and at a profit of 25s per ton.

In Victoria the Bendigo field has attracted the attention of English and American companies and a thorough search for payable Saddle reefs is now being carried out by Bendigo Mines Ltd. There are over 30 smaller companies operating in Bendigo, but only two are dividend payers at the moment. It is stated that the Victorian deep leads, representing the buried river channels carrying auriferous gravels will develop into important gold-producing areas within the near future.

Queensland has only two important gold mines at the present time - Mount Morgan and Golden Plateau (Cracow). The re-opening of the famous Mount Morgan gold-copper mine is one of the bright spots of the revival. The plant has been enlarged to a capacity of 15,000 tons monthly. By the application of the Edquist process, recovery is reported to have been increased by 0.5 dwt. per ton and over 2,000,000 tons thus added to reserves which now exceed 7,000,000 tons.

In New South Wales the occidental mine at Cobar will be in production by the middle of 1935 and in Northern Australia the Golden Dyke Mine, at Shackle, has reached production, over 130,000 tons assaying 8 dwts. gold per ton have been proved to the 100 foot level.

The future of the gold mining industry in Australia is described as exceedingly bright. It has been stated that the output for the Commonwealth in 1935 will exceed 800,000 ounces and that the yield in 1936 should not be far short of 900,000 ounces and a year later 1,000,000 ounces. In Western Australia to-day over 12,000 men are reported directly employed in gold mining as compared with 5,000 in 1929.

NEW ZEALAND

Compared with the yields of the early days of gold mining, the industry has fallen away very considerably, but the annual export has never appreciably been below a value of half a million sterling, and since the recent depression, which caused a large number of men to turn to prospecting, the yields have increased. Ten years ago, for instance, the export figure was £551,000 whereas last year it was £1,320,000. Present values, necessarily have a great deal to do with the higher value of the yield, but greater quantities also were recovered last year than a decade ago, the relative figures being - 1924, 133,631 ounces; 1934, 162,490 ounces. Encouragement has been given to unemployed men to prospect; during the year 1933 the Unemployment Board expended in this £198,000 in unemployment pay, subsidies, supervising and purchasing of mining equipment to assist gold prospecting. Up to March 31, 1934, approximately 10,000 ounces of gold (excluding gold obtained by subsidized companies and syndicates) was won by subsidized miners who would otherwise have swelled the ranks of the unemployed.

Reefing propositions are rapidly coming into favour and this means that more attention is being paid to the North Island. The Thames, Waihi and Coromandel fields are rapidly coming into prominence and a great revival has taken place in gold dredging in Central Otago.

BELGIAN CONGO

A statement by the Belgian Colonial Office gives the Congo gold production in 1934 at 11,620 kilos and estimates the gold reserves at 75,000 kilos. A steady increase in production is anticipated as a result of further prospecting and development and the increase in the number of gold mining undertakings which number 23.

CYPRUS

The Cyprus Mines Corporation actively worked the gold bearing lode at Skouriotissa with encouraging results; data pertaining to the production of "Devil's Mud" or auriferous andesite during the last six months of 1934 are as follows:- Underground development, footage 12,293, tonnage mined 4,342, gold content of ore exported 10,488 ounces; silver content of ore exported 70,143 ounces and gold content of precipitate exported 2,604 ounces.

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

DIRECTORY

PRINCIPAL CANADIAN ALLUVIAL GOLD OPERATORS, 1934.

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>QUEBEC</u> -		
Cook and Lloyd Gold River Mining Co. Ltd. Unit Co. Ltd.	St. Simon les Mines 956 New Birks Bldg., Montreal 52 St. Peter St., Quebec	Gilbert River Compton Co. Beauce Co.
<u>ALBERTA</u> -		
McLeod River Mining Corp. Ltd.	200 Bay St., Toronto, Ont.	McLeod River
<u>BRITISH COLUMBIA</u> -		
Alberta Pacific Cons. Oils Ltd.	302 Toronto General Trusts Bldg., Calgary, Alberta	Lillooet M.D.
Barkerville Gold Mines, Ltd.	708 - 525 Seymour St., Vancouver	Barkerville
Barrington, S. C.	Wrangell, Alaska	Stikine
Black Watch Mines Ltd.	Nelson	Nelson Mining Div.
Boundary Creek Mining Co.	814 Metropolitan Bldg., Vancouver	Greenwood Mining D.
Bride, Maurice	Atlin	Atlin Mining Div.
Brown, H. P.	Hixon	Barkerville
Buchanan & Cumming	Atlin	Atlin Mining Div.
Bullion Placers Ltd.	501 Vancouver Block, Vancouver	Quesnel Mining Div.
Butterworth and MacKay Bros.	1056 Foul Bay Rd., Victoria	Leech River
Cariboo Northern Development Co. Ltd.	704 Bank of Toronto Bldg., Victoria	Omineca Mining Div.
Cedar Creek Hydraulic Mines Ltd.	323 Sayward Bldg., Victoria	Quesnel Mining Div.
Clay, J. R.	Spruce Creek, Atlin	Atlin Mining Div.
Colpe, Chas. H.	Atlin	Atlin Mining Div.
Columbia Development Ltd.	410 King St., Kitchener, Ont.	Atlin Mining Div.
Compagnie Francais Des Mines d'Or du Canada	19 rue d'Aurnale, Paris, France	Atlin Mining Div.
Consolidated Gold Alluvials of B.C. Ltd.	1040 West Gerogia St., Vancouver	Lightning Creek Atlin Mining Div.
Consolidated Mining & Smelting Co. of Canada, Ltd.	Trail	Fort Steel Mining Div., Omineca Mining Div.
De Mers Placer Ltd.	660 St. Catherine St. W., Montreal, P.Q.	Wigwam
Dredgement Syndicate	Tlell	Shuttle Island
Eastman Red Gulch Placers Ltd.	Barkerville	Cariboo Mining Div.
Eldorado Placers Ltd.	1044 Beach Ave., Vancouver	Cariboo Mining Div.
Elieff, McDonald & McKay	Atlin	Spruce Creek
Falconer, D. H.	Atlin	Atlin Mining Div.
French Creek Hydraulic Placers, Ltd.	410 Lancaster Bldg., Calgary, Alberta	Cariboo Mining Div.

