# Minister of Mines

PROVINCE OF BRITISH COLUMBIA

---

# ANNUAL REPORT

For the Year Ended 31st December

1955

VICTORIA, B.C.
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1956

**BRITISH COLUMBIA DEPARTMENT OF MINES**

VICTORIA, B.C.

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*To His Honour* FRANK MACKENZIE ROSS, C.M.G., M.C.,
*Lieutenant-Governor of the Province of British Columbia.*

MAY IT PLEASE YOUR HONOUR:

The Annual Report of the Mining Industry of the Province for the year 1955 is herewith respectfully submitted.

W. K. KIERNAN,
*Minister of Mines.*

*Minister of Mines' Office.*
*May, 1956.*

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# ANNUAL REPORT OF THE MINISTER OF MINES, 1955

## Introduction

A Report of the Minister of Mines of the Province of British Columbia has been published each year since 1874.

The Annual Report records the salient facts in the progress of the mineral industry, also much detail about individual operations, including those undertaken in the search for, exploration of, and development of mineral deposits, as well as the actual winning of material from mineral deposits.

The Annual Report of the Minister of Mines now contains introductory sections dealing with Statistics and Departmental Work, followed by sections dealing with Lode Metals; Placer; Structural Materials and Industrial Minerals; Petroleum and Natural Gas; Inspection of Lode Mines, Placer Mines, and Quarries; Coal; and Inspection of Electrical Equipment and Installations at Mines and Quarries, each with its own table of contents. A table listing the properties described, in geographic groupings, precedes the index.

An introductory review of the mineral industry and notes at the first of several of the main sections deal generally with the industry or its principal subdivisions. Notes in the various sections deal briefly with exploration or production operations during the year or describe a property in more complete detail, outlining the history of past work and the geological setting as well as describing the workings and the mineral deposits exposed in them. Some notes deal with areas rather than with a single property.

The work of the branches of the Department is outlined briefly in the section on Departmental Work. This section is followed by notes dealing briefly with the work of the British Columbia or Federal Government services of particular interest to the mineral industry of British Columbia. Information concerning mine operations and some of the activities of the Inspection Branch of the Department of Mines is contained in the section on Inspection of Lode Mines, Placer Mines, and Quarries, early in the section on Coal and in the section on Inspection of Electrical Equipment and Installations at Mines and Quarries.

The section on Statistics begins with an outline of current and past practice in arriving at quantities and calculating the value of the various products.

# Review of the Mineral Industry in British Columbia, 1955

By Hartley Sargent

The mineral production of British Columbia in 1955 had a value of $174,710,606, exceeded only by the record value of $175,613,693 reached in 1951. The 1955 value exceeds that of 1954 by $21,000,000, reflecting higher prices for all the principal metals, a substantial increase in the output of zinc, and increased values for miscellaneous metals, industrial minerals, and structural materials. The value for fuel is somewhat less than in 1954; it is derived dominantly from coal but includes production of some natural gas.

The mint price for newly mined Canadian gold* was higher in 1955 than in 1954 because the United States dollar was at a lesser discount. The prices for the other principal metals were greater than in 1954 by the following approximate percentages: Silver, 5.9; lead, 9.1; zinc, 15.4; and copper, 31.5. The 1955 copper price was an all-time record. The prices for silver, lead, and zinc, although higher than in 1954, were well below the 1951 prices.

The quantities of gold, silver, copper, and lead were less than in 1954, but the quantity of zinc was materially greater than in 1954 or any previous year. The combination of quantity and price gave values for gold and silver that were somewhat below the 1954 values, and a value for lead about equal to the 1954 value, whereas copper and zinc greatly exceeded their 1954 values but did not reach the records set for copper in 1929 and for zinc in 1951. The values for precious metals were below those of recent years, but the increased values for zinc and copper offset this decline and gave the principal metals group a value well above that reached in any previous year except 1951 and 1952.

Most of the increase in output of zinc was zinc recovered by " fuming " current and reclaimed slags at the Trail smelter, which is in the tables as " not assigned " (*see* Table VIIB). Next in volume was the increase from the Nelson Mining Division, reflecting the beginning of production from the H.B. mine in May, the resumption of production at the Reeves MacDonald mine in October, and substantially increased production from the Jersey mine. Increased output from the Golden, Revelstoke, and Slocan Mining Divisions stemmed mainly from the increased output of the Mineral King, Spider, and Bluebell mines. Along with the increases in zinc from the mines named went increased production of lead and silver that partly offset the decreased output of these metals from the Fort Steele Mining Division.

The year witnessed the closing of the historic Nickel Plate mine at Hedley. In two periods, 1904 to 1931 and 1931 to 1955, this mine produced gold valued at more than $37,000,000; that is, about 9 per cent of the British Columbia lode-gold production to date.

The value of miscellaneous metals in 1955 was higher than in 1954 but lower than in 1953. The 1955 figure reflects record production of cadmium and indium, both recovered as by-products at the Trail smelter. Antimony also had a value materially higher than in 1954, but bismuth, iron, tin, and tungsten were somewhat lower than in 1954. The value for the group, although greater than in 1954, was less than in 1953, when the iron output was 50 per cent higher and was valued at more than twice the 1955 figure. The increases in sales of by-product metals recovered at the Trail smelter are noteworthy. Increases were recorded for antimony (as antimonial lead), cadmium, and indium. Indium production was 104,744 ounces, valued at $232,389 in 1955, the first

* Prices are averages for the year, in Canadian funds, unless otherwise stated. The prices for the principal metals and coal are listed on page A 16.

year that production has exceeded 7,000 ounces or a value of $15,000. This metal has very specialized uses, including use in superior bearings.

In the lode-mining field, exploration interest was focused most strongly on copper, and in addition to the continued exploration campaign on the Granduc property there was much activity elsewhere, including Vancouver Island, the Highland Valley-Kamloops-Nicola area, the old Boundary camp, and the Hope-Princeton area. Exploration and development of silver-lead-zinc deposits was at a satisfying level and produced encouraging results at Ainsworth and Silverton, at properties in the Golden Mining Division, and at the Highland-Bell mine at Beaverdell.

Dividends from lode-metal operations amounted to $34,823,111. Two lode-mining companies, Canadian Exploration Limited and Yale Lead & Zinc Mines Limited, distributed dividends for the first time.

The 1955 value for industrial minerals was higher than for any previous year because of record output of asbestos, sulphur, and barite. Structural materials also exceeded their value for any previous year, reflecting increases in most items, notably common brick, firebrick and blocks, cement, and lime and limestone. The materially increased output of common brick is in noteworthy contrast to that of the preceding few years, in which it might appear that concrete brick and clay brick imported from Alberta had largely replaced British Columbia common brick.

The output of coal was greater than in 1954, but reduced output of higher-priced coal from Vancouver Island and Bulkley Valley and increased output of low-priced coal from the Princeton-Merritt area resulted in a lower average price per ton in 1955, even though three-quarters of the output came from the Crowsnest Pass area, where the price was unchanged.

Statistics for the commercial production of natural gas in British Columbia are published for the first time in this Report. The production reported is of natural gas sold in Fort St. John, where commercial distribution was started in 1954.

Search for oil and gas continued to be pressed by many companies that undertook geological and geophysical work and the drilling of wells.

Most of the drilling was done in northeastern British Columbia. Drilling operations in that part of the Province extended from the Lone Mountain area to the Fort Nelson area, although most wells were located north of the Peace River in the Fort St. John district.

Texaco N.F.A. Boundary Lake 1, near the British Columbia-Alberta boundary north of the Peace River, was completed in February, 1955, as the first commercial oil well in British Columbia.

The successful completion of gas wells indicated the discovery of six new gas areas, namely, Cameron River, Milligan Creek, Paddy, Doig River, Bougie Creek, and North Blueberry.

Construction of a pipe-line to bring natural gas from northeastern British Columbia and near-by Alberta to the major British Columbia markets has been contingent upon finding a market for a substantial volume of gas in northwestern United States. In the latter part of 1955, after a long period of negotiations, the United States Federal Power Commission approved importation into the northwestern United States of 300 billion cubic feet of natural gas daily. The pipe-line proposal has been under study for several years, and construction was started before the end of 1955 on building a 650-mile 30-inch pipe-line from Dawson Creek to the Vancouver area for Westcoast Transmission Company Limited. Westcoast is a Canadian company with head office in Calgary. Completion of the pipe-line is expected in 1957.

Construction of the pipe-line with its pumping stations, and with plants for removing sulphur and liquid fractions, will be a tremendous undertaking. Assurance of market for gas will undoubtedly result in an intensified exploration programme in the northeastern part of the Province.

The average number employed throughout 1955 in placer, lode, coal, industrial-mineral, and structural-material mining was 14,102. Major expenditures by those branches of the industry included: Salaries and wages, $50,892,369; fuel and electricity, $5,401,548; process supplies, $24,598,773; Federal taxes, $18,591,258; Provincial taxes, $4,476,066; municipal and other taxes, $907,645; levies for workmen's compensation (including silicosis), unemployment insurance, and other items, $1,647,642. Dividends amounted to $35,071,583. The lode-mining industry spent $30,696,044 in freight and treatment charges on ores and concentrates. Expenditure in exploration for petroleum and natural gas in 1955 was $8,529,964.

# Statistics

The statistics of the mineral industry are collected and compiled and the statistical tables for this Report are prepared by the Bureau of Economics and Statistics, Department of Trade and Industry.

In the 1951 Report, extensive rearrangements of tables and of their order were made. The tables in the present Report closely parallel those presented in Reports for years preceding 1951, but additional details have been incorporated, and the present order is considered to make more apparent the relationship between summary tables and the tables giving the details summarized.

## METHOD OF COMPUTING PRODUCTION

The tables of statistics recording the mineral production of the Province for each year are compiled from certified returns made by the operators, augmented by some data obtained from the Royal Canadian Mint (Assay Office) and from the operators of customs smelters. The value of each mineral product, in Canadian funds, is calculated at the average price for the year (*see* p. A 16). The quantities of metals are net after making deductions for losses in smelting and refining.

### METALS

Prior to 1925 the average prices for gold and copper are true average prices, but, as a means of correcting for losses in smelting and refining, the prices of other metals were taken at the following percentages of the year's average price for the metal: Silver, 95 per cent; lead, 90 per cent; and zinc, 85 per cent. For 1925 and subsequent years the value has been calculated using the true average price and the net metal contents, in accordance with the procedures adopted by the Dominion Bureau of Statistics and the co-operating Provincial Departments of Mines.

Beginning with the Annual Report for 1948, production figures for individual lode-mining operations are the assay contents of the products shipped (ore, concentrates, or bullion), no deductions being made for losses in smelting and refining. In previous Annual Reports the production figures given for individual properties are net, after deductions for smelting and refining losses.

#### *Placer Gold*

The data on placer-gold production were very largely obtained from the Gold Commissioners until 1925. The value of placer gold in dollars is now obtained from returns received annually from the operators. At the old standard price, $20.67 per ounce of fine gold, $17 was regarded as a close approximation of the average value per ounce of crude placer gold produced in British Columbia. Dividing the production reported in dollars by 17 gave the equivalent in crude ounces. The average value $17 per ounce is equivalent to a fineness of 822½. Beginning with 1932 the average value per crude ounce has been based on the same fineness but has recognized the varying price of gold. The average price per ounce of crude placer gold for the year is listed on page A 16.

#### *Lode Metals, Gross and Net Contents*

The gross contents are the gold and silver contents of bullion and for ores and concentrates the total assay contents, obtained by multiplying the assay by the weight. The quantities for gold, silver, copper, lead, and zinc in Table XV and in "Notes on Metal Mines" are gross.

Calculations of the value of production are based on the total assay content for gold and on net content for the other principal metals. These are: in lead ores and

concentrates and zinc concentrates, for silver 98 per cent, lead 95 per cent, and zinc 85 per cent of the total assay content; and in copper concentrates, 95 per cent of the silver and the total assay content of copper less 10 pounds per ton of concentrates. Quantities for silver, lead, zinc, and copper in Tables I to VIII, inclusive, are net.

### *Average Metal Prices*

In the interests of uniformity the Statistical Bureaux of the Provinces and the Dominion Bureau of Statistics use the same average metal prices in valuing mineral production. Up to and including the year 1939 the prices used in evaluating metal and mineral production were:—

Gold and silver: The average United States price for the year, as quoted in the Engineering and Mining Journal, converted into Canadian funds at the average exchange rate.

Copper, lead, and zinc: For lead and zinc, the average London Metal Market prices for the year converted into Canadian funds at the average exchange rate; for copper, until 1932 the New York price for copper was used, thereafter the average London Metal Market price was used.

Suspension of trading on the London Metal Exchange in September, 1939, and the controls of metals during the war years necessitated changes from the procedures which had been followed.

The method of arriving at the price for gold continued unchanged, but the prices for the metals controlled were those set by the Canadian Metals Controller. In 1945 the controls were largely removed from sales but not from prices. Control of metal prices ended on June 6th, 1947. For 1945 and subsequent years the prices are those computed by the Dominion Bureau of Statistics, using information supplied by the principal Canadian refiners of silver and the base metals.

In the period 1945–47 the prices received for silver, lead, and zinc sold for use in Canada were substantially less than the prices received for these metals exported to the United States. The prices for silver in 1945 and 1946 and for copper, lead, and zinc in 1946 and 1947 are weighted averages, taking into consideration sales in Canada at the ceiling prices and sales abroad at New York prices converted into Canadian funds.

Prices are now arrived at by the methods as given in the footnotes to table of average prices on page A 16.

## FUEL

### *Coal*

In 1926 a change was made in computing coal and coke statistics. The practice in former years had been to list as coke production only the coke made in bee-hive ovens, the coal used in making it not being listed; coke made in by-product ovens was not listed as coke, but the coal used in making this coke was credited as coal production. The result was that both the coal and the coke production figures were incomplete. Starting with the 1926 Annual Report, the standard practice of the Bureau of Statistics, Ottawa, was adopted. This consists of crediting all coal produced, including that used in making coke, as primary mine production. Coke-making is considered a manufacturing industry. As the data are of interest to the mining industry, Table X is included in the Report to show the total coke produced in the Province, together with by-products, and the values given by the producers. The pre-1926 data have now been reworked and brought into conformity with current practice. Table IXA lists the full mine output (gross) produced and its net value, and these figures are incorporated in Table I, in the total mine production for the Province. Table X gives the complete data for coke, gas, and by-products manufacture for the period 1895 to 1925, and for each year subsequent to 1925.

Up to and including the year 1947, production was recorded in long tons (2,240 pounds). Beginning in 1948, production is given in short tons (2,000 pounds). The quantity of coal produced in the preceding years has been recalculated in short tons.

The average price for coal, listed year by year (*see* p. A 16), is the total value divided by the quantity. Up to and including 1945, the quantity is the gross mine output; for 1946 and subsequent years, the quantity is the quantity sold and used. For 1946 and subsequent years, the value (Tables I, III, VIIA, IXA, IXB, and IXC) is the amount realized from sales of coal, at colliery loading points, plus the colliery valuation of coal used under companies' boilers and in making coke. For 1946 and subsequent years the quantity sold and used is shown in Table IXC. "Use" includes coal used under company stationary and locomotive boilers, and used in making coke. Washery loss and changes in stocks, year by year, are shown in the table "Collieries of British Columbia, Production and Distribution by Collieries and by Districts," page 132 of this Report.

*Natural Gas*

Commercial production of natural gas began in 1954. The production shown in Tables I, III, VIIA, and VIIIA is gas sold in Fort St. John in 1954 and 1955. The figures are compiled from the Crown royalty statements filed monthly with the Department of Mines by the producer. The quantity is reported as thousands of cubic feet at standard conditions (14.4 pounds per square inch pressure, 60° F. temperature).

## AVERAGE PRICES USED IN VALUING PROVINCIAL PRODUCTION OF GOLD, SILVER, COPPER, LEAD, ZINC, AND COAL

| Year | Gold,[1] Crude, Oz. | Gold, Fine, Oz. | Silver, Fine, Oz. | Copper, Lb. | Lead, Lb. | Zinc, Lb. | Coal, Short Ton |
|---|---|---|---|---|---|---|---|
| | $ | $ | Cents | Cents | Cents | Cents | $ |
| 1901 | 17.00 | 20.67 | 56.002 N.Y. | 16.11 N.Y. | 2.577 N.Y. | ..... | 2.679 |
| 1902 | ..... | ..... | 49.55 ,, | 11.70 ,, | 3.66 ,, | ..... | ..... |
| 1903 | ..... | ..... | 50.78 ,, | 13.24 ,, | 3.81 ,, | ..... | ..... |
| 1904 | ..... | ..... | 53.36 ,, | 12.82 ,, | 3.88 ,, | ..... | ..... |
| 1905 | ..... | ..... | 51.33 ,, | 15.59 ,, | 4.24 ,, | ..... | ..... |
| 1906 | ..... | ..... | 63.45 ,, | 19.28 ,, | 4.81 ,, | ..... | ..... |
| 1907 | ..... | ..... | 62.06 ,, | 20.00 ,, | 4.80 ,, | ..... | 3.125 |
| 1908 | ..... | ..... | 50.22 ,, | 13.20 ,, | 3.78 ,, | ..... | ..... |
| 1909 | ..... | ..... | 48.93 ,, | 12.98 ,, | 3.85 ,, | ..... | ..... |
| 1910 | ..... | ..... | 50.812 ,, | 12.738 ,, | 4.00 ,, | 4.60 E. St. L. | ..... |
| 1911 | ..... | ..... | 50.64 ,, | 12.38 ,, | 3.98 ,, | 4.90 ,, | ..... |
| 1912 | ..... | ..... | 57.79 ,, | 16.341 ,, | 4.024 ,, | 5.90 ,, | ..... |
| 1913 | ..... | ..... | 56.80 ,, | 15.27 ,, | 3.93 ,, | 4.80 ,, | ..... |
| 1914 | ..... | ..... | 52.10 ,, | 13.60 ,, | 3.50 ,, | 4.40 ,, | ..... |
| 1915 | ..... | ..... | 47.20 ,, | 17.28 ,, | 4.17 ,, | 11.25 ,, | ..... |
| 1916 | ..... | ..... | 62.38 ,, | 27.202 ,, | 6.172 ,, | 10.88 ,, | ..... |
| 1917 | ..... | ..... | 77.35 ,, | 27.18 ,, | 7.91 ,, | 7.566 ,, | ..... |
| 1918 | ..... | ..... | 91.93 ,, | 24.63 ,, | 6.67 ,, | 6.94 ,, | 4.464 |
| 1919 | ..... | ..... | 105.57 ,, | 18.70 ,, | 5.19 ,, | 6.24 ,, | ..... |
| 1920 | ..... | ..... | 95.80 ,, | 17.45 ,, | 7.16 ,, | 6.52 ,, | ..... |
| 1921 | ..... | ..... | 59.52 ,, | 12.50 ,, | 4.09 ,, | 3.95 ,, | ..... |
| 1922 | ..... | ..... | 64.14 ,, | 13.38 ,, | 5.16 ,, | 4.86 ,, | ..... |
| 1923 | ..... | ..... | 61.63 ,, | 14.42 ,, | 6.54 ,, | 5.62 ,, | ..... |
| 1924 | ..... | ..... | 63.442 ,, | 13.02 ,, | 7.287 ,, | 5.39 ,, | ..... |
| 1925 | ..... | ..... | 69.065 ,, | 14.042 ,, | 7.848 Lond. | 7.892 Lond. | ..... |
| 1926 | ..... | ..... | 62.107 ,, | 13.795 ,, | 6.751 ,, | 7.409 ,, | ..... |
| 1927 | ..... | ..... | 56.37 ,, | 12.92 ,, | 5.256 ,, | 6.194 ,, | ..... |
| 1928 | ..... | ..... | 58.176 ,, | 14.570 ,, | 4.575 ,, | 5.493 ,, | ..... |
| 1929 | ..... | ..... | 52.993 ,, | 18.107 ,, | 5.050 ,, | 5.385 ,, | ..... |
| 1930 | ..... | ..... | 38.154 ,, | 12.982 ,, | 3.927 ,, | 3.599 ,, | ..... |
| 1931 | ..... | ..... | 28.700 ,, | 8.116 ,, | 2.710 ,, | 2.554 ,, | 4.018 |
| 1932 | 19.30 | 23.47 | 31.671 ,, | 6.380 Lond. | 2.113 ,, | 2.405 ,, | 3.795 |
| 1933 | 23.02 | 28.60 | 37.832 ,, | 7.454 ,, | 2.391 ,, | 3.210 ,, | ..... |
| 1934 | 28.37 | 34.50 | 47.461 ,, | 7.419 ,, | 2.436 ,, | 3.044 ,, | ..... |
| 1935 | 28.94 | 35.19 | 64.790 ,, | 7.795 ,, | 3.133 ,, | 3.099 ,, | ..... |
| 1936 | 28.81 | 35.03 | 45.127 ,, | 9.477 ,, | 3.913 ,, | 3.315 ,, | ..... |
| 1937 | 28.77 | 34.99 | 44.881 ,, | 13.078 ,, | 5.110 ,, | 4.902 ,, | ..... |
| 1938 | 28.93 | 35.18 | 43.477 ,, | 9.972 ,, | 3.344 ,, | 3.073 ,, | ..... |
| 1939 | 29.72 | 36.14 | 40.488 ,, | 10.092 ,, | 3.169 ,, | 3.069 ,, | ..... |
| 1940 | 31.66 | 38.50 | 38.249 ,, | 10.086 ,, | 3.362 ,, | 3.411 ,, | ..... |
| 1941 | 31.66 | 38.50 | 38.261 ,, | 10.086 ,, | 3.362 ,, | 3.411 ,, | ..... |
| 1942 | 31.66 | 38.50 | 41.166 ,, | 10.086 ,, | 3.362 ,, | 3.411 ,, | ..... |
| 1943 | 31.66 | 38.50 | 45.254 ,, | 11.75 ,, | 3.754 ,, | 4.000 ,, | ..... |
| 1944 | 31.66 | 38.50 | 43.000 ,, | 12.000 ,, | 4.500 ,, | 4.300 ,, | ..... |
| 1945 | 31.66 | 38.50 | 47.000 ,, | 12.550 ,, | 5.000 ,, | 6.440 ,, | ..... |
| 1946 | 30.22 | 36.75 | 83.650 ,, | 12.80 ,, | 6.750 ,, | 7.810 ,, | 4.68 |
| 1947 | 28.78 | 35.00 | 72.000 ,, | 20.39 ,, | 13.670 ,, | 11.230 ,, | 5.12 |
| 1948 | 28.78 | 35.00 | 75.000 Mont. | 22.35 U.S. | 18.040 ,, | 13.930 ,, | 6.09 |
| 1949 | 29.60 | 36.00 | 74.250 U.S. | 19.973 ,, | 15.800 U.S. | 13.247 U.S. | 6.51 |
| 1950 | 31.29 | 38.05 | 80.635 ,, | 23.428 ,, | 14.454 ,, | 15.075 ,, | 6.43 |
| 1951 | 30.30 | 36.85 | 94.55 ,, | 27.70 ,, | 18.4 ,, | 19.9 ,, | 6.46 |
| 1952 | 28.18 | 34.27 | 83.157 ,, | 31.079 ,, | 16.121 ,, | 15.874 ,, | 6.94 |
| 1953 | 28.31 | 34.42 | 83.774 ,, | 30.333 ,, | 13.265 ,, | 10.675 ,, | 6.88 |
| 1954 | 27.52 | 34.07 | 82.982 ,, | 29.112 ,, | 13.680 ,, | 10.417 ,, | 7.00 |
| **1955** | **28.39** | **34.52** | **87.851** ,, | **38.276** ,, | **14.926** ,, | **12.127** ,, | **6.74** |

[1] Unrefined placer gold, average price per ounce, is taken as $17 divided by $20.67 times the price of an ounce of fine gold.

Prices for fine gold are the Canadian Mint buying prices. Prices for other metals are those of the markets indicated, converted into Canadian funds. The abbreviations are: Mont.=Montreal; N.Y.=New York; Lond.=London; E. St. L. =East St. Louis; and U.S.=United States.

Prior to 1925 the prices for gold and copper are true average prices, but the prices of other metals were taken at the following percentages of the year's average price for the metal: Silver, 95 per cent; lead, 90 per cent; and zinc, 85 per cent.

For coal *see* last paragraph under " Fuel," page A 15.

The bases for the prices listed are discussed in detail on pages A 14 and A 15.

## TABLE I.—TOTAL MINE PRODUCTION FOR ALL YEARS UP TO AND INCLUDING 1955

| | | Total Quantity | Total Value | Quantity, 1955 | Value, 1955 |
|---|---|---|---|---|---|
| Gold—placer | crude, oz. | 5,193,495 | $95,764,719 | 7,666 | $217,614 |
| „ lode | fine, oz. | 14,721,151 | 421,095,172 | 242,477 | 8,370,306 |
| Silver | oz. | 386,292,041 | 225,352,853 | 7,902,145 | 6,942,113 |
| Copper | lb. | 2,835,394,382 | 450,904,188 | 44,238,031 | 16,932,549 |
| Lead | lb. | 11,719,223,118 | 795,756,879 | 302,567,640 | 45,161,245 |
| Zinc | lb. | 8,999,949,689 | 672,156,466 | 429,198,565 | 52,048,909 |
| Miscellaneous metals[1] | | ..... | 102,817,144 | ..... | 12,935,887 |
| Industrial minerals[2] | | ..... | 52,538,931 | ..... | 7,798,098 |
| Structural materials[3] | | ..... | 202,482,770 | ..... | 15,299,254 |
| Coal | tons | 137,688,559[4] | 523,521,783 | 1,332,874[4] | 8,986,501 |
| Natural gas | M c.f. | 229,534 | 24,675 | 168,651 | 18,130 |
| Totals | | ..... | $3,542,415,580 | ..... | $174,710,606 |

[1] For individual miscellaneous metals, *see* Tables III and VIIIc, pages A 18 and A 31.
[2] For individual industrial minerals, including sulphur, *see* Tables III and VIIIb, pages A 18 and A 33.
[3] For individual structural materials, *see* Tables III and VIIIe, pages A 18 and A 35.
[4] Total quantity is gross mine output; it includes material discarded in picking and washing. The quantity shown for 1955 is that sold and used (*see also* Table IXc).