PRINCIPAL CANADIAN ALLUVIAL GOLD OPERATORS, 1934 (continued)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>BRITISH COLUMBIA (continued)</u>		
Gold Run Exploration Co.Ltd.	509 Union Bldg., Victoria	Atlin Mining Div.
Golden Strand Syndicate (N. H. Terry)	Masset	Graham Island
Guyet Placers Ltd.	1012 Royal Bank Bldg., Vancouver	Barkerville
High Run Placer Gold Mines Ltd.	319 West Pender St., Vancouver	Jessica
Hodges and Moron	Atlin	Atlin
Jacobson, Roy	Trout Lake	Lardeau Creek
Johnson, Nelson & Ucland	Atlin	Spruce Creek
Ketch Hydraulic Co.	Van Winkle	Devil's Canyon
Lower Bridge River Placers Ltd.	708 Yorkshire Bldg., Vancouver	Lillooet Mining Div.
Lowhee Mining Co. Ltd.	1109. Rust Bldg., Tacoma, Wash., U.S.A.	Cariboo
Lykegard, Carl E.	Atlin	Spruce Creek
Matson & Schultz	Atlin	Ruby Creek
Morse, McKechnie & Brett	Atlin	Spruce Creek
McKinnon, Chas. E.	Atlin	Spruce Creek
Mew, Edmund	914 E. 15th Ave., Vancouver	Clinton Mining Div.
Moose Syndicate	Likely	Quesnel Mining Div.
Morrison, McKay & Johnson	Atlin	Ruby Creek
Murphy, Nathan	Atlin	O'Donnell River
Perret, Francois	Quesnel	Finlay River
Pine Creek Mining Co. Ltd.	837 W. Hastings St., Vancouver	Quesnel Mining Div.
Placer Engineers Ltd.	304 - 535 Georgia St.W., Vancouver	Quesnel Mining Div.
Queen City Mining Co.	501 - 1411-4th Ave.Bldg., Seattle, Wash., U.S.A.	Cariboo Mining Div.
Ruby Gold Mines Ltd.	470 Granville St., Vancouver	Quesnel Mining Div.
Sang Dang Placer	Barkerville	Cariboo Dist.
Silts and Hagberg	Finmoore	-
Skoldquist & Co.	Atlin	Spruce Creek
Slade-Cariboo Gold Placers Ltd.	1410 Hoge Bldg., Seattle, Wash., U.S.A.	Barkerville
Sombrio Placer Mining Syndicate	507 Stock Exchange Bldg., Vancouver	Victoria Mining Div.
Sovereign Creek Gold Mines Ltd.	612 Standard Bank Bldg., Vancouver	Quesnel Mining Div.
Sundberg, Carl	Wingdam	Barkerville
Trehouse Hydraulic Mining Co.	Barkerville	Cariboo Mining Div.
Turnquist, Emil	Atlin	Ruby Creek
Tyaughton Creek Gold Placers Ltd.	118 Vancouver Block, Vancouver	Lillooet Div.
Walton, Lindal & Williams	Atlin	Spruce Creek
Yates & Boe	Hudson Hope	Hudson Hope
Yeager, A. C.	Lumberton	Fort Steele Div.
Zahara, A. J.	Rycroft, Alberta	Hudson Hope
<u>YUKON</u>		
Holbrook Dredging Co.	Glacier	60 Mile Creek
Inca Mining Corp. Ltd.	Carcross	Iron Creek
McDonald, McCormick & Stewart	Glacier Creek	Glacier Creek
Ostby, T.	1070 Haro St., Vancouver, B.C.	Hunker Creek
Yukon Consolidated Gold Corp.Ltd.	140 Wellington St., Ottawa, Ont.	Dawson

DIRECTORY

PRINCIPAL OPERATORS(x) IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>NOVA SCOTIA</u>		
/Associated Gold Mines of Nova Scotia Ltd.	908 Transportation Bldg., Montreal, P.Q.	Lawrencetown
Banook Gold Mines Ltd.	1310 Concourse Bldg., Toronto, Ont.	Central Hawdon
Beacon Gold Mines Ltd.	706/100 Adelaide St. W., Toronto, Ont.	Molega
/Bluenose Gold Syndicate	321 Federal Bldg., Toronto, Ont.	Mill Village
Cons. Mining & Smelting Co. of Can. Ltd.	840 Dominion Sq. Bldg., Montreal, P.Q.	Goldboro
Corwin Gold Mines Ltd.	Enfield	Caribou Gold
Guysboro Mines Ltd.	1220/25 King St. W., Toronto, Ont.	Mine
Higgins and Lawlor	Moose River Gold Mines	Oldham
Hogan, F. J.	Mt. Uniacke	Goldenville
/Kemptville Gold Mining Co.	Box 219 Yarmouth	Moose River
Lacey Gold Mining Co. Ltd.	35 Bedford Row, Halifax	Dist.
/Minerals Limited	Roy Bldg., Halifax	Mt. Uniacke
Montague Gold Mines Ltd.	706/100 Adelaide St. W., Toronto, Ont.	Kemptville
/Queens Mines Ltd.	297 Agricola St., Halifax	Chester Basin
Seal Harbour Gold Mines Ltd.	57 Bloor St. W., Toronto, Ont.	various mines
Stuart, S. J.	Isaac's Harbour	Dartmouth
/Thompson, J. H.	Box 98, Oxford	Mt. Uniacke
United Goldfields of Nova Scotia Ltd.	Liverpool	Goldboro
		Guysboro Co.
		Moosehead
		Brookfield Mines
<u>QUEBEC</u>		
/Adanac Gold Mines Ltd.	601/330 Bay St., Toronto, Ont.	Rouyn
/Amity Gold Mines Ltd.	1302 Canada Permanent Bldg., Toronto, Ont.	Bourlamaque Tp.
/Arcadian Rouyn Gold Mines Synd. Ltd.	Commonwealth Bldg., King St. E., Toronto, Ont.	Rouyn
/Arno Mines Ltd.	63 Sparks St., Ottawa, Ont.	Rouyn
/Arntfield Gold Mines Ltd.	303 Old Birks Bldg., Montreal, Que.	Arntfield
/Avocalon Mining Syndicate Ltd.	67 Yonge St., Toronto, Ont.	Vauquelin
/Basin Gold Mines Ltd.	619/159 Craig St. W., Montreal	Varsan Tp.
Beattie Gold Mines Ltd.	25 King St. W., Toronto, Ont.	Duparquet Tp.
/Beaufor Gold Mines Ltd.	1208 Edifice Aldred, Montreal	Pascalie Tp.
/Bidlamaque Gold Mines Ltd.	320 Bay St., Toronto, Ont.	Bourlamaque Tp.
/Birrell Gold Mines Ltd.	300 Sterling Tower, Toronto, Ont.	Duprat Tp.
/Blake River Gold Mines Ltd.	317/132 St. James St., W., Montreal	Cadillac Tp.
/Blouin Lake Gold Mines Ltd.	136 Sparks St., Ottawa, Ont.	Bourlamaque Tp.
/Bourbeau Lake Chibougamau Mines Ltd.	New Liskeard, Ont.	Chibougamau
/Brownlee Mines Ltd.	Box 456, Noranda	Noranda
Bussieres Mining Co. Ltd.	221 Notre Dame St. W., Montreal	Lauviquart Tp.
/Calder Bousquet Gold Mines Ltd.	706/100 Adelaide St. W., Toronto, Ont.	Bousquet Tp.
/Canadian Malartic Gold Mines Ltd.	25 King St. W., Toronto, Ont.	Fourniere Tp.
/Canadian Pandora Gold Mines Ltd.	Box 700, New Liskeard, Ont.	Cadillac Tp.
/Central Malartic Mines Ltd.	350 Bay St., Toronto, Ont.	Malartic Tp.
/Chibougamau-Tiblenmont Syndicate	810 Federal Bldg., 85 Richmond St. W., Toronto, Ont.	Tiblenmont Tp.
/Coniagas Reduction Co. Ltd.	320 Bay St., Toronto, Ont.	Guillet Tp.