## TABLE II.—PRODUCTION FOR EACH YEAR FROM 1836 TO 1955, INCLUSIVE

| | | | |
|---|---|---|---|
| 1836–95 (incl.) | $95,355,010 | 1926 | $67,188,842 |
| 1896 | 7,507,956 | 1927 | 60,729,358 |
| 1897 | 10,455,268 | 1928 | 65,372,583 |
| 1898 | 10,906,861 | 1929 | 68,245,443 |
| 1899 | 12,429,707 | 1930 | 55,391,993 |
| 1900 | 16,344,751 | 1931 | 34,883,181 |
| 1901 | 19,671,572 | 1932 | 28,798,406 |
| 1902 | 17,486,550 | 1933 | 32,602,672 |
| 1903 | 17,495,954 | 1934 | 42,305,297 |
| 1904 | 18,977,359 | 1935 | 48,821,239 |
| 1905 | 22,461,325 | 1936 | 54,081,967 |
| 1906 | 24,980,546 | 1937 | 74,475,902 |
| 1907 | 25,882,560 | 1938 | 64,485,551 |
| 1908 | 23,851,277 | 1939 | 65,681,547 |
| 1909 | 24,443,025 | 1940 | 75,701,145 |
| 1910 | 26,377,066 | 1941 | 78,479,719 |
| 1911 | 23,499,072 | 1942 | 75,551,093 |
| 1912 | 32,440,800 | 1943 | 65,892,395 |
| 1913 | 30,296,398 | 1944 | 54,923,803 |
| 1914 | 26,388,825 | 1945 | 63,343,949 |
| 1915 | 29,447,508 | 1946 | 72,319,951 |
| 1916 | 42,290,462 | 1947 | 113,314,314 |
| 1917 | 37,010,392 | 1948 | 151,436,039 |
| 1918 | 41,782,474 | 1949 | 131,100,468 |
| 1919 | 33,296,313 | 1950 | 148,289,687 |
| 1920 | 35,543,084 | 1951 | 175,613,693 |
| 1921 | 28,066,641 | 1952 | 171,309,429 |
| 1922 | 35,162,843 | 1953 | 152,628,683 |
| 1923 | 41,304,320 | 1954 | 153,383,860 |
| 1924 | 48,704,604 | 1955 | 174,710,606 |
| 1925 | 61,492,242 | | |
| | | Total | $3,542,415,580 |

## TABLE III.—QUANTITY AND VALUE OF MINE PRODUCTS FOR YEARS 1946 TO 1955

| Description | | 1946 | | 1947 | | 1948 | | 1949 | | 1950 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| *Principal Metals* | | | $ | | $ | | $ | | $ | | $ |
| Gold—placer, crude | oz. | 15,729 | 475,361 | 6,969 | 200,585 | 20,332 | 585,200 | 17,886 | 529,524 | 19,134 | 598,717 |
| ,, lode, fine | oz. | 117,612 | 4,322,241 | 243,282 | 8,514,870 | 286,230 | 10,018,050 | 288,396 | 10,382,256 | 283,983 | 10,805,553 |
| Silver | oz. | 6,365,761 | 5,324,959 | 5,707,691 | 4,109,538 | 6,718,122 | 5,038,592 | 7,636,053 | 5,669,769 | 9,507,225 | 7,666,151 |
| Copper | lb. | 17,500,538 | 2,240,070 | 41,783,921 | 8,519,741 | 43,025,388 | 9,616,174 | 54,856,808 | 10,956,550 | 42,212,133 | 9,889,458 |
| Lead | lb. | 347,990,146 | 23,489,335 | 306,400,709 | 41,884,977 | 332,996,351 | 60,072,542 | 263,580,549 | 41,645,726 | 307,122,803 | 44,391,530 |
| Zinc | lb. | 270,718,128 | 21,143,086 | 268,450,926 | 30,147,039 | 296,012,941 | 41,234,603 | 276,324,451 | 36,604,700 | 324,263,778 | 48,882,765 |
| Totals | | | 56,995,052 | | 93,376,750 | | 126,565,161 | | 105,788,525 | | 122,234,174 |
| *Miscellaneous Metals* | | | | | | | | | | | |
| Antimony | lb. | 642,145 | 96,322 | 1,150,463 | 384,255 | 310,062 | 113,173 | 158,288 | 61,020 | 643,540 | 216,229 |
| Bismuth | lb. | 234,020 | 327,628 | 284,357 | 560,183 | 222,000 | 444,000 | 102,913 | 210,972 | 162,616 | 369,138 |
| Cadmium | lb. | 632,539 | 771,698 | 547,248 | 941,266 | 617,226 | 1,126,437 | 665,449 | 1,364,170 | 650,540 | 1,535,274 |
| Indium | oz. | | | | | | | 689 | 1,550 | 4,952 | 12,132 |
| Iron ore | tons | | | | | | | 5,472 | 27,579 | | |
| Mercury | lb. | | | | | 679 | 3,735 | | | | |
| Platinum | oz. | | | 1 | 59 | 242 | 21,175 | 99 | 7,468 | 111 | 9,239 |
| Tin | lb. | 874,186 | 480,802 | 714,198 | 517,794 | 691,332 | 688,567 | 619,117 | 633,047 | 796,403 | 828,259 |
| Tungsten ($WO_3$) | lb. | | | 496,023 | 680,792 | 1,409,297 | 1,409,297 | | | 281,160 | 281,160 |
| Totals | | | 1,676,450 | | 3,084,349 | | 3,806,384 | | 2,305,806 | | 3,251,431 |
| *Industrial Minerals* | | | | | | | | | | | |
| Barite | tons | 2,728 | 19,000 | 2,875 | 26,650 | 1,632 | 16,317 | 1,314 | 13,145 | 1,440 | 17,284 |
| Diatomite | tons | 40 | 1,027 | 59 | 1,472 | 24 | 817 | 36 | 963 | 4 | 108 |
| Flux (quartz, limestone) | tons | 55,732 | 71,531 | 102,918 | 174,655 | 83,389 | 248,977 | 108,531 | 213,773 | 144,325 | 268,411 |
| Granules (slate and rock) | tons | 1,116 | 19,917 | 1,156 | 19,686 | 4,958 | 68,937 | 5,941 | 79,661 | 7,886 | 104,590 |
| Gypsum and products | tons | 40,900 | 318,500 | 67,112 | 523,298 | 77,055 | 546,707 | 98,977 | 616,490 | 92,882 | 620,108 |
| Iron oxides | tons | 427 | 2,135 | 58 | 464 | 3,386 | 30,472 | 2,752 | 23,301 | | |
| Mica | lb. | 1,616,000 | 23,420 | 1,808,000 | 24,240 | 894,000 | 9,494 | 578,000 | 5,675 | 456,000 | 5,533 |
| Sodium carbonate | lb. | 210 | 2,310 | 163 | 1,793 | | | 47 | 517 | | |
| Sulphur | tons | 126,622 | 1,258,576 | 157,161 | 1,503,714 | 144,448 | 1,409,156 | 160,435 | 1,546,798 | 143,343 | 1,421,806 |
| Totals | | | 1,716,416 | | 2,275,972 | | 2,330,877 | | 2,500,323 | | 2,437,840 |
| *Structural Materials* | | | | | | | | | | | |
| Brick—common | No. | 3,300,000 | 94,000 | 4,318,000 | 122,660 | 3,810,000 | 111,300 | 3,220,000 | 95,075 | 3,980,500 | 117,770 |
| ,, face, paving, sewer | No. | 2,077,683 | 84,353 | 1,232,812 | 64,849 | 2,584,752 | 129,268 | 509,560 | 24,793 | 974,380 | 52,823 |
| ,, firebrick, blocks | | | 283,317 | | 389,899 | | 392,458 | | 135,391 | | 282,962 |
| Clays | tons | 601 | 8,241 | 11,428 | 9,675 | 5,673 | 32,922 | 6,500 | 22,339 | 6,706 | 32,264 |
| Structural tile, hollow blocks | | | 105,194 | | 158,276 | | 116,513 | | 145,512 | | 191,016 |
| Drain-tile, sewer-pipe, flue-linings | | | 263,864 | | 361,975 | | 597,541 | | 265,098 | | 428,418 |
| Pottery—glazed or unglazed | | | 2,811 | | 3,476 | | 5,138 | | 5,176 | | 5,860 |
| Other clay products | | | 3,611 | | 9,332 | | 9,611 | | 9,676 | | 11,335 |
| Cement | | | 1,739,966 | | 1,896,772 | | 2,441,304 | | 3,029,425 | | 3,088,296 |
| Lime and limestone | tons | 159,493 | 642,912 | 151,671 | 714,126 | 209,453 | 1,177,632 | 179,400 | 1,295,087 | 221,454 | 1,133,776 |
| Rubble, riprap, crushed rock | tons | 154,164 | 158,446 | 222,044 | 216,873 | 896,780 | 839,780 | 1,112,272 | 916,841 | 1,164,049 | 990,257 |
| Sand and gravel | | | 1,713,138 | | 1,828,919 | | 3,060,535 | | 3,967,132 | | 3,723,487 |
| Stone—building | tons | 4,354 | 99,710 | 19,835 | 119,971 | 3,579 | 54,220 | 2,287 | 44,345 | 26,758 | 188,675 |
| Totals | | | 5,199,563 | | 5,896,803 | | 8,968,222 | | 9,955,890 | | 10,246,939 |
| *Fuel* | | | | | | | | | | | |
| Coal[1] | tons | 1,284,904 | 6,732,470 | 1,514,598 | 8,680,440 | 1,604,480 | 9,765,395 | 1,621,268 | 10,549,924 | 1,574,006 | 10,119,303 |
| Provincial totals | | | 72,319,951 | | 113,314,314 | | 151,436,039 | | 131,100,468 | | 148,289,687 |

TABLE III.—QUANTITY AND VALUE OF MINE PRODUCTS FOR YEARS 1946 TO 1955—*Continued*

| Description | 1951 | | 1952 | | 1953 | | 1954 | | 1955 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| *Principal Metals* | | $ | | $ | | $ | | $ | | $ |
| Gold—placer, crude ... oz. | 23,691 | 717,911 | 17,554 | 494,756 | 14,245 | 403,230 | 8,684 | 238,967 | 7,666 | 217,614 |
| ,, lode, fine ... oz. | 261,274 | 9,627,947 | 251,393 | 8,615,238 | 253,553 | 8,727,294 | 258,388 | 8,803,279 | 242,477 | 8,370,306 |
| Silver ... oz. | 8,215,884 | 7,768,118 | 8,796,720 | 7,315,088 | 8,376,953 | 7,017,709 | 9,825,153 | 8,153,108 | 7,902,145 | 6,942,113 |
| Copper ... lb. | 43,249,658 | 11,980,155 | 42,005,512 | 13,054,893 | 49,021,013 | 14,869,544 | 50,150,087 | 14,599,693 | 44,328,031 | 16,932,549 |
| Lead ... lb. | 273,456,604 | 50,316,015 | 284,949,396 | 45,936,692 | 296,559,781 | 39,338,655 | 332,474,456 | 45,482,505 | 302,567,640 | 45,161,245 |
| Zinc ... lb. | 333,910,764 | 66,448,242 | 372,871,717 | 59,189,656 | 378,345,159 | 40,388,346 | 334,124,560 | 34,805,755 | 429,198,565 | 52,048,909 |
| Totals | ... | 146,858,388 | ... | 134,606,323 | ... | 110,744,778 | ... | 112,083,307 | ... | 129,672,736 |
| *Miscellaneous Metals* | | | | | | | | | | |
| Antimony ... lb. | 1,310,836 | 622,647 | 2,333,239 | 1,028,025 | 1,551,043 | 570,474 | 1,302,333 | 382,104 | 2,021,721 | 667,776 |
| Bismuth ... lb. | 191,471 | 451,872 | 142,246 | 312,941 | 71,298 | 157,569 | 225,351 | 493,519 | 160,767 | 356,903 |
| Cadmium ... lb. | 1,164,933 | 3,122,021 | 726,172 | 1,561,270 | 787,158 | 1,550,701 | 680,734 | 1,123,211 | 1,593,591 | 2,677,233 |
| Indium ... oz. | 582 | 1,368 | 404 | 889 | 6,752 | 14,922 | 477 | 1,281 | 104,774 | 232,389 |
| Iron ore ... tons | 113,535 | 790,000 | 900,481 | 5,474,924 | 991,248 | 6,763,105 | 535,746 | 3,733,891 | 610,930 | 3,228,756 |
| Mercury ... lb. | ... | ... | ... | ... | ... | ... | ... | ... | 75 | 250 |
| Platinum ... oz. | 22 | 2,085 | 2 | 176 | ... | ... | 4 | 408 | ... | ... |
| Tin ... lb. | 346,718 | 495,807 | 212,113 | 250,293 | 1,092,228 | 581,746 | 587,528 | 280,437 | 391,228 | 311,613 |
| Tungsten ($WO_3$) ... lb. | ... | ... | 1,434,640 | 4,565,024 | 2,168,977 | 5,950,323 | 2,206,443 | 5,851,558 | 1,914,000 | 5,460,967 |
| Totals | ... | 5,485,800 | ... | 13,193,542 | ... | 15,588,840 | ... | 11,866,409 | ... | 12,935,887 |
| *Industrial Minerals* | | | | | | | | | | |
| Asbestos | ... | ... | ... | 23,000 | ... | 988,716 | ... | 2,920,751 | ... | 4,265,971 |
| Barite ... tons | 1,248 | 16,224 | 848 | 13,408 | 3,560 | 52,845 | 5,056 | 115,337 | 9,465 | 238,825 |
| Diatomite ... tons | 8 | 223 | 12 | 240 | ... | ... | ... | ... | 14 | 280 |
| Flux (quartz, limestone) ... tons | 144,235 | 292,100 | 55,588 | 141,478 | 37,358 | 110,698 | 39,897 | 40,804 | 111,759 | 208,198 |
| Granules (slate and rock) ... tons | 5,727 | 73,767 | 1,610 | 21,026 | 4,620 | 59,321 | 4,541 | 65,507 | 6,355 | 73,858 |
| Gypsum and products ... tons | 124,729 | 263,072 | 91,112 | 235,453 | 172,665 | 387,655 | 175,480 | 421,734 | 149,719 | 383,934 |
| Mica ... lb. | 606,000 | 7,462 | 314,000 | 3,001 | 604,000 | 11,338 | 284,000 | 5,326 | 505,300 | 2,861 |
| Perlite ... tons | ... | ... | ... | ... | 1,112 | 11,120 | ... | ... | ... | ... |
| Sulphur ... tons | 194,874 | 1,840,992 | 182,607 | 1,745,258 | 151,954 | 1,590,055 | 219,999 | 2,308,422 | 216,520 | 2,624,171 |
| Totals | ... | 2,493,840 | ... | 2,182,864 | ... | 3,211,748 | ... | 5,877,881 | ... | 7,798,098 |
| *Structural Materials* | | | | | | | | | | |
| Brick—common ... No. | 1,353,000 | 41,820 | 830,815 | 28,248 | 1,382,883 | 51,381 | 1,289,911 | 35,550 | 4,853,940 | 232,139 |
| ,, face, paving, sewer ... No. | 3,127,888 | 153,575 | 2,566,540 | 121,254 | 4,307,894 | 226,459 | 5,651,262 | 316,676 | 3,901,866 | 248,913 |
| ,, firebrick, blocks | ... | 380,742 | ... | 435,681 | ... | 426,783 | ... | 372,528 | ... | 578,578 |
| Clays ... tons | 14,786 | 60,255 | 11,483 | 51,797 | 5,226 | 31,990 | 6,609 | 36,425 | 8,033 | 46,757 |
| Structural tile, hollow blocks | ... | 171,481 | ... | 60,273 | ... | 123,469 | ... | 122,903 | ... | 114,460 |
| Drain-tile, sewer-pipe, flue-linings | ... | 410,206 | ... | 468,110 | ... | 627,097 | ... | 753,297 | ... | 801,019 |
| Pottery—glazed or unglazed | ... | 4,695 | ... | 6,536 | ... | 30,012 | ... | 31,081 | ... | 38,035 |
| Other clay products | ... | 10,393 | ... | 11,296 | ... | 19,267 | ... | 32,697 | ... | 55,514 |
| Cement | ... | 3,311,439 | ... | 3,603,273 | ... | 5,071,260 | ... | 4,935,298 | ... | 5,474,875 |
| Lime and limestone ... tons | 241,723 | 1,251,327 | 321,710 | 1,552,772 | 338,005 | 1,357,958 | 317,976 | 1,555,002 | 318,152 | 1,711,348 |
| Rubble, riprap, crushed rock ... tons | 972,178 | 1,145,072 | 739,504 | 982,792 | 770,415 | 1,122,516 | 920,707 | 1,253,856 | 890,613 | 962,272 |
| Sand and gravel | ... | 3,355,693 | ... | 3,839,965 | ... | 4,388,594 | ... | 4,850,469 | ... | 4,886,890 |
| Stone—building ... tons | 4,837 | 309,350 | 122,308 | 434,964 | 2,611 | 78,252 | 3,055 | 99,392 | 26,079 | 148,454 |
| Totals | ... | 10,606,048 | ... | 11,596,961 | ... | 13,555,038 | ... | 14,395,174 | ... | 15,299,254 |
| *Fuel* | | | | | | | | | | |
| Coal[1] ... tons | 1,573,572 | 10,169,617 | 1,402,347 | 9,729,739 | 1,384,138 | 9,528,279 | 1,308,284 | 9,154,544 | 1,332,874 | 8,986,501 |
| Natural gas ... M c.f. | ... | ... | ... | ... | ... | ... | 60,883 | 6,545 | 168,651 | 18,130 |
| Provincial totals | ... | 175,613,693 | ... | 171,309,429 | ... | 152,628,683 | ... | 153,383,860 | ... | 174,710,606 |

[1] The quantity of coal is that sold and used.

TABLE IV.—MINERAL PRODUCTION VALUE, 1895–1955

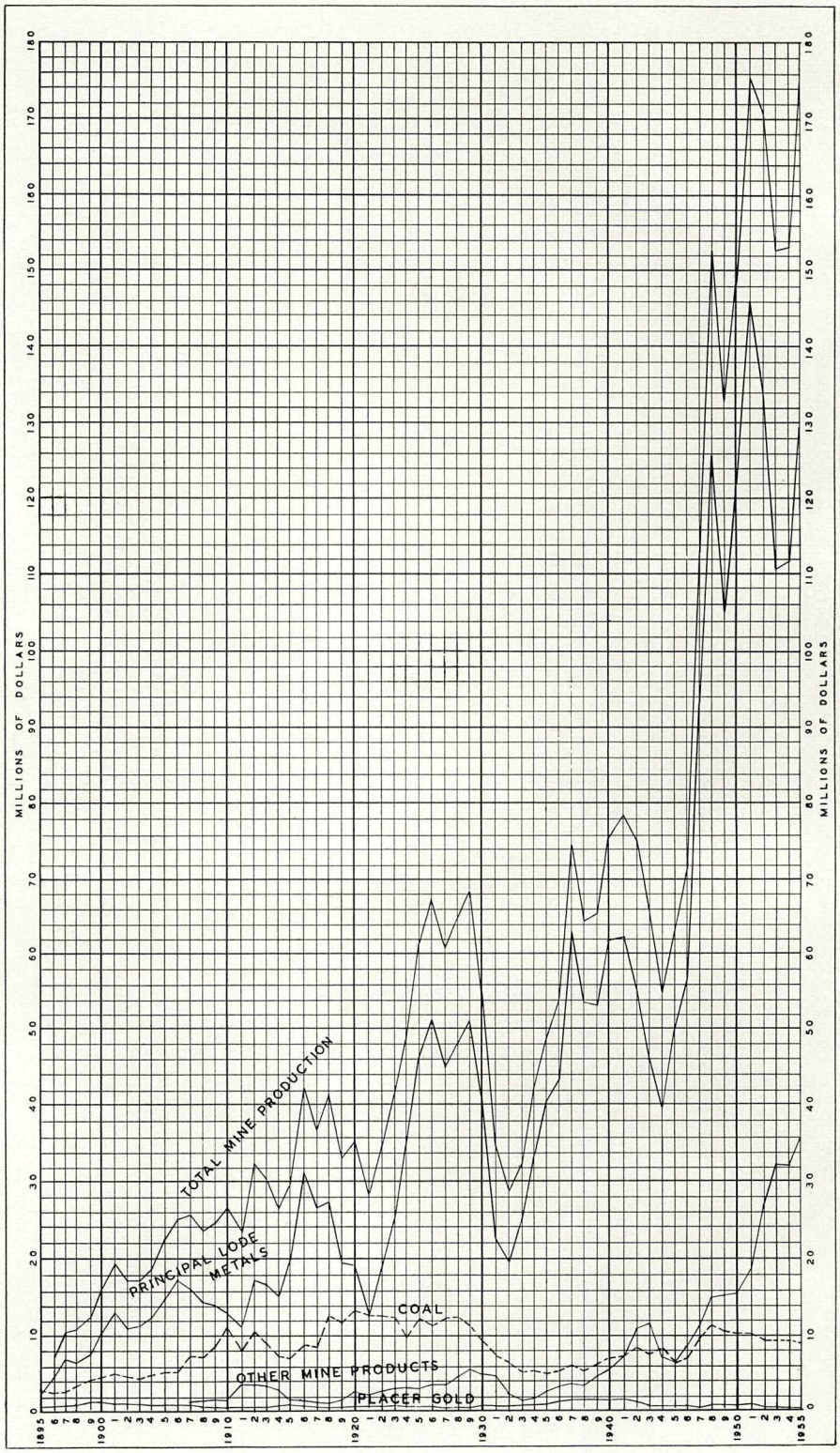
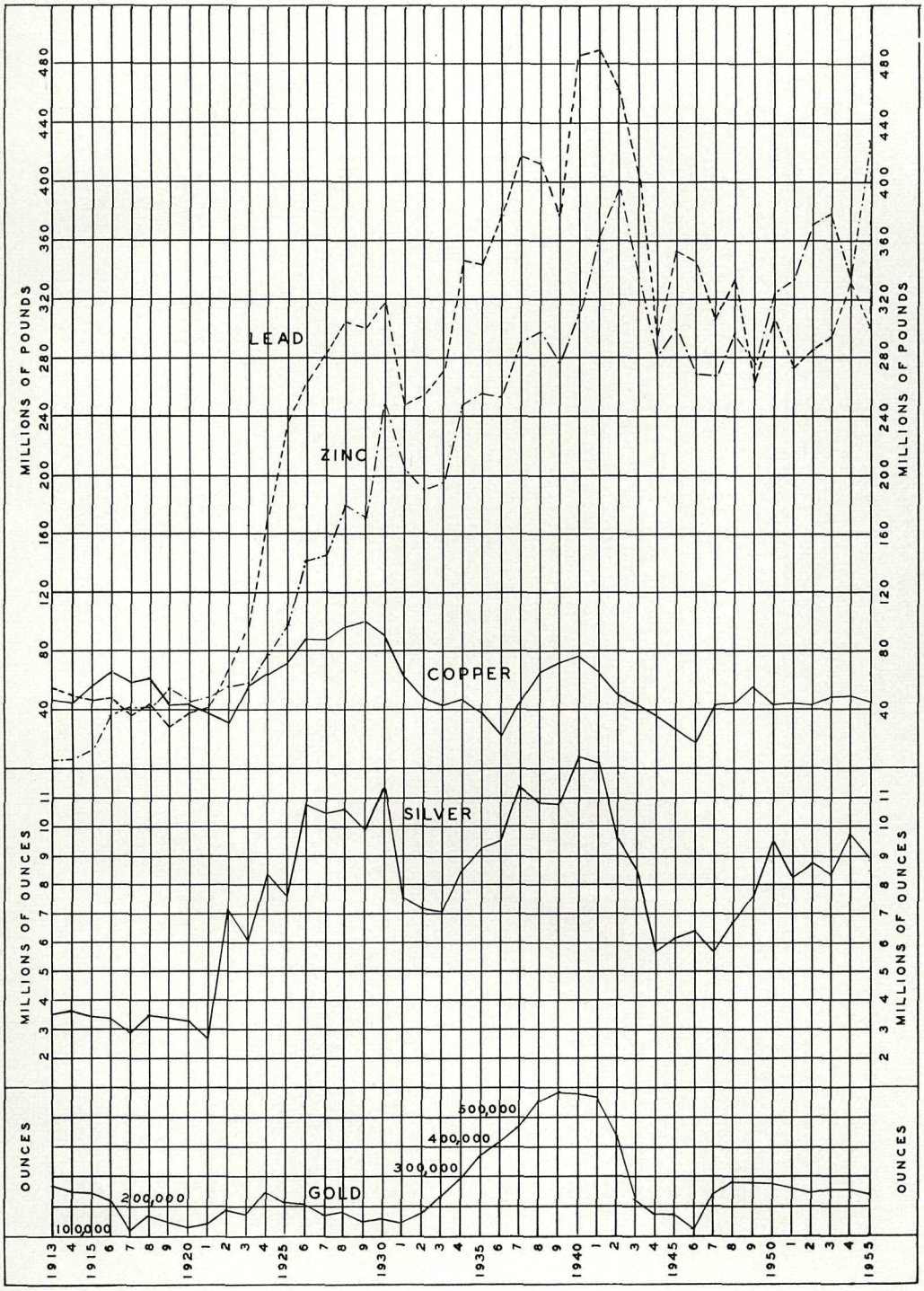