PRINCIPAL OPERATORS(x) IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>QUEBEC (continued) -</u>		
/ Consolidated Chibougamau Goldfields Ltd.	276 St. James St. W., Montreal	Chibougamau
/ Consolidated M. & S. Co. of Canada Ltd.	840 Dominion Sq. Bldg., Montreal	...
/ Contact Gold Mines Ltd.	320 Bay St., Toronto, Ont.	Bourlamaque Tp.
/ Cummings-Trudel Mining & Dev. Co. Ltd.	201 Victoria Bldg., Ottawa, Ont.	Barraulte Tp.
/ Del Rio Mining Co. Ltd.	506/56 Sparks St., Ottawa, Ont.	Destor Tp.
/ Darrington Mining Syndicate	2408 Stanley St., Niagara Falls, Ont.	Boischatel Tp.
/ Dorval-Siscoe Gold Mines Ltd.	357 Bay St., Toronto, Ont.	Varsan Tp.
/ Dubuisson Mines Ltd.	25 King St. W., Toronto, Ont.	N. W. Quebec
/ Duparquet Mining Co. Ltd.	204 Hospital St., Montreal	Duparquet Tp.
/ East Lamaque Gold Mines Ltd.	357 Bay St., Toronto, Ont.	Bourlamaque Tp.
/ East Malartic Mines Ltd.	913 Royal Bank Bldg., Montreal	Fourniere Tp.
/ Engineers Exploration Co. Ltd.	Box 310, Noranda	...
/ Erie Canadian Mines Ltd.	Box Ex, Kirkland Lake, Ont.	N. W. Quebec
/ Explorer Syndicate	c/o W. M. Goodwin, Ste Anne de Bellevue	Rouyn Tp.
/ Farrell Rouyn Mines Ltd.	25 King St. W., Toronto, Ont.	Rouyn Tp.
/ Fleming Mines Ltd.	2150 St. Jacques St., Montreal	Pascalie Tp.
/ Fleming-Thompson Gold Mines Ltd.	Box 308, Rouyn	Duparquet Tp.
/ Francoeur Gold Mines Ltd.	941 Dominion Sq. Bldg., Montreal	Boischatel Tp.
/ Galatea Gold Mines Ltd.	1305 Star Bldg., Toronto, Ont.	Duparquet Tp.
/ Gilbec Mines Ltd.	200 Bay St., Toronto, Ont.	Destor Tp.
/ Glenwood Mining Co. Ltd.	Rouyn	Pascalie Tp.
/ Gold Bar Mines Ltd.	204 Royal Bank Bldg., Toronto, Ont.	Rouyn Tp.
/ Golden Quebec Mines Ltd.	Sterling Tower, Toronto, Ont.	Rouyn
/ Granada Gold Mines Ltd.	204 Royal Bank Bldg., Toronto	Bousquet Tp.
/ Green Stabell Mines Ltd.	1406 Concourse Bldg., Toronto, Ont.	Rouyn Tp.
/ Halliwell Gold Mines Ltd.	132 St. Jacques W., Montreal	Dubuisson Tp.
/ Harricana Amalgamated Gold Mines Ltd.	105 Mountain Hill, Quebec	Boischatel Tp.
/ Herbin Lake Gold Synd. Ltd.	357 Bay St., Toronto, Ont.	Abitibi Co.
/ Joannes Mine Corp.	276 St. James St., Montreal,	Bourlamaque Tp.
/ Jupiter Gold Syndicate	601/330 Bay St., Toronto, Ont.	Joannes Tp.
/ Keyroc Gold Mining Co. Ltd.	244 Bay St., Toronto, Ont.	Rouyn Tp.
/ Kindall Mines Ltd.	217 Univeristy Tower, Montreal	Rouyn Tp.
/ Kinghorn Sturgeon Mines Ltd.	357 Bay St., Toronto, Ont.	Rouyn Tp.
/ Kirkland Crest Gold Mining Synd.	811 Ottawa Electric Bldg., Ottawa, Ont.	Bourlamaque Tp.
/ Lake Expanse Mines Ltd.	701/407 McGill St., Montreal	Louvicourt Tp.
/ Lake Fortune Gold Mines Ltd.	941 Dominion Sq. Bldg., Montreal	Guillett Tp.
/ La Mine D'Or Venus Cons.	51 Rue Colomb, Quebec	Boischatel Tp.
/ Leader Gold Mines Ltd.	405 Concourse Bldg., 100 Adelaide St. W. Toronto, Ont.	Barraulte Tp.
/ Lamaque Gold Mines Ltd.	Bourlamaque via Amos	Tiblemont Tp.
/ Louvre Gold Mines Ltd.	701/407 McGill St., Montreal	Bourlamaque Tp.
/ Manley Quebec Gold Mines Ltd.	703/357 Bay St., Toronto, Ont.	Louvicourt Tp.
/ McDonald Gold Mines Ltd.	Elmira, Ont.	LaReine Tp.
/ McIntyre Porcupine Mines Ltd.	Schumacher, Ont.	Duparquet Tp.
/ McWatters Gold Mines Ltd.	Box 689, Rouyn	Guillet Tp..
		Rouyn Tp.

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.(con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
QUEBEC (concluded)		
/Maritime Cadillac Synd.	Moncton, N. B.	Cadillac Tp.
/Murwood Gold Mines Ltd.	405 Councourse Bldg., Toronto, Ont.	Tiblémont Tp.
/Met-Mac Prospectors Ltd.	701/407 McGill St., Montreal	Louvicourt Tp.
/Midland Mining Corp. Ltd.	231 Notre Dame W., Montreal	Desmeloizes Tp.
/Mines Development Corp.	189 St. Jean St., Quebec	N. W. Quebec
/Monarch Mines Ltd.	14 King St. E., Toronto, Ont.	Dasserat Tp.
/Mooshla Gold Mines Ltd.	25 King St. W., Toronto, Ont.	Bousquet Tp.
/Newroy Gold Mines Ltd.	465 Bay St., Toronto, Ont.	Louvicourt Tp.
/Norlake Mining Corp.	Castle Bldg., Montreal	Rouyn
/Normont Gold Mines Ltd.	905 Transportation Bldg., Montreal	Rouyn Tp.
/Northern Aerial Canada Golds Ltd.	Councourse Bldg., Toronto, Ont.	N. W. Quebec
/Northern Chibogamau Mines Ltd.	460 St. Francois Xavier St., Montreal	Chibougamau
/Northern Quebec Gold Fields & Exploration Co.	Three Rivers	Bousquet Tp.
/Northern Quebec Gold Mines Ltd.	341 Dominion Sq. Bldg., Montreal	Rouyn
/Nu Sigma Gold Syndicate Ltd.	320 Bay St., Toronto, Ont.	Bourlamaque Tp.
O'Brien Gold Mines Ltd.	Kewagama	Cadillac Tp.
/O'Leary Malartic Mines Ltd.	Box 120, Noranda	N. W. Quebec
/O'Neill Thompson Mining Synd.	c/o E. B. Eddy Co., Hull	Joannes Tp..
/Pan Canadian Gold Mines Ltd.	24 Milk St., Boston, Mass.	Cadillac Tp.
/Payore Gold Mines Ltd.	357 Bay St., Toronto, Ont.	Bourlamaque Tp.
Perron Gold Mines Ltd.	Pascalis	Pascalis Tp.
/Pontiac Rouyn Ltd.	706/100 Adelaide St. W., Toronto, Ont.	Noranda
/Powell Rouyn Gold Mines Ltd.	440 Confederation Life Bldg., Toronto, Ont.	Rouyn Tp.
/Prospectors Airways Ltd.	80 King St. W., Toronto, Ont.	Rose Lake
/Quebec Eureka Gold Mines Ltd.	11 King St. W., Toronto, Ont.	Tiblémont Tp.
/Quebec Gold Belt Mines Ltd.	Box 190 Fort Erie, Ont.	Bourlamaque Tp.
/Quebec Viking Gold Mines Ltd.	305/330 Bay St., Toronto, Ont.	Beauschatel Tp.
/Raymond Tiblémont Synd.	205 Brock Bldg., Toronto, Ont.	Tiblémont Tp.
/Rocdor Gold Mines Ltd.	Ussher Bldg., Toronto, Ont.	Bourlamaque Tp.
/Rouyn Reward Coll Mines Ltd.	305/330 Bay St., Toronto, Ont.	Joannes & Rouyn Tps
/Seguin Rouyn Gold Mines Ltd.	507 Place d'Armes, Montreal	Rouyn
/Senneterre Gold Syndicate	1007/465 Bay St., Toronto, Ont.	Senneterre
/Shawkey Gold Mining Co. Ltd.	67 Yonge St., Toronto, Ont.	Dubuisson Tp.
/Sigma Mines Ltd.	Valdor	Bourlamaque Tp.
Siscoe Gold Mines Ltd.	907 Dominion Sq. Bldg., Montreal	Dubuisson Tp.
/Sladen Malartic Mines Ltd.	63 Sparks St., Ottawa, Ont.	N. W. Quebec
/South Tiblémont Mines Ltd.	1007/465 Bay St., Toronto, Ont.	Tiblémont Tp.
/Stadacona Rouyn Mines Ltd.	159 Craig St. W., Montreal	Rouyn
/Stanley Siscoe Extension Gold Mines Ltd.	231 St. James St. W., Montreal	Varsan Tp.
/Sudbury Contact Mines Ltd..	25 King St. W., Toronto, Ont.	Bousquet Tp.
/Sudbury Mines Ltd.	11 Jordan St., Toronto, Ont.	Joannes Tp.
Sullivan Cons. Mines Ltd.	1207 Aldred Bldg., Montreal	Dubuisson Tp.
/Tavernier Gold Mining Synd.	11 King St. W., Toronto, Ont.	Tavernier Tp.
/Tiblémont Contact Mining Synd.	34 King St. E., Toronto, Ont.	Tiblémont Tp.
/Tiblémont Exyension Synd.	811 Federal Bldg., Toronto, Ont.	Tiblémont Tp.
/Tiblémont Island Mining Co. Ltd	Senneterre	Tiblémont Tp
/United Gold Exploration Ltd.	276 St. James St. W., Montreal	Laverlochere Tp.
/Vicour Gold Mines Ltd.	80 King St. W., Toronto, Ont.	Louvicourt Tp.
/West Shore Gold Mines Ltd.	816 Keefer Bldg., Montreal	Abitibi Co.
/Wiltsey-Coglan Mines Ltd.	25 King St. W., Toronto, Ont.	Rouyn Tp.

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.(con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>ONTARIO</u>		
/Algold Mines Ltd.	45 Richmond St. W., Toronto,	Goudreau Dist.
Algoma Summit Gold Mines Ltd.	514 McKinnon Bldg., Toronto	Goudreau Dist.
/Alschbach Gold Mining Co. Ltd.	New Liskeard	Grenfell Tp.
Amalgamated Gold Fields Corp. Ltd.	1104 Northern Ontario Bldg., Toronto	Beatty Tp.
Anglo-Huronian Ltd.	80 King St. W., Toronto	Timmins
Ardeen Gold Mines Ltd.	132 St. James St. W., Montreal, Que.	Kashabowie
Ashley Gold Mining Corp. Ltd.	602/350 Bay St., Toronto	Bannockburn Tp.
/Bankfield Gold Mines Ltd.	1006 Concourse Bldg., Toronto	Errington Tp.
Barry-Hollinger Mines Ltd.	57 Bloor St. W., Toronto	Boston Creek
/Beatty-Waterloo Mines Ltd.	16 Cedar St. E., Waterloo	Beatty Tp.
/Bey Mines Ltd.	1601 Sterling Tower, Toronto	Eastern Ontario
Bidgood Kirkland Gold Mines Ltd.	32 Main St., Hamilton	Kirkland Lake
/Bilmac Gold Mines Ltd.	364 Bay St., Toronto	Shining Tree
/Bob Tough Gold Mines Ltd.	21 Main St. E., Hamilton	McKinnon Tp.
Buffalo Ankerite Gold Mines Ltd.	Box 1728, Buffalo, N. Y.	South Porcupine
/Canadian Reserve Mines Ltd.	306 C. P. R. Bldg., Toronto	Larder Lake
/Canusa Gold Mines Ltd.	416 Penobscot Bldg., Detroit, Mich., U.S.A.	Porcupine Area
Casey Summit Gold Mines Ltd.	465 Bay St., Toronto	Summit Lake
/Centennial Gold Mines Ltd.	Box 212, Blind River	Michipicoten
Central Canada Mines Ltd.	232 Grain Exchange, Winnipeg, Man.	Sapawe
Central Patricia Gold Mines Ltd.	1001 Federal Bldg., Toronto, Ont.	Patricia Dist.
Clark Gold Mines Ltd.	388 St. James St., Montreal, P.Q.	Dymont
/Coulson Cons. Gold Mines Ltd.	1104 Northern Ontario Bldg., Toronto	Matheson
/Concordia Gold Mining Co. Ltd.	276 St. James St. W., Montreal, P.Q.	Porcupine Dist.
Coniaurum Mines Ltd.	25 King St. W., Toronto	Schumacher
/Consolidated Mining & Smelting Co. of Canada, Ltd.	840 Dominion Square Bldg., Montreal, P.Q.	Cordova Mines
/Craig Gold Mines Ltd.	Box 179, Madoc	Hastings Co.
/Darwin Gold Mines Ltd.	703 - 357 Bay St., Toronto	Wawa
/Delnite Mines Ltd.	Box EX, Kirkland Lake	Timmins
/De Santis Gold Mining Co.	24½ Second Ave., Timmins	Ogden Tp.
Dikdik Exploration Co. Ltd.	941 Dominion Square Bldg., Montreal, P.Q.	Kinghorn
Dome Mines Ltd.	36 Toronto St., Toronto	South Porcupine
/Dumond Mining & Exploration Co Ltd,	Haileybury	Jellicoe
Duport Mining Co. Ltd.	Utilities Bldg., Port Arthur	Shoal Lake
/Erie Canadian Mines Ltd.	Box EX, Kirkland Lake	Kirkland Lake
/Excello Mines Ltd.	159 Bay St., Toronto	South Porcupine
/Federated Mining Corp. Ltd.	11 King St. W., Toronto	Tisdale Tp.
Foley Syndicate	57 Bloor St., Toronto	Mine Centre
/Four Nations Cons. Gold Mines, Ltd.	372 Bay St., Toronto	Kehogami Lake
/Fox Lake Gold Mines, Inc.	511 Liberty Bank Bldg., Buffalo, N.Y.	Michipicoten
/Gillies Lake Porcupine Gold Mines Ltd.	18 Toronto St., Toronto	Timmins
/Glenora Gold Mines, Ltd.	1005 Federal Bldg., Toronto	Kirkland Lake
/Golden Gate Mining Co. Ltd.	59 Yonge St., Toronto	Swastika
/Golden Summit Mines Ltd.	2374 Bloor St. W., Toronto	Sesekinika
/Gold Range Mines Ltd.	1604 Royal Bank Bldg., Toronto	Schreiber
/Halcrow Swayze Mines Ltd.	1821 Canadian Bank of Commerce Bldg., Toronto	Halcrow Tp.
/Har` Rock Gold Mines Ltd.	603 Royal Bank Bldg., Toronto	Little Long Lac