TABLE V.—PRINCIPAL LODE METALS, PRODUCTION, 1913–55



## TABLE VI.—PRODUCTION OF PRINCIPAL METALS, 1858–1955

| Year | Placer Gold | | Gold | | Silver | | Copper | | Lead | | Zinc | | Total Value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity[1] | Value | Quantity[2] | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | Oz. | $ | Oz. | $ | Oz. | $ | Lb. | $ | Lb. | $ | Lb. | $ | $ |
| 1858–86, incl. | 3,105,775 | 52,798,364 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 52,798,364 |
| 1887 | 40,810 | 693,709 | ... | ... | 17,690 | 17,331 | ... | ... | 204,800 | 9,216 | ... | ... | 720,256 |
| 1888 | 36,280 | 616,731 | ... | ... | 79,780 | 75,000 | ... | ... | 674,500 | 29,813 | ... | ... | 721,544 |
| 1889 | 34,640 | 588,923 | ... | ... | 53,192 | 47,873 | ... | ... | 165,100 | 6,498 | ... | ... | 643,294 |
| 1890 | 29,080 | 494,436 | ... | ... | 70,427 | 73,948 | ... | ... | ... | ... | ... | ... | 568,384 |
| 1891 | 25,280 | 429,811 | ... | ... | 4,500 | 4,000 | ... | ... | ... | ... | ... | ... | 433,811 |
| 1892 | 23,500 | 399,526 | ... | ... | 77,160 | 66,935 | ... | ... | 808,420 | 33,064 | ... | ... | 499,525 |
| 1893 | 20,950 | 356,131 | 1,170 | 23,404 | 227,000 | 195,000 | ... | ... | 2,135,023 | 78,996 | ... | ... | 653,531 |
| 1894 | 23,850 | 405,516 | 6,252 | 125,014 | 746,379 | 470,219 | 324,680 | 16,234 | 5,662,523 | 169,875 | ... | ... | 1,186,858 |
| 1895 | 28,330 | 481,683 | 39,270 | 785,400 | 1,496,522 | 977,229 | 952,840 | 47,642 | 16,475,464 | 532,255 | ... | ... | 2,824,209 |
| 1896 | 32,000 | 544,026 | 62,259 | 1,244,180 | 3,135,343 | 2,100,689 | 3,818,556 | 190,926 | 24,199,977 | 721,384 | ... | ... | 4,801,205 |
| 1897 | 30,210 | 513,520 | 106,141 | 2,122,820 | 5,472,971 | 3,272,836 | 5,325,180 | 266,258 | 38,841,135 | 1,390,517 | ... | ... | 7,565,951 |
| 1898 | 37,840 | 643,346 | 110,061 | 2,201,217 | 4,292,401 | 2,375,841 | 7,271,678 | 874,781 | 31,693,559 | 1,077,581 | ... | ... | 7,172,766 |
| 1899 | 79,110 | 1,344,900 | 138,315 | 2,857,573 | 2,939,413 | 1,663,708 | 7,722,591 | 1,351,453 | 21,862,436 | 878,870 | ... | ... | 8,096,504 |
| 1900 | 75,220 | 1,278,724 | 167,153 | 3,453,381 | 3,958,175 | 2,309,200 | 9,997,080 | 1,615,289 | 63,358,621 | 2,691,887 | ... | ... | 11,348,481 |
| 1901 | 57,060 | 970,100 | 210,384 | 4,348,605 | 4,396,447 | 2,462,008 | 27,603,746 | 4,446,963 | 51,582,906 | 2,010,260 | ... | ... | 14,237,936 |
| 1902 | 63,130 | 1,073,140 | 236,491 | 4,888,269 | 3,917,917 | 1,941,328 | 29,636,057 | 3,446,673 | 22,536,381 | 824,832 | ... | ... | 12,174,242 |
| 1903 | 62,380 | 1,060,420 | 232,831 | 4,812,616 | 2,996,204 | 1,521,472 | 34,359,921 | 4,547,535 | 18,089,283 | 689,744 | ... | ... | 12,631,787 |
| 1904 | 65,610 | 1,115,300 | 222,042 | 4,589,608 | 3,222,481 | 1,719,516 | 35,710,128 | 4,578,037 | 36,646,244 | 1,421,874 | ... | ... | 13,424,335 |
| 1905 | 57,020 | 969,300 | 238,660 | 4,933,102 | 3,439,417 | 1,971,818 | 37,692,251 | 5,876,222 | 56,580,703 | 2,399,022 | ... | ... | 16,149,464 |
| 1906 | 55,790 | 948,400 | 224,027 | 4,630,639 | 2,990,262 | 1,897,320 | 42,990,488 | 8,288,565 | 52,408,217 | 2,667,578 | ... | ... | 18,432,502 |
| 1907 | 48,710 | 828,000 | 196,179 | 4,055,020 | 2,745,448 | 1,703,825 | 40,832,720 | 8,166,544 | 47,738,703 | 2,291,458 | ... | ... | 17,044,847 |
| 1908 | 38,060 | 647,000 | 255,582 | 5,282,880 | 2,631,389 | 1,321,483 | 47,274,614 | 6,240,249 | 43,195,733 | 1,632,799 | ... | ... | 15,124,411 |
| 1909 | 28,060 | 477,000 | 238,224 | 4,924,090 | 2,532,742 | 1,239,270 | 45,597,245 | 5,918,522 | 44,396,346 | 1,709,259 | 8,500,000 | 400,000 | 14,668,141 |
| 1910 | 31,760 | 540,000 | 267,701 | 5,533,380 | 2,450,241 | 1,245,016 | 38,243,934 | 4,871,512 | 34,658,746 | 1,386,350 | 4,184,192 | 192,473 | 13,768,731 |
| 1911 | 25,060 | 426,000 | 228,617 | 4,725,513 | 1,892,364 | 958,293 | 36,927,656 | 4,571,644 | 26,872,397 | 1,069,521 | 2,634,544 | 129,092 | 11,880,063 |
| 1912 | 32,680 | 555,500 | 257,496 | 5,322,442 | 3,132,108 | 1,810,045 | 51,456,537 | 8,408,513 | 44,871,454 | 1,805,627 | 5,358,280 | 316,139 | 18,218,266 |
| 1913 | 30,000 | 510,000 | 272,254 | 5,627,490 | 3,465,856 | 1,968,606 | 46,460,305 | 7,094,489 | 55,364,677 | 2,175,832 | 6,758,768 | 324,421 | 17,700,838 |
| 1914 | 33,240 | 565,000 | 247,170 | 5,109,004 | 3,602,180 | 1,876,736 | 45,009,699 | 6,121,319 | 50,625,048 | 1,771,877 | 7,866,467 | 346,125 | 15,790,061 |
| 1915 | 45,290 | 770,000 | 250,021 | 5,167,934 | 3,366,506 | 1,588,991 | 56,918,405 | 9,835,500 | 46,503,590 | 1,939,200 | 12,982,440 | 1,460,524 | 20,762,149 |
| 1916 | 34,150 | 580,500 | 221,932 | 4,587,334 | 3,301,923 | 2,059,739 | 65,379,364 | 17,784,494 | 48,727,516 | 3,007,462 | 37,168,980 | 4,043,985 | 32,063,514 |
| 1917 | 29,180 | 496,000 | 114,523 | 2,367,190 | 2,929,216 | 2,265,749 | 59,007,565 | 16,038,256 | 37,307,465 | 2,951,020 | 41,848,513 | 3,166,259 | 27,284,474 |
| 1918 | 18,820 | 320,000 | 164,674 | 3,403,812 | 3,498,172 | 3,215,870 | 61,483,754 | 15,143,449 | 43,899,661 | 2,928,107 | 41,772,916 | 2,899,040 | 27,910,278 |
| 1919 | 16,850 | 286,500 | 152,426 | 3,150,645 | 3,403,119 | 3,592,673 | 42,459,339 | 7,939,896 | 29,475,968 | 1,526,855 | 56,737,651 | 3,540,429 | 20,036,998 |
| 1920 | 13,040 | 221,600 | 120,048 | 2,481,392 | 3,377,849 | 3,235,980 | 44,887,676 | 7,832,899 | 39,331,218 | 2,816,115 | 47,208,268 | 3,077,979 | 19,665,965 |
| 1921 | 13,720 | 233,200 | 135,663 | 2,804,154 | 2,673,389 | 1,591,201 | 39,036,993 | 4,879,624 | 41,402,288 | 1,693,354 | 49,419,372 | 1,952,065 | 13,153,598 |
| 1922 | 21,690 | 368,800 | 197,856 | 4,089,684 | 7,101,311 | 4,554,781 | 32,359,896 | 4,329,754 | 67,447,985 | 3,480,316 | 57,146,548 | 2,777,322 | 19,600,657 |
| 1923 | 24,710 | 420,000 | 179,245 | 3,704,994 | 6,032,986 | 3,718,129 | 57,720,290 | 8,323,266 | 96,663,152 | 6,321,770 | 58,343,462 | 3,278,903 | 25,767,062 |
| 1924 | 24,750 | 420,750 | 247,716 | 5,120,535 | 8,341,768 | 5,292,184 | 64,845,393 | 8,442,870 | 170,384,481 | 12,415,917 | 79,130,970 | 4,266,741 | 35,958,997 |
| 1925 | 16,476 | 280,092 | 209,719 | 4,335,269 | 7,654,844 | 5,286,818 | 72,306,432 | 10,153,269 | 237,899,199 | 18,670,329 | 98,257,099 | 7,754,450 | 46,480,227 |
| 1926 | 20,912 | 355,503 | 201,427 | 4,163,859 | 10,748,556 | 6,675,606 | 89,339,768 | 12,324,421 | 263,023,937 | 17,757,535 | 142,876,947 | 10,586,610 | 51,863,534 |

| | Oz. | $ | Oz. | $ | Oz. | $ | Lb. | $ | Lb. | $ | Lb. | $ | $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1927 | 9,191 | 156,247 | 178,001 | 3,679,601 | 10,470,185 | 5,902,043 | 89,202,871 | 11,525,011 | 282,996,423 | 14,874,292 | 145,225,443 | 8,996,135 | 45,133,329 |
| 1928 | 8,284 | 143,208 | 188,087 | 3,888,097 | 10,627,167 | 6,182,461 | 97,908,316 | 14,265,242 | 305,140,792 | 13,961,412 | 181,763,147 | 9,984,613 | 48,425,033 |
| 1929 | 6,983 | 118,711 | 145,339 | 3,004,419 | 9,918,800 | 5,256,270 | 101,483,857 | 18,375,682 | 302,346,268 | 15,269,696 | 172,096,841 | 9,268,792 | 51,293,570 |
| 1930 | 8,955 | 152,235 | 160,778 | 3,323,576 | 11,289,171 | 4,307,270 | 90,421,545 | 11,738,525 | 319,199,752 | 12,535,931 | 250,287,306 | 9,010,093 | 41,067,630 |
| 1931 | 17,176 | 291,992 | 146,039 | 3,018,894 | 7,524,320 | 2,247,514 | 63,194,299 | 5,289,363 | 248,783,508 | 6,742,282 | 205,071,247 | 5,237,520 | 22,827,565 |
| 1932 | 20,400 | 395,542 | 181,564 | 4,261,307 | 7,130,838 | 2,258,453 | 49,841,009 | 3,179,956 | 254,488,952 | 5,378,878 | 192,120,091 | 4,621,641 | 20,095,777 |
| 1933 | 23,928 | 562,787 | 223,529 | 6,392,929 | 7,006,406 | 2,650,720 | 42,608,002 | 3,176,341 | 271,606,071 | 6,495,731 | 195,963,751 | 6,291,416 | 25,569,924 |
| 1934 | 25,181 | 714,431 | 297,130 | 10,250,985 | 8,572,916 | 4,068,792 | 48,084,658 | 3,567,401 | 347,366,967 | 8,461,859 | 247,926,844 | 7,546,893 | 34,610,361 |
| 1935 | 30,929 | 895,058 | 365,244 | 12,852,936 | 9,251,544 | 5,994,075 | 38,791,127 | 3,023,768 | 344,268,444 | 10,785,930 | 256,239,446 | 7,940,860 | 41,492,627 |
| 1936 | 43,389 | 1,249,940 | 404,472 | 14,168,654 | 9,521,015 | 4,296,548 | 20,806,672 | 1,971,848 | 377,971,618 | 14,790,029 | 254,581,393 | 8,439,373 | 44,916,392 |
| 1937 | 54,153 | 1,558,245 | 460,781 | 16,122,727 | 11,308,685 | 5,075,451 | 46,057,584 | 6,023,411 | 419,118,371 | 21,416,949 | 291,192,278 | 14,274,245 | 64,471,028 |
| 1938 | 57,759 | 1,671,015 | 557,522 | 19,613,624 | 10,861,578 | 4,722,288 | 65,769,906 | 6,558,575 | 412,979,182 | 13,810,024 | 298,497,295 | 9,172,822 | 55,548,348 |
| 1939 | 49,746 | 1,478,492 | 587,180 | 21,221,272 | 10,771,585 | 4,361,199 | 73,254,679 | 7,392,862 | 378,743,763 | 12,002,390 | 278,409,102 | 8,544,375 | 55,000,590 |
| 1940 | 39,067 | 1,236,928 | 583,416 | 22,461,516 | 12,327,944 | 4,715,315 | 77,980,223 | 7,865,085 | 485,364,420 | 16,317,952 | 310,768,251 | 10,600,261 | 63,197,057 |
| 1941 | 43,775 | 1,385,962 | 571,026 | 21,984,501 | 12,175,700 | 4,658,545 | 66,435,583 | 6,700,693 | 490,185,657 | 16,480,042 | 363,302,195 | 12,392,238 | 63,601,981 |
| 1942 | 32,904 | 1,041,772 | 444,518 | 17,113,943 | 9,677,881 | 4,080,775 | 50,097,716 | 5,052,856 | 463,269,005 | 15,575,104 | 396,857,260 | 13,536,801 | 56,401,251 |
| 1943 | 14,600 | 462,270 | 224,403 | 8,639,516 | 8,526,310 | 3,858,496 | 42,307,510 | 4,971,132 | 405,285,476 | 15,214,417 | 335,137,014 | 13,405,481 | 46,551,312 |
| 1944 | 11,433 | 361,977 | 186,632 | 7,185,332 | 5,705,334 | 2,453,293 | 36,300,589 | 4,356,070 | 294,797,469 | 13,265,886 | 280,356,477 | 12,055,328 | 39,677,886 |
| 1945 | 12,589 | 398,591 | 175,373 | 6,751,860 | 6,157,307 | 2,893,934 | 25,852,366 | 3,244,472 | 353,497,689 | 17,674,884 | 301,737,902 | 19,431,921 | 50,395,662 |
| 1946 | 15,729 | 475,361 | 117,612 | 4,322,241 | 6,365,761 | 5,324,959 | 17,500,538 | 2,240,070 | 347,990,146 | 23,489,335 | 270,718,128 | 21,143,086 | 56,995,052 |
| 1947 | 6,969 | 200,585 | 243,282 | 8,514,870 | 5,707,691 | 4,109,538 | 41,783,921 | 8,519,741 | 306,400,709 | 41,884,977 | 268,450,926 | 30,147,039 | 93,376,750 |
| 1948 | 20,332 | 585,200 | 286,230 | 10,018,050 | 6,718,122 | 5,038,592 | 43,025,388 | 9,616,174 | 332,996,351 | 60,072,542 | 296,012,941 | 41,234,603 | 126,565,161 |
| 1949 | 17,886 | 529,524 | 288,396 | 10,382,256 | 7,636,053 | 5,669,769 | 54,856,808 | 10,956,550 | 263,580,549 | 41,645,726 | 276,324,451 | 36,604,700 | 105,788,525 |
| 1950 | 19,134 | 598,717 | 283,983 | 10,805,553 | 9,507,225 | 7,666,151 | 42,212,133 | 9,889,458 | 307,122,803 | 44,391,530 | 324,263,778 | 48,882,765 | 122,234,174 |
| 1951 | 23,691 | 717,911 | 261,274 | 9,627,947 | 8,215,884 | 7,768,118 | 43,249,658 | 11,980,155 | 273,456,604 | 50,316,015 | 333,910,764 | 66,448,242 | 146,858,388 |
| 1952 | 17,554 | 494,756 | 251,393 | 8,615,238 | 8,796,720 | 7,315,088 | 42,005,512 | 13,054,893 | 284,949,396 | 45,936,692 | 372,871,717 | 59,189,656 | 134,606,323 |
| 1953 | 14,245 | 403,230 | 253,553 | 8,727,294 | 8,376,953 | 7,017,709 | 49,021,013 | 14,869,544 | 296,559,781 | 39,338,655 | 378,345,159 | 40,388,346 | 110,744,778 |
| 1954 | 8,684 | 238,967 | 258,388 | 8,803,279 | 9,825,153 | 8,153,108 | 50,150,087 | 14,599,693 | 332,474,456 | 45,482,505 | 334,124,560 | 34,805,755 | 112,083,307 |
| 1955 | 7,666 | 217,614 | 242,477 | 8,370,306 | 7,902,145 | 6,942,113 | 44,238,031 | 16,932,549 | 302,567,640 | 45,161,245 | 429,198,565 | 52,048,909 | 129,672,736 |
| Totals | 5,193,495 | 95,764,719 | 14,721,151 | 421,095,172 | 386,292,041 | 225,352,853 | 2,835,394,382 | 450,904,188 | 11,719,223,118 | 795,756,879 | 8,999,949,689 | 672,156,466 | 2,661,030,277 |

[1] Ounces of crude gold. [2] Ounces of fine gold.

## TABLE VIIA.—PRODUCTION, 1954 AND 1955, BY MINING DIVISIONS—SUMMARY

| Mining Division | Year | Placer Gold | | Principal Lode Metals | Miscellaneous Metals | Industrial Minerals | Structural Materials | Coal | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity[1] | Value | | | | | Quantity | Value | |
| | | Oz. | $ | $ | $ | $ | $ | Tons | $ | $ |
| Alberni | 1954 | ..... | ..... | ..... | ..... | ..... | 89,865 | ..... | ..... | 89,865 |
| | **1955** | ..... | ..... | ..... | ..... | ..... | **96,470** | ..... | ..... | **96,470** |
| Atlin | 1954 | 6,723 | 185,004 | 4,784,245 | 96,368 | ..... | 2,924 | ..... | ..... | 5,068,541 |
| | **1955** | **5,330** | **151,302** | **5,881,546** | **102,085** | ..... | **5,662** | ..... | ..... | **6,140,595** |
| Cariboo | 1954 | 1,564 | 43,038 | 1,644,015 | ..... | 5,326 | 270,572 | ..... | ..... | 1,962,951 |
| | **1955** | **2,081** | **59,073** | **1,434,841** | ..... | **1,066** | **286,986** | ..... | ..... | **1,781,966** |
| Clinton | 1954 | 10 | 275 | 68 | ..... | ..... | 48,285 | ..... | ..... | 48,628 |
| | **1955** | ..... | ..... | ..... | ..... | ..... | **500** | ..... | ..... | **500** |
| Fort Steele | 1954 | 23 | 633 | 62,520,540 | 280,437 | 330,426 | 302,963 | 1,054,314 | 6,648,655 | 70,083,654 |
| | **1955** | **35** | **994** | **61,847,483** | **311,613** | **697,531** | **282,493** | **1,050,149** | **6,564,544** | **69,704,658** |
| Golden | 1954 | 2 | 55 | 2,941,347 | 36,841 | 319,037 | 41,000 | ..... | ..... | 3,338,280 |
| | **1955** | ..... | ..... | **4,114,638** | **74,429** | **399,618** | **43,832** | ..... | ..... | **4,632,517** |
| Greenwood | 1954 | ..... | ..... | 555,011 | 4,097 | 17,000 | 7,032 | ..... | ..... | 583,140 |
| | **1955** | ..... | ..... | **543,890** | **3,750** | **72,333** | **28,070** | ..... | ..... | **648,043** |
| Kamloops | 1954 | 19 | 523 | 971 | ..... | 191,878 | 305,652 | ..... | ..... | 499,024 |
| | **1955** | **1** | **28** | **3,539** | ..... | **225,216** | **579,928** | ..... | ..... | **808,711** |
| Liard | 1954 | 41 | 1,128 | ..... | ..... | 2,920,751 | 79,197 | 4,359 | 33,079 | 3,040,700[4] |
| | **1955** | **19** | **539** | ..... | ..... | **4,265,971** | **64,213** | **3,560** | **32,850** | **4,381,703**[4] |
| Lillooet | 1954 | 118 | 3,247 | 3,825,770 | ..... | ..... | 41,607 | ..... | ..... | 3,870,624 |
| | **1955** | **97** | **2,754** | **4,145,072** | **250** | ..... | **26,470** | ..... | ..... | **4,174,546** |
| Nanaimo | 1954 | 5 | 138 | ..... | 3,733,891 | 23,804 | 1,626,716 | 182,070 | 2,029,099 | 7,413,648 |
| | **1955** | ..... | ..... | ..... | **3,228,756** | **8,654** | **1,690,189** | **174,326** | **1,769,682** | **6,697,281** |
| Nelson | 1954 | 3 | 83 | 4,250,684 | 4,916,830 | ..... | 89,657 | ..... | ..... | 9,257,254 |
| | **1955** | ..... | ..... | **8,406,977** | **5,955,154** | ..... | **160,971** | ..... | ..... | **14,523,102** |
| New Westminster | 1954 | 45 | 1,238 | ..... | ..... | 8,505 | 3,129,853 | ..... | ..... | 3,139,596 |
| | **1955** | **4** | **114** | ..... | ..... | **19,266** | **3,353,676** | ..... | ..... | **3,373,056** |
| Nicola | 1954 | ..... | ..... | ..... | ..... | ..... | 25,759 | 1,256 | 12,769 | 38,528 |
| | **1955** | ..... | ..... | ..... | ..... | ..... | **20,534** | **1,259** | **12,904** | **33,438** |
| Omineca | 1954 | 54 | 1,486 | 1,850,594 | 1,135,894 | ..... | 106,118 | 36,572 | 292,862 | 3,386,954 |
| | **1955** | **35** | **994** | **554,275** | **22,695** | ..... | **179,563** | **30,015** | **227,010** | **984,537** |
| Osoyoos | 1954 | ..... | ..... | 1,738,265 | ..... | 26,775 | 32,449 | ..... | ..... | 1,797,489 |
| | **1955** | ..... | ..... | **1,332,851** | ..... | **160,056** | **18,179** | ..... | ..... | **1,511,086** |
| Revelstoke | 1954 | 1 | 28 | 1,114,455 | 24,132 | ..... | 47,563 | ..... | ..... | 1,186,178 |
| | **1955** | ..... | ..... | **1,675,888** | **36,488** | ..... | **41,091** | ..... | ..... | **1,753,467** |
| Similkameen | 1954 | 22 | 605 | 7,350,375 | 408 | ..... | 85,314 | 29,713 | 138,080 | 7,574,782 |
| | **1955** | **6** | **170** | **8,313,534** | ..... | ..... | **59,450** | **73,475** | **379,511** | **8,752,665** |
| Skeena | 1954 | ..... | ..... | 1,815,016 | ..... | ..... | 199,366 | ..... | ..... | 2,014,382 |
| | **1955** | **14** | **397** | **1,732,932** | ..... | ..... | **295,295** | ..... | ..... | **2,028,624** |
| Slocan | 1954 | ..... | ..... | 7,407,227 | 149,703 | ..... | 27,906 | ..... | ..... | 7,584,836 |
| | **1955** | ..... | ..... | **9,698,464** | **187,043** | ..... | **73,058** | ..... | ..... | **9,958,565** |
| Trail Creek | 1954 | ..... | ..... | 11,246 | ..... | 1,716,490 | 107,819 | ..... | ..... | 1,835,555 |
| | **1955** | ..... | ..... | **8,602** | ..... | **1,673,570** | **112,507** | ..... | ..... | **1,794,679** |
| Vancouver | 1954 | ..... | ..... | 7,554,806 | ..... | 317,889 | 1,938,238 | ..... | ..... | 9,810,933 |
| | **1955** | ..... | ..... | **8,845,071** | **90,421** | **274,817** | **1,328,891** | ..... | ..... | **10,539,200** |
| Vernon | 1954 | 54 | 1,486 | 5,499 | ..... | ..... | 130,179 | ..... | ..... | 137,164 |
| | **1955** | **44** | **1,249** | ..... | ..... | ..... | **322,975** | ..... | ..... | **324,224** |
| Victoria | 1954 | ..... | ..... | 292,123 | ..... | ..... | 5,659,140 | ..... | ..... | 5,951,263 |
| | **1955** | ..... | ..... | **143,541** | ..... | ..... | **6,228,251** | ..... | ..... | **6,371,792** |
| Not assigned | 1954 | ..... | ..... | 2,182,083[2] | 1,487,808[3] | ..... | ..... | ..... | ..... | 3,669,891 |
| | **1955** | ..... | ..... | **10,771,978**[2] | **2,923,203**[3] | ..... | ..... | ..... | ..... | **13,695,181** |
| Totals | 1954 | 8,684 | 238,967 | 111,844,340 | 11,866,409 | 5,877,881 | 14,395,174 | 1,308,284 | 9,154,544 | 153,383,860 |
| | **1955** | **7,666** | **217,614** | **129,455,122** | **12,935,887** | **7,798,098** | **15,299,254** | **1,332,874** | **8,986,501** | **174,710,606** |

[1] Crude gold. [2] Includes estimated zinc and lead recovered at the Trail smelter from current and reclaimed slags and gold, silver, copper, and lead recovered from copper dross (matte) derived from British Columbia mines in several mining divisions. [3] Consists of all the antimony, bismuth, and indium recovered at the Trail smelter; part of the quantities of these metals may be derived from sources outside of British Columbia. [4] Includes value of natural gas.