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934 (con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>ONTARIO - (con.)</u>		
/ Harwood Lake Mines Ltd.	21 King St. E., Toronto	Sudbury Dist.
/ Hislop Gold Mines Ltd.	503 - 357 Bay St., Toronto	Hislop Tp.
Hollinger Cons. Gold Mines Ltd.	Timmins	Timmins, Hislop Tp.
/ Horseshoe Mines Ltd.	302 Royal Bank Bldg., Toronto	Kenora Dist.
/ Howey Gold Mines Ltd.	717 Federal Bldg., Toronto	Red Lake
/ Hudson Patricia Gold Mines Ltd.	112 Yonge St., Toronto	Narrow Lake
/ Interlac Gold Ltd.	112 Dalhousie St., Brantford	Long Lac Dist.
/ Iroquois Kirkland Mines Corp. Ltd.	537 Ellicott Sq., Buffalo, N.Y., U.S.A.	Kirkland Lake
J-M Cons. Gold Mines Ltd.	1116 Federal Bldg., Toronto	Patricia Dist.
/ Kenora Prospectors & Miners Ltd.	Box 591, Kenora	Shoal Lake
/ Kirkland Gold Belt Mines Ltd.	156 Yonge St., Toronto	Kirkland Lake
Kirkland Lake Gold Mining Co. Ltd.	930 Canadian Bank of Commerce Bldg., Toronto	Kirkland Lake
/ Koch Daneff Gold Mines Ltd.	1104 Bank of Hamilton Bldg., Toronto	Jellicoe
/ Lafayette Long Lac Gold Mines Ltd.	200 Bay St., Toronto	Long Lac Dist.
/ Lake Caswell Mines Ltd.	1465 Yonge St., Toronto	Shining Tree Dist.
/ Lakeland Gold Ltd.	19 Sun Life Bldg., Hamilton	Maisonville Tp.
Lake Shore Mines Ltd.	Kirkland Lake	Kirkland Lake
/ Langmuir Longlac Gold Mines Ltd.	1005 Federal Bldg., Toronto	Little Long Lac Area
Lebel Oro Mines Ltd.	703 Northern Ontario Bldg., Toronto	Long Lake
/ Lee Gold Mines Ltd.	244 Bay St., Toronto	Greenlaw Tp.
Little Long Lac Gold Mines Ltd.	1331 Canadian Bank of Commerce Bldg., Toronto	Geraldton
/ Longlac Lagoon Gold Mines Ltd.	1005 Federal Bldg., Toronto	Little Long Lac Area
/ Lucky Kirkland Gold Mines Ltd.	215 - 159 Bay St., Toronto	Eby Tp.
/ McCuaig Red Lake Gold Mines Ltd.	347 Bay St., Toronto	Red Lake
/ McFarlane Long Lac Gold Mines Ltd.	1112 - 85 Richmond St. W., Toronto	Long Lac Dist.
McIntyre Porcupine Mines Ltd.	Box 12, Schumacher	Tisdale Tp.
/ Macjoe Sturgeon Gold Mines Ltd.	67 Yonge St., Toronto	Thunder Bay Dist.
/ McKenzie Red Lake Gold Mines Ltd.	507 National Bldg., Bay St., Toronto	Red Lake
McLaren-Porcupine Gold Mines Ltd.	Box 507, South Porcupine	Deloro Tp.
/ MacLeod-Cockshutt Gold Mines Ltd.	1001 Federal Bldg., Toronto	Geraldton
McMillan Gold Mines Ltd.	Sudbury	Mongowin Tp.
Macassa Mines Ltd.	85 Richmond St. W., Toronto	Kirkland Lake
/ May-Spiers Gold Mines Ltd.	919 - 159 Bay St., Toronto	Red Lake
/ Magnet Lake Gold Mines Ltd.	1005 Federal Bldg., Toronto	Little Long Lac Area
/ Makwa Champagne Gold Mines Ltd.	502 McKinnon Bldg., Toronto	Champagne Tp.
/ Manitoba & Eastern Mines Ltd.	1821 Canadian Bank of Commerce Bldg., Toronto	Strathy Tp.
Marbuan Gold Mines Ltd.	1730 Rand Bldg., Buffalo, N.Y., U.S.A.	South Porcupine
/ Margo Mines Ltd.	1302 Canadian Permanent Bldg., Toronto	Matachewan Dist.
Matachewan Cons. Mines Ltd.	2810 - 25 King St. W., Toronto	Matachewan Dist.
Minto Gold Mines Ltd.	Wawa	Wawa
Moffat Hall Mines Ltd.	Haileybury	Lebel Tp.
/ Murray Algoma Mining Co. Ltd.	1105 - 45 Richmond St. W., Toronto	Algoma Dist.
Munro Croesus Gold Mines Ltd.	Haileybury	Munro Tp.
/ Naybob Gold Mines Ltd.	808 - 85 Richmond St. W., Toronto	Porcupine Dist.
/ Northern Empire Mines Co. Ltd.	Empire	Beardmore
/ Northern Securities Co.	39 Bank of Toronto Bldg., London	Boston Creek, Mongowin Tp.

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934 (con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>ONTARIO - (concluded)</u>		
Northern Turnbull Gold Mines Ltd.	372 Bay St., Toronto	Turnbull Tp.
Parkhill Gold Mines Ltd.	1835 Beaver Hall Bldg., Montreal, P.Q.	Wawa
Paymaster Cons. Mines Ltd.	South Porcupine	S. Porcupine
/Pamour Porcupine Mines Ltd.	221 Notre Dame St. W., Montreal, P.Q.	Whitney Tp.
/Pickle Crow Gold Mines Ltd.	1406 Concourse Bldg., Toronto	Patricia Dist.
/Pleunik Mining Syndicate	6 Norton Ave., Toronto	Goward
/Plymouth Gold Mining Co. Ltd.	276 St. James St. W., Montreal, P.Q.	Rainy River Dist.
/Porcupine Peninsular Gold Mines Ltd.	80 King St. W., Toronto	Connaught
/Rahill Red Lake Mining Co. Ltd.	67 Yonge St., Toronto	Red Lake
/Richardson Gold Mines Ltd.	701 - 330 Bay St., Toronto	Savant Lake
/Rich Rock Gold Mines Ltd.	901 Star Bldg., Toronto	Lennox and Addington
/Rickard Raymore Gold Mines Ltd.	601 Concourse Bldg., Toronto	Rickard Tp.
St. Anthony Gold Mines Ltd.	159 Bay St., Toronto	Sturgeon Lake
Saundary Syndicate	Mine Centre	Rainy River Dist.
/Scott Gold Mining Syndicate	1405 - 302 Bay St., Toronto	Red Lake
/S. B. Smith Mine	Wawa	Wawa
Sol d'Or Gold Mine Ltd.	Narrow Lake	Narrow Lake
/Soocana Mining Co. Ltd.	450 Queen St. E., Sault Ste. Marie, Ont.	Algoma Dist.
/South McKenzie Island Mines Ltd.	1112 - 85 Richmond St. W., Toronto	Red Lake
Swayze Huycke Gold Mines Ltd.	910 Sterling Tower, Toronto	Cunningham Tp.
Sylvanite Gold Mines Ltd.	Box EX, Kirkland Lake	Kirkland Lake
/Tache Gold Syndicate Ltd.	Brandon, Man.	Dymont
/Talisman Gold Mines Ltd.	364 Bay St., Toronto	Guibord Tp.
/Tashota Goldfields Ltd.	706 - 100 Adelaide St. W., Toronto	Tashota
Teck-Hughes Gold Mines Ltd.	Kirkland Lake	Kirkland Lake
Toburn Gold Mines Ltd.	217 Bay St., Toronto	Kirkland Lake
/Wawa Gold Fields Ltd.	616 Canada Cement Bldg., Montreal, P.Q.	Wawa
/Wayne Sturgeon River Mining Syndicate	1821 Canadian Bank of Commerce Bldg., Toronto	Sturgeon River
/Wendigo Mines Ltd.	601 Ussher Bldg., Toronto	Kenora Dist.
/Wells Long Lac Mines Ltd.	171 Yonge St., Toronto	Geraldton
West Side Long Lac Mines Ltd.	372 Bay St., Toronto	Thunder Bay Dist.
Wright Hargreaves Mines Ltd.	Liberty Bank Bldg., Buffalo, N.Y., U.S.A.	Kirkland Lake
Young-Davidson Mines Ltd.	c-o Hollinger Mine, Timmins	Matachewan
<u>MANITOBA -</u>		
/Bailor Gold Mines, Ltd.	505 Union Trust Bldg., Winnipeg	Beresford Lake
/Black River Gold Mines	232 Curry Bldg., Winnipeg	Rice Lake
/Brooks God's Lake Gold Mines Ltd.	801 Bk. of Hamilton Bldg., Toronto, Ont.	God's Lake
Central Manitoba Mines Ltd.	Paris Bldg., Winnipeg	Wadhope
/Clover Gold Mines Ltd.	1207 McArthur Bldg., Winnipeg	Beresford Lake
/Cons. Goldfields of Manitoba Ltd.	941 Somerset Bldg., Winnipeg	Rice Lake
/Coupland Gold Mines Ltd.	67 Yonge St., Toronto, Ont.	Island Lake
Liane Gold Mines, Ltd.	67 Yonge St., Toronto, Ont.	Gem Lake
/Forty-Four Mines, Ltd.	237 Curry Bldg., Winnipeg	Rice Lake
/Gabrielle Mines, Ltd.	903 McArthur Bldg., Winnipeg	Bissett
/Garry God's Lake Mines, Ltd.	204 Royal Bk. Bldg., Toronto, Ont.	God's Lake

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934. (con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>MANITOBA (concluded) -</u>		
/God's Lake Gold Mines, Ltd.	395 Main St., Winnipeg	God's Lake
/Gunnar Gold Mines, Ltd.	2001 Star Bldg., Toronto, Ont.	Beresford Lake
/Highland Enterprise Mining Co. Ltd.	505 Huron & Erie Bldg., Winnipeg	Falcon Lake
Island Lake Mines, Ltd.	395 Main St., Winnipeg	Island Lake
/Jowsey Island Gold Mines, Ltd.	395 Main St., Winnipeg	God's Lake
/Kiskoba Mining Co. Ltd.	Winnipeg	Herb Lake
/Knee Lake Gold Mines, Ltd.	395 Main St., Winnipeg	God's Lake
/Laguna Gold Mines, Ltd.	602-350 Bay St., Toronto, Ont.	Herb Lake
/Lake Maron Gold Mines Ltd.	1005 Federal Bldg., Toronto, Ont.	Reed Lake
/Little God's Lake Synd. Ltd.	1116 Federal Bldg., Toronto, Ont.	God's Lake
/Mandalay Gold Mines, Ltd.	205 Enderton Bldg., Winnipeg	Beresford Lake
/Manco Gold Mines, Ltd.	Lumsden Bldg., Toronto, Ont.	Elbow Lake
/Maskwa Lake Gold Mines Ltd.	701 Great West Permanent Bldg. Winnipeg	Maskwa Lake
/Midfield Gold Mines, Ltd.	504 Kensington Bldg., Winnipeg	Rice Lake
/Normandy Gold Mines, Ltd.	601 Union Trust Bldg., Winnipeg	Rice Lake
Oro Grande Development Co. Ltd.	1207 McArthur Bldg., Winnipeg	Beresford Lake
/Oro Plata Mining Co. Ltd.	1005 Federal Bldg., Toronto, Ont.	Reed Lake
/Packsack Mines, Ltd.	395 Main St., Winnipeg	Rice Lake
/Ranger Gold Mines, Ltd.	941 Somerset Bldg., Winnipeg	Rice Lake
San Antonio Gold Mines Ltd.	237 Curry Bldg., Winnipeg	Rice Lake
/Scattergood Manitoba Gold, Ltd.	201 Somerset Bldg., Winnipeg	Beresford Lake
/Scotia Gold Mines, Ltd.	290 Garry St., Winnipeg	Beresford Lake
/Smelter Gold Mines, Ltd.	1104 Bk. of Hamilton Bldg., Toronto, Ont.	God's Lake
/Stevenson Lake Gold Mines, Ltd.	395 Main St., Winnipeg	Stevenson Lake
/Tinney Lake Gold Mines, Ltd.	362 Main St., Winnipeg	Vadhope
/Vanson Manitoba Gold Mines, Ltd.	610 McArthur Bldg., Winnipeg	Rice Lake
/Wallace Lake Gold Mines, Ltd.	403 Scott Block, Winnipeg	Rice Lake
/Wingold Mines, Ltd.	403 McIntyre Bldg., Winnipeg	Bissett
/Wylie Dominion Gold Mines Ltd.	2200 Sterling Tower, Toronto, Ont.	Wylie Station
<u>SASKATCHEWAN -</u>		
/Cons. Mining & S. Co. of Can. Ltd.	Trail, B. C.	Amisk Lake
/Flin Flon Gold Mining Synd. Ltd.	601 Avenue Blk., Winnipeg, Man.	Douglas Lake
/Great Bear Lake Mines, Ltd.	601 Ussher Bldg., Toronto, Ont.	Athabasca Lake
/Wekach Lake Gold Mines, Ltd.	290 Garry St., Winnipeg, Man.	Wekech Lake
<u>BRITISH COLUMBIA</u>		
Alma N. Mining Co.	511 Fidelity Bldg., Tacoma, Wash.	Nelson Div.
Ashloo Gold Mining Synd.	411 Bank of N. S. Bldg., Vancouver	Squamish
/Atlin-Ruffner Mines Ltd.	1405 Trusts & Guarantee Bldg., Toronto	Atlin Lake
/B. C. Cariboo Gold Fields	1824 Marine Bldg., Vancouver	Moyie
/Blue Jack Mines Ltd.	706 Metropolitan Bldg., Vancouver	McGuire
Blue Hawk Gold Mines Synd.	2083 Byron St., Victoria	Kelowna
/Bredian Mines Ltd.,	555 Burrard St., Vancouver	Lillooet Dist.
Bralorne Mines Ltd.	555 Burrard St., Vancouver	Bralorne
Bunker Hill Gold Mines Ltd.	Nelson	Nelson
/B. R. X. Gold Mines Ltd.	816 Hall Bldg., Vancouver	Lillooet Dist.
/Buena Vista Mining Co. Ltd.	Trail	Stewart
/Camp McKinney Gold Hill Mining Co. Ltd.	703 Dominion Bank Bldg., Vancouver	Yale Dist.