NOTE.—Full details for placer gold are given in this table. The columns headed "Principal Lode Metals," "Miscellaneous Metals," "Industrial Minerals," and "Structural Materials" give the total value only, details being set forth in Tables VIIB, VIIC, VIID, and VIIE. The coal is that sold and used; details for coal are given in Tables IXB and IXC.

## Table VIIb.—Production, 1954 and 1955, by Mining Divisions—Principal Lode Metals

| Division | Year | Lode Gold | | Silver | | Copper | | Lead | | Zinc | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity[1] | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| | | Oz. | $ | Oz. | $ | Lb. | $ | Lb. | $ | Lb. | $ |
| Alberni | 1954 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Atlin | 1954 | 20,665 | 704,057 | 592,707 | 491,840 | 4,554,340 | 1,325,859 | 4,253,916 | 581,936 | 16,132,797 | 1,680,553 |
| | **1955** | **20,867** | **720,329** | **641,918** | **563,931** | **4,703,437** | **1,800,288** | **4,606,220** | **687,524** | **17,394,852** | **2,109,474** |
| Cariboo | 1954 | 48,141 | 1,640,164 | 4,641 | 3,851 | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | **41,464** | **1,431,337** | **3,989** | **3,504** | ..... | ..... | ..... | ..... | ..... | ..... |
| Clinton | 1954 | 2 | 68 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fort Steele | 1954 | 307 | 10,460 | 3,719,028 | 3,086,124 | ..... | ..... | 255,012,518 | 34,885,712 | 235,559,606 | 24,538,244 |
| | **1955** | **335** | **11,564** | **2,849,594** | **2,503,397** | ..... | ..... | **214,250,159** | **31,978,979** | **225,559,026** | **27,353,543** |
| Golden | 1954 | ..... | ..... | 222,114 | 184,315 | 27,780 | 8,087 | 15,403,294 | 2,107,171 | 6,160,829 | 641,774 |
| | **1955** | ..... | ..... | **233,074** | **204,758** | **230,911** | **88,383** | **16,616,858** | **2,480,232** | **11,060,152** | **1,341,265** |
| Greenwood | 1954 | 195 | 6,644 | 564,825 | 468,703 | 11,702 | 3,407 | 290,061 | 39,680 | 351,127 | 36,577 |
| | **1955** | **217** | **7,491** | **516,448** | **453,705** | **14,689** | **5,622** | **252,260** | **37,652** | **325,061** | **39,420** |
| Kamloops | 1954 | ..... | ..... | 8 | 7 | 3,311 | 964 | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | **518** | **455** | ..... | ..... | **14,956** | **2,232** | **7,029** | **852** |
| Liard | 1954 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Lillooet | 1954 | 111,707 | 3,805,857 | 23,997 | 19,913 | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | **119,445** | **4,123,241** | **24,850** | **21,831** | ..... | ..... | ..... | ..... | ..... | ..... |
| Nanaimo | 1954 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nelson | 1954 | 1,187 | 40,441 | 42,444 | 35,221 | ..... | ..... | 16,406,922 | 2,244,467 | 18,532,738 | 1,930,555 |
| | **1955** | **33** | **1,139** | **57,636** | **50,634** | ..... | ..... | **14,175,926** | **2,115,899** | **51,449,702** | **6,239,305** |
| New Westminster | 1954 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nicola | 1954 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Omineca | 1954 | 2,919 | 99,450 | 966,117 | 801,703 | 37,533 | 10,927 | 3,521,770 | 481,778 | 4,384,526 | 456,736 |
| | **1955** | **643** | **22,196** | **256,489** | **225,328** | **48,183** | **18,443** | **864,352** | **129,013** | **1,313,553** | **159,295** |
| Osoyoos | 1954 | 50,097 | 1,734,401 | 4,656 | 3,864 | ..... | ..... | ..... | ..... | ..... | ..... |
| | **1955** | **38,521** | **1,329,745** | **3,536** | **3,106** | ..... | ..... | ..... | ..... | ..... | ..... |
| Revelstoke | 1954 | 2,117 | 72,126 | 293,267 | 243,359 | ..... | ..... | 3,715,772 | 508,318 | 2,790,168 | 290,652 |
| | **1955** | **2,475** | **85,437** | **320,291** | **281,379** | ..... | ..... | **4,886,167** | **729,309** | **4,780,764** | **579,763** |
| Similkameen | 1954 | 7,960 | 271,197 | 166,211 | 137,925 | 23,843,270 | 6,941,253 | ..... | ..... | ..... | ..... |
| | **1955** | **6,932** | **239,293** | **147,681** | **129,739** | **20,754,222** | **7,943,886** | **1,780** | **266** | **2,885** | **350** |
| Skeena | 1954 | 73 | 2,487 | 2,030,426 | 1,684,888 | ..... | ..... | 924,771 | 126,509 | 10,864 | 1,132 |
| | **1955** | ..... | ..... | **1,790,380** | **1,572,867** | ..... | ..... | **1,072,391** | **160,065** | ..... | ..... |
| Slocan | 1954 | 257 | 8,756 | 924,921 | 767,518 | ..... | ..... | 30,456,315 | 4,166,424 | 23,658,720 | 2,464,529 |
| | **1955** | **253** | **8,734** | **846,858** | **743,973** | ..... | ..... | **36,168,405** | **5,398,496** | **29,250,939** | **3,547,261** |
| Trail Creek | 1954 | 164 | 5,588 | 111 | 92 | 19,118 | 5,566 | ..... | ..... | ..... | ..... |
| | **1955** | **179** | **6,179** | **58** | **51** | **6,198** | **2,372** | ..... | ..... | ..... | ..... |
| Vancouver | 1954 | 11,569 | 394,156 | 94,586 | 78,489 | 17,751,513 | 5,167,820 | 549,388 | 75,156 | 17,655,613 | 1,839,185 |
| | **1955** | **10,969** | **378,650** | **85,856** | **75,425** | **16,347,307** | **6,257,095** | **677,594** | **101,138** | **16,762,292** | **2,032,763** |
| Vernon | 1954 | ..... | ..... | 4,076 | 3,382 | ..... | ..... | 12,941 | 1,770 | 3,335 | 347 |
| | **1955** | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Victoria | 1954 | ..... | ..... | 5,290 | 4,390 | **988,366** | **287,733** | ..... | ..... | ..... | ..... |
| | **1955** | ..... | ..... | **1,987** | **1,746** | **370,453** | **141,795** | ..... | ..... | ..... | ..... |
| Not assigned[2] | 1954 | 218 | 7,427 | 165,728 | 137,524 | 2,913,154 | 848,077 | 1,926,788 | 263,584 | 8,884,237 | 925,471 |
| | **1955** | **144** | **4,971** | **120.982** | **106,284** | **1.762,631** | **674,665** | **8,980,572** | **1,340,440** | **71,292,310** | **8,645,618** |
| Totals | 1954 | 258,388 | 8,803,279 | 9.825,153 | 8,153,108 | 50,150,087 | 14,599,693 | 332,474,456 | 45,482,505 | 334,124,560 | 34,805,755 |
| | **1955** | **242,477** | **8,370,306** | **7,902,145** | **6,942,113** | **44,238,031** | **16.932,549** | **302,567,640** | **45,161,245** | **429,198,565** | **52,048,909** |

[1] Fine gold. [2] Gold, silver, copper, and some lead "not assigned" were recovered at the Tacoma smelter from dross shipped from the Trail smelter. The zinc and most of the lead were recovered at the Trail smelter by "fuming" current and reclaimed slag.

## TABLE VIIc.—PRODUCTION, 1954 AND 1955, BY MINING DIVISIONS—MISCELLANEOUS METALS

| Division | Year | Antimony[1] | | Bismuth | | Cadmium[2] | | Indium | | Iron Ore | | Mercury | | Tin | | Tungsten ($WO_3$) | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | | Lb. | $ | Lb. | $ | Lb. | $ | Oz. | $ | Tons | $ | Lb. | $ | Lb. | $ | Lb. | $ | $ |
| Atlin | 1954 | | | | | 58,405 | 96,368 | | | | | | | | | | | 96,368 |
| | **1955** | | | | | **60,765** | **102,085** | | | | | | | | | | | **102,085** |
| Fort Steele | 1954 | | | | | | | | | | | | | 333,788 | 280,437 | | | 280,437 |
| | **1955** | | | | | | | | | | | | | **391,228** | **311,613** | | | **311,613** |
| Golden | 1954 | | | | | 22,328 | 36,841 | | | | | | | | | | | 36,841 |
| | **1955** | | | | | **44,303** | **74,429** | | | | | | | | | | | **74,429** |
| Greenwood | 1954 | | | | | 2,483 | 4,097 | | | | | | | | | | | 4,097 |
| | **1955** | | | | | **2,232** | **3,750** | | | | | | | | | | | **3,750** |
| Lillooet | 1954 | | | | | | | | | | | | | | | | | |
| | **1955** | | | | | | | | | | | **75** | **250** | | | | | **250** |
| Nanaimo | 1954 | | | | | | | | | 535,746 | 3,733,891 | | | | | | | 3,733,891 |
| | **1955** | | | | | | | | | **610,930** | **3,228,756** | | | | | | | **3,228,756** |
| Nelson | 1954 | | | | | 84,830 | 139,970 | | | | | | | | | 1,695,020 | 4,776,860 | 4,916,830 |
| | **1955** | | | | | **294,159** | **494,187** | | | | | | | | | **1,914,000** | **5,460,967** | **5,955,154** |
| Omineca | 1954 | | | | | 39,411 | 65,028 | | | | | | | | | 505,040 | 1,070,866 | 1,135,894 |
| | **1955** | | | | | **13,509** | **22,695** | | | | | | | | | | | **22,695** |
| Revelstoke | 1954 | | | | | 12,303 | 20,300 | | | | | | | | | 6,383 | 3,832 | 24,132 |
| | **1955** | | | | | **21,719** | **36,488** | | | | | | | | | | | **36,488** |
| Similkameen | 1954 | | | | | | | | | | | | | | | | | 408[4] |
| | **1955** | | | | | | | | | | | | | | | | | |
| Skeena | 1954 | | | | | | | | | | | | | | | | | |
| | **1955** | | | | | | | | | | | | | | | | | |
| Slocan | 1954 | | | | | 90,729 | 149,703 | | | | | | | | | | | 149,703 |
| | **1955** | | | | | **111,335** | **187,043** | | | | | | | | | | | **187,043** |
| Vancouver | 1954 | | | | | | | | | | | | | | | | | |
| | **1955** | | | | | **53,822** | **90,421** | | | | | | | | | | | **90,421** |
| Not assigned[1 2 3] | 1954 | 1,302,333[3] | 382,104 | 225,351 | 493,519 | 370,245 | 610,904 | 477 | 1,281 | | | | | | | | | 1,487,808 |
| | **1955** | **2,021,726[3]** | **667,776** | **160,767** | **356,903** | **991,747** | **1,666,135** | **104,774** | **232,389** | | | | | | | | | **2,923,203** |
| Totals | 1954 | 1,302,333 | 382,104 | 225,351 | 493,519 | 680,734 | 1,123,211 | 477 | 1,281 | 535,746 | 3,733,891 | | | 333,788 | 280,437 | 2,206,443 | 5,851,558 | 11,866,409 |
| | **1955** | **2,021,726** | **667,776** | **160,767** | **356,903** | **1,593,591** | **2,677,233** | **104,774** | **232,389** | **610,930** | **3,228,756** | **75** | **250** | **391,228** | **311,613** | **1,914,000** | **5,460,967** | **12,935,887** |

[1] Antimony assigned to individual mining divisions is the reported content of concentrates exported to foreign smelters. Antimony "not assigned" is the antimony content of antimonial lead produced at the Trail smelter and antimony reported as recovered from Dore slag and flue dust exported.

[2] Cadmium assigned to individual mining divisions is the reported content of customs shipments to the Trail smelter and to foreign smelters. Cadmium "not assigned" is the remainder of the reported estimated recovery at the Trail refinery from British Columbia concentrates.

[3] Antimony, bismuth, and indium recovered at the Trail smelter may include some metal from sources outside British Columbia, in addition to metal contained in British Columbia ores and concentrates. The Trail output of each of the three metals is shown as "not assigned."

[4] Value of four ounces of platinum credited to the Lillooet Mining Division in 1954.