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.(con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
BRITISH COLUMBIA - continued		
Caroni Gold Mines Ltd.	804 Standard Bank Bldg., Vancouver	Caroni
/Canada Smelters Ltd.	Sanca	Sanca
Cariboo Gold Quartz Mining Co. Ltd.	615 Bower Bldg., Vancouver	Wells
/Cariboo Yankee Belle Mining Co. Ltd.	425 Standard Bank Bldg., Vancouver	Keithley
/Chilco Explorations Ltd.	918 Rogers Bldg., Vancouver	Tatlayoco Lake
Clubine Comstock Gold Mines Ltd.	Nelson	Boulder Creek
Columario Cons. Gold Mines Ltd.	1010 Kent Bldg., Toronto, Ont.	Usk
/Cons. Mining & S. Co. of Can. Ltd.	Trair	Fish Lake
		Upper Salmon Val
Danzig Mines Ltd.	Nootka	Nootka Sound
Dawson Cons. Gold Mines Ltd.	716 Hall Bldg., Vancouver	Jessica
Dentonia Mines Ltd.	200 Lancaster Bldg., Calgary	Greenwood
/Dictator Gold Mines Ltd.	Penticton	Edgewood
/Durango Gold Mines Ltd.	712 Standard Bank Bldg., Vancouver	Nelson
Dynamo Mining & Milling Co. Ltd.	1927 Marine Bldg., Vancouver	Greenwood
Engineer Mine (R. Brook)	Mining Corp. of Can., 350 Bay St., Toronto, Ont.	Atlin
Euphrates Mining Co. Ltd.	Box 677, Nelson	Nelson
/Fairview Amalgamated Gold Mines Ltd.	208 Pacific Bldg., Vancouver	Osoyoos Div.
/Foster Ledge Gold Mines Ltd.	816 Hall Bldg., Vancouver	Cariboo Dist.
/Frances Gold Mines Ltd.	210 Pemberton Bldg., Victoria	Bridge River
		Kamloops
/Gem Gold Mines Ltd.	955 Thurlow St., Vancouver	Texada Island
Gold Belt Mining Co. Ltd.	Box 544, Nelson	Salmo
/Goldfinch Gold Mines Ltd.	620 Pemberton Bldg., Victoria	Camborne
/Gold Standard Mining Co. Ltd.	Penticton	Fairview Dist.
Good Hope Mine	Box 1089, Nelson	Nelson
Granby Cons. M. S. & P. Co. Ltd.	Hall Bldg., Vancouver	Granby Point
/Grull-Wihksne Gold Mines Ltd.	1007 Royal Bank Bldg., Vancouver	Bridge River Dist.
/Gun Lake Gold Mines Ltd.	816 Hall Bldg., Vancouver	Lillooet Dist.
Grandoro Mines Ltd.	Box 474, Penticton	Osoyoos Div.
Grange Mines Ltd.	Burrard St., Vancouver	Clinton
/Haide Gold Mines Ltd.	612 Standard Bank Bldg., Vancouver	Queen Charlotte Islands
Hercules Cons. M. S. & P. Co. Ltd.	618 Vancouver Block, Vancouver	Nanaimo Dist.
Home Gold Mining Co. Ltd.	614 Rogers Bldg., Vancouver	Jessica
/Ideal Gold & Nickel Mines Ltd.	612 Vancouver Block, Vancouver	Yale Dist.
Imperial Leasing Synd.	Rock Creek	Greenwood
Island Mt. Mines Co. Ltd.	744 West Hastings St., Vancouver	Cariboo Div.
I. X. L. Leasors Ltd.	Rossland	Rossland
/Jenny Long Gold Mines	547 Howe St., Vancouver	Nicola Div.
/Kelowna Exploration Co. Ltd.	Hedley	Hedley
Kennedy Lake Gold Mines Ltd.	1214 Broad St., Victoria	Kennedy Lake Dist.
Kootenay Belle Gold Mines Ltd.	470 Granville St., Vancouver	Salmo
/Kootenay Nevada Mines Ltd.	1012 Royal Bank Bldg., Vancouver	Nelson
/Lillooet Lake Mining Co. Ltd.	North Bend	Fire Mountain
Livingstone Mining Co. Inc.	Taghum	Taghum
/Lytton Gold Mines Ltd.	1110 E. 15th Ave., Vancouver	Lytton
Mak Siccar Gold Mines Ltd.	124 Pacific Bldg., Vancouver	Similkameen
/Martel Gold Mines Ltd.	607 Standard Bank Bldg., Vancouver	Ashcroft Div.
McArthur, W. E. Jr.	Box 629, Greenwood	Greenwood and Grand Forks Divs
Mc aniel, E. H.	Box 180, Nelson	Trout Lake

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934.(con.)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
BRITISH COLUMBIA - continued		
/ Meridian Mining Co. Ltd.	555 Howe St., Vancouver	Lardeau Dist.
Midnight Syndicate	Midnight Mine, Rossland	Rossland
Minto Gold Mines Ltd.	Bridge River	Lillooet Dist.
/ Mix Gold Mines Ltd.	414/789 West Pender St., Vancouver	Bridge River
/ Monashee Mines Synd. Ltd.	312 Pacific Bldg., Vancouver	Greenwood M.D.
Morning Star Gold Mines Ltd.	840 West Hastings St., Vancouver	Oliver
/ National Gold Mines Ltd.	502 Pacific Bldg., Vancouver	McGillivray Falls
Nicola Mines & Metals Ltd.	210/602 Hastings St. W., Vancouver	Stump Lake
Noble Five Mines Ltd.	420 Baker St., Nelson	Sandon & Nelson
/ Northern Reef Gold Mines Ltd.	704 Bank of Toronto Bldg., Victoria	Omineca M.D.
O. K. Leasing Syndicate	Box 167, Rossland	Rossland
Oscarson Bros.	Erie	Nelson M.D.
/ Osoyoos Mines Ltd.	105a, 8th Ave. W., Calgary, Alta.	Osoyoos
/ Pacific Eastern Gold Ltd.	Pacific Bldg., Vancouver	Pioneer
/ Pacific Golden West Synd.	34/553 Granville St., Vancouver	Bridge River
Patterson, T. F.	Refuge Bay	Skeena Div.
/ Phillips Arm Cons. Mines Ltd.	475 Howe St., Vancouver	Port Neville
Pickering, B. A.	Box 857, Nelson	West Kootenay
Pioneer Gold Mines Ltd.	605 Rogers Bldg., Vancouver	Lillooet Dist.
Precambrian Gold Mines	Smith Tower, Seattle, Wash.	Ewings Landing
Premier Gold Mining Co. Ltd.	Royal Trust Bldg., Vancouver	Portland Canal
/ Proserpine Gold Mines Ltd.	502 Pacific Bldg., Vancouver	Barkerville
/ Quesnelle Quartz Mining Co. Ltd.	1000 Hall Bldg., Vancouver	Hixon
/ Radio Gold Mines Ltd.	612 Vancouver Blk., Vancouver	Omineca M.D.
/ Reliance Gold Mines Ltd.	1308 Northern Life Tower, Seattle, Wash.	Bridge River
Relief-Arlington Mines Ltd.	Erie	Nelson M.D.
Reno Gold Mines Ltd.	Yorkshire Bldg., Vancouver	Salmo
Robertson, H. W.	Box 1133, Nelson	Nelson M.D.
/ Saddle Mines Ltd.	c/o Britannia M. & S. Co., Britannia Beach	Quesnel M.D.
Salmo-Malartic Ltd.	608/159 Bay St., Toronto, Ont.	Nelson M.D.
/ Standard Gold Mines Ltd.	716 Hall Bldg., Vancouver	Bridge River
Superior Gold Mines Ltd.	614 Stock Exchange Bldg., Vancouver	Greenwood
/ Sunloch Mines Ltd.	Trail	Jordan River
Surf Point Mine (N. A. Timmins Corp.)	1010 Canada Cement Bldg., Montreal, Que.	Porcher Island
Taylor, J. E. (Republic)	32 Fairfield Bldg., Vancouver	Greenwood
Taylor Windfall Gold Mining Co. Ltd.	102 Pacific Bldg., Vancouver	Clinton M.D.
/ Trites Gold Mining Co. Ltd.	608 Pacific Bldg., Vancouver	Ymir
Turner, T. H.	Columbia Gardens	Nelson M.D.
Twin Lakes Gold Mining Co. Ltd.	Penticton	Fairview Dist.
Union Mine (J. F. McCarthy)	Grand Forks	Grand Forks
Vancouver Island Gold Mines Ltd.	678 Howe St., Vancouver	Alberni
Velvet Gold Mining Co.	1309, 7th Ave., Seattle, Wash.	Rossland
Victoria Fairview Mines Ltd.	823 W. Hastings St., Vancouver	Oliver
Vidette Gold Mines Ltd.	312 Pacific Bldg., Vancouver	Savona
/ Viking Gold Mines Ltd.	712 Standard Bank Bldg., Vancouver	Fairview Dist.
Walters, Williamson & Wanke	Greenwood	Greenwood M.D.
Waterloo Gold Mines Ltd.	Penticton	Lightning Peak
Wayside Cons. Gold Mines Ltd.	Wayside via Bridge River	Lillooet Div.
/ Wesko Exploration and Development Co. Ltd.	816 Hall Bldg., Vancouver	Nelson M.D.

PRINCIPAL OPERATORS IN CANADIAN AURIFEROUS QUARTZ MINING INDUSTRY, 1934. (concluded)

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>BRITISH COLUMBIA - concluded</u>		
/ Widdowson, E. W.	Nelson	Ymir
Wilcox Mining Synd.	Box 205, Rossland	Ymir
Wilson Mining & Investment Co. Ltd.	506 Pacific Bldg., Vancouver	Smithers
Windpass Gold Mining Co. Ltd.	744 Hastings St., Vancouver	Chu Chua
Ymir Cons. Gold Mines Ltd.	716 Hall Bldg., Vancouver	Ymir
Ymir Dundee Gold Mining Co. Ltd.	Box 246, Nelson	Ymir
Ymir Yankee Girl Gold Mines Ltd.	Ymir	Nelson M.D.
<u>NORTHWEST TERRITORIES -</u>		
/ Burwash Yellow Knife Mines Ltd.	1112/85 Richmond St. W., Toronto, Ont.	Yellow Knife River
<u>YUKON -</u>		
/ Timmins Corp., N. A.	1010 Canada Cement Bldg., Montreal, Que.	Carmacks

~~/~~ Active but not producing.

(x) In addition to the operators listed there were numerous active properties for which official returns were not received.

NOTE - Complex auriferous-sulphide ores that are mined essentially for their gold content are largely classified in this report under auriferous quartz.

OPERATORS IN CANADIAN COPPER-GOLD-SILVER MINING INDUSTRY, 1934.

<u>Name</u>	<u>Head Office Address</u>	<u>Location</u>
<u>QUEBEC</u> -		
Aldermac Mines Ltd.	941 Dominion Sq. Bldg., Montreal	Arntfield
✓ Astoria Rouyn Mines Ltd.	74 St. Paul St., Quebec	Rouyn
✓ Bagamac Rouyn Mines Ltd.	Haileybury, Ont.	Rouyn
✓ Carlson Copper Synd.	New Liskeard, Ont.	Dugay Tp.
✓ Clericy Cons. Mines Ltd.	74 Sparks St., Ottawa, Ont.	Clericy Tp.
Consolidated Copper & Sulphur Co.	Eustis	Eustis
✓ Cons. Mining & S. Co. of Can. Ltd.	Dominion Sq. Bldg., Montreal	Chibougamau
Noranda Mines Ltd.	804 Royal Bank Bldg., Toronto, Ont.	Rouyn
✓ Normetal Mining Corp. Ltd.	350 Bay St., Toronto, Ont.	✓ Chibougamau
✓ Opemiska Copper Mines Ltd.	25 King St. E., Toronto, Ont.	Desmeloizes Tp.
✓ Prospectors Airways Ltd.	80 King St. W., Toronto, Ont.	Opemiska Lake
✓ Robb-Monthray Mines Ltd.	85 Richmond St. W., Toronto, Ont.	various claims
✓ Syndicate Minier de Gaboury	Guigues	Monthray Tp.
		Gaboury Tp.
<u>MANITOBA AND SASKATCHEWAN</u> -		
Hudson Bay Mining & Smelting Co. Ltd.	Woodstock, Ont.	Flin Flon
<u>BRITISH COLUMBIA</u> ^x -		
Britannia Mining & Smelting Co. Ltd.	Britannia Beach	Vancouver M.D.
Granby Cons. M. S. & P. Co. Ltd.	Hall Bldg., Vancouver	Anyox

^x In addition to the companies listed there were numerous operators working under lease on the LeRoy, Centre Star and other mines.

✓ Active but not producing.

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