## TABLE VIID.—PRODUCTION, 1954 AND 1955, BY MINING DIVISIONS—INDUSTRIAL MINERALS

| Division | Year | Asbestos | | Barite | | Diatomite | | Fluxes (Limestone, Quartz) | | Granules (Roofing) | | Gypsum and Products | | Mica | | Sulphur | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Lb. | $ | Tons | $ | $ |
| Cariboo | 1954 | | | | | | | | | | | | | 284,000 | 5,326 | | | 5,326 |
| | **1955** | | | | | **14** | **280** | | | | | | | **80,600** | **786** | | | **1,066** |
| Fort Steele | 1954 | | | | | | | | | | | 11,624 | 26,156 | | | 30,427 | 304,270 | 330,426 |
| | **1955** | | | | | | | | | | | | | | | **32,826** | **697,531** | **697,531** |
| Golden | 1954 | | | 5,056 | 115,337 | | | | | | | 60,200 | 203,700 | | | | | 319,037 |
| | **1955** | | | **9,465** | **238,825** | | | | | | | **47,647** | **160,793** | | | | | **399,618** |
| Greenwood | 1954 | | | | | | | 17,000 | 17,000 | | | | | | | | | 17,000 |
| | **1955** | | | | | | | **72,333** | **72,333** | | | | | | | | | **72,333** |
| Kamloops | 1954 | | | | | | | | | | | 103,656 | 191,878 | | | | | 191,878 |
| | **1955** | | | | | | | | | | | **102,072** | **223,141** | **424,700** | **2,075** | | | **225,216** |
| Liard | 1954 | 8,598 | 2,920,751 | | | | | | | | | | | | | | | 2,920,751 |
| | **1955** | **17,187** | **4,265,971** | | | | | | | | | | | | | | | **4,265,971** |
| Nanaimo | 1954 | | | | | | | 22,897 | 23,804 | | | | | | | | | 23,804 |
| | **1955** | | | | | | | **11,157** | **8,654** | | | | | | | | | **8,654** |
| New Westminster | 1954 | | | | | | | | | 1,080 | 8,505 | | | | | | | 8,505 |
| | **1955** | | | | | | | | | **2,585** | **19,266** | | | | | | | **19,266** |
| Omineca | 1954 | | | | | | | | | | | | | | | | | |
| | **1955** | | | | | | | | | | | | | | | | | |
| Osoyoos | 1954 | | | | | | | | | 1,785 | 26,775 | | | | | | | 26,775 |
| | **1955** | | | | | | | **28,269** | **127,211** | **2,676** | **32,845** | | | | | | | **160,056** |
| Vancouver | 1954 | | | | | | | | | 1,676 | 30,227 | | | | | 17,923 | 287,662 | 317,889 |
| | **1955** | | | | | | | | | **1,094** | **21,747** | | | | | **16,338** | **253,070** | **274,817** |
| Not assigned | 1954 | | | | | | | | | | | | | | | 171,649[1] | 1,716,490 | 1,716,490 |
| | **1955** | | | | | | | | | | | | | | | **167,356[1]** | **1,673,570** | **1,673,570** |
| Totals | 1954 | 8,598 | 2,920,751 | 5,056 | 115,337 | | | 39,897 | 40,804 | 4,541 | 65,507 | 175,480 | 421,734 | 284,000 | 5,326 | 219,999 | 2,308,422 | 5,877,881 |
| | **1955** | **17,187** | **4,265,971** | **9,465** | **238,825** | **14** | **280** | **111,759** | **208,198** | **6,355** | **73,858** | **149,719** | **383,934** | **505,300** | **2,861** | **216,520** | **2,624,171** | **7,798,098** |

[1] Recovery at Trail smelter for use in Warfield fertilizer plants, and derived from several mining divisions.

## Table VIIe.—Production, 1954 and 1955, by Mining Divisions—Structural Materials

| Division | Year | Cement | Lime and Limestone | Building-stone | Rubble, Riprap, and Crushed Rock | Sand and Gravel | Brick (Common) | Face, Paving, and Sewer Brick | Fire-bricks, Blocks | Clays | Structural Tile (Hollow Blocks), Roof-tile, Floor-tile | Drain-tile and Sewer-pipe | Pottery (Glazed or Unglazed) | Other Clay Products | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ |
| Alberni | 1954 | ... | ... | ... | 908 | 88,957 | ... | ... | ... | ... | ... | ... | ... | ... | 89,865 |
| | **1955** | ... | ... | ... | **19** | **96,451** | ... | ... | ... | ... | ... | ... | ... | ... | **96,470** |
| Atlin | 1954 | ... | ... | ... | ... | 2,924 | ... | ... | ... | ... | ... | ... | ... | ... | 2,924 |
| | **1955** | ... | ... | ... | ... | **5,662** | ... | ... | ... | ... | ... | ... | ... | ... | **5,662** |
| Cariboo | 1954 | ... | ... | ... | 41,419 | 229,153 | ... | ... | ... | ... | ... | ... | ... | ... | 270,572 |
| | **1955** | ... | ... | ... | **26,778** | **260,208** | ... | ... | ... | ... | ... | ... | ... | ... | **286,986** |
| Clinton | 1954 | ... | ... | ... | ... | 48,285 | ... | ... | ... | ... | ... | ... | ... | ... | 48,285 |
| | **1955** | ... | ... | ... | ... | **500** | ... | ... | ... | ... | ... | ... | ... | ... | **500** |
| Fort Steele | 1954 | ... | ... | ... | 20,469 | 282,494 | ... | ... | ... | ... | ... | ... | ... | ... | 302,963 |
| | **1955** | ... | ... | ... | **23,731** | **258,762** | ... | ... | ... | ... | ... | ... | ... | ... | **282,493** |
| Golden | 1954 | ... | ... | ... | 1,000 | 40,000 | ... | ... | ... | ... | ... | ... | ... | ... | 41,000 |
| | **1955** | ... | ... | ... | **4,102** | **39,730** | ... | ... | ... | ... | ... | ... | ... | ... | **43,832** |
| Greenwood | 1954 | ... | ... | ... | 1,110 | 5,922 | ... | ... | ... | ... | ... | ... | ... | ... | 7,032 |
| | **1955** | ... | ... | ... | **5,433** | **22,637** | ... | ... | ... | ... | ... | ... | ... | ... | **28,070** |
| Kamloops | 1954 | ... | ... | ... | 163,997 | 141,655 | ... | ... | ... | ... | ... | ... | ... | ... | 305,652 |
| | **1955** | ... | ... | ... | **134,828** | **445,100** | ... | ... | ... | ... | ... | ... | ... | ... | **579,928** |
| Liard | 1954 | ... | ... | ... | 500 | 78,697 | ... | ... | ... | ... | ... | ... | ... | ... | 79,197 |
| | **1955** | ... | ... | ... | **78** | **64,135** | ... | ... | ... | ... | ... | ... | ... | ... | **64,213** |
| Lillooet | 1954 | ... | ... | ... | ... | 41,607 | ... | ... | ... | ... | ... | ... | ... | ... | 41,607 |
| | **1955** | ... | ... | ... | **6,000** | **20,470** | ... | ... | ... | ... | ... | ... | ... | ... | **26,470** |
| Nanaimo | 1954 | ... | 1,367,768 | 45,000 | 4,822 | 209,126 | ... | ... | ... | ... | ... | ... | ... | ... | 1,626,716 |
| | **1955** | ... | **1,557,646** | **30,000** | **5,491** | **97,052** | ... | ... | ... | ... | ... | ... | ... | ... | **1,690,189** |
| Nelson | 1954 | ... | ... | 8,300 | 51,256 | 30,101 | ... | ... | ... | ... | ... | ... | ... | ... | 89,657 |
| | **1955** | ... | ... | ... | **63,814** | **97,157** | ... | ... | ... | ... | ... | ... | ... | ... | **160,971** |
| New Westminster | 1954 | ... | 97,596 | ... | 258,418 | 1,222,909 | 12,420 | 278,054 | 372,528 | 36,370 | 103,152 | 695,245 | 23,389 | 29,772 | 3,129,853 |
| | **1955** | ... | **54,508** | ... | **219,072** | **1,204,767** | **219,069** | **233,427** | **505,024** | **46,757** | **93,877** | **739,306** | **31,339** | **42,778** | **3,389,924** |
| Nicola | 1954 | ... | ... | ... | 18,029 | 7,730 | ... | ... | ... | ... | ... | ... | ... | ... | 25,759 |
| | **1955** | ... | ... | ... | **4,000** | **16,534** | ... | ... | ... | ... | ... | ... | ... | ... | **20,534** |
| Omineca | 1954 | ... | ... | ... | 5,000 | 101,118 | ... | ... | ... | ... | ... | ... | ... | ... | 106,118 |
| | **1955** | ... | ... | ... | **4,633** | **174,930** | ... | ... | ... | ... | ... | ... | ... | ... | **179,563** |
| Osoyoos | 1954 | ... | ... | ... | ... | 32,449 | ... | ... | ... | ... | ... | ... | ... | ... | 32,449 |
| | **1955** | ... | ... | ... | ... | **18,179** | ... | ... | ... | ... | ... | ... | ... | ... | **18,179** |
| Revelstoke | 1954 | ... | ... | ... | 135 | 47,428 | ... | ... | ... | ... | ... | ... | ... | ... | 47,563 |
| | **1955** | ... | ... | ... | **900** | **40,191** | ... | ... | ... | ... | ... | ... | ... | ... | **41,091** |
| Similkameen | 1954 | ... | ... | ... | 19,568 | 65,746 | ... | ... | ... | ... | ... | ... | ... | ... | 85,314 |
| | **1955** | ... | ... | ... | **19,700** | **39,750** | ... | ... | ... | ... | ... | ... | ... | ... | **59,450** |
| Skeena | 1954 | ... | 82,998 | ... | 17,362 | 99,006 | ... | ... | ... | ... | ... | ... | ... | ... | 199,366 |
| | **1955** | ... | **93,675** | ... | **82,820** | **118,800** | ... | ... | ... | ... | ... | ... | ... | ... | **295,295** |
| Slocan | 1954 | ... | ... | ... | 5,443 | 22,463 | ... | ... | ... | ... | ... | ... | ... | ... | 27,906 |
| | **1955** | ... | ... | ... | **17,621** | **55,437** | ... | ... | ... | ... | ... | ... | ... | ... | **73,058** |
| Trail Creek | 1954 | ... | ... | ... | 7,800 | 100,019 | ... | ... | ... | ... | ... | ... | ... | ... | 107,819 |
| | **1955** | ... | ... | ... | **3,450** | **109,057** | ... | ... | ... | ... | ... | ... | ... | ... | **112,507** |
| Vancouver | 1954 | ... | ... | 45,000 | 614,074 | 1,224,487 | 13,130 | 38,622 | ... | ... | ... | ... | ... | 2,925 | 1,938,238 |
| | **1955** | ... | ... | **118,454** | **280,454** | **781,306** | **12,490** | **15,486** | **71,717** | ... | ... | ... | ... | **12,736** | **1,292,643** |
| Vernon | 1954 | ... | ... | 1,092 | 19,655 | 109,432 | ... | ... | ... | ... | ... | ... | ... | ... | 130,179 |
| | **1955** | ... | ... | ... | **53,000** | **269,975** | ... | ... | ... | ... | ... | ... | ... | ... | **322,975** |
| Victoria | 1954 | 4,935,298 | 6,640 | ... | 2,891 | 618,761 | 10,000[1] | ... | ... | 55 | 19,751 | 58,052[1] | 7,692 | ... | 5,659,140 |
| | **1955** | **5,474,875** | **5,519** | ... | **6,348** | **650,100** | **580** | ... | **1,837** | ... | **20,583** | **61,713** | **6,696** | ... | **6,228,251** |
| Totals | 1954 | 4,935,298 | 1,555,002 | 99,392 | 1,253,856 | 4,850,469 | 35,550 | 316,676 | 372,528 | 36,425 | 122,903 | 753,297 | 31,081 | 32,697 | 14,395,174 |
| | **1955** | **5,474,875** | **1,711,348** | **148,454** | **962,272** | **4,886,890** | **232,139** | **248,913** | **578,578** | **46,757** | **114,460** | **801,019** | **38,035** | **55,514** | **15,299,254** |

[1] Estimated.

## TABLE VIIIA.—PRODUCTION TO DATE BY MINING DIVISIONS—SUMMARY

| Division | Placer Gold[1] | | Principal Lode Metals | Miscellaneous Metals | Industrial Minerals | Structural Materials | Coal | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | | | | | Quantity | Value | |
| | Oz. | $ | $ | $ | $ | $ | Tons | $ | $ |
| Alberni | 1,610 | 33,052 | 11,657,082 | ..... | 9,398 | 671,406 | ..... | ..... | 12,370,938 |
| Atlin | 725,039 | 17,082,890 | 27,009,025 | 198,813 | 20,325 | 153,450 | ..... | ..... | 44,464,503 |
| Cariboo | 2,587,267 | 53,508,562 | 33,964,967 | 23,730 | 157,180 | 2,070,834 | 290 | 1,100 | 89,726,273 |
| Clinton | 10,063 | 240,004 | 847,454 | 900 | 162,867 | 72,445 | ..... | ..... | 1,323,670 |
| Fort Steele | 20,423 | 465,308 | 1,319,446,225 | 7,108,542 | 1,364,919 | 3,085,594 | 50,426,570 | 199,718,021 | 1,531,188,609 |
| Golden | 469 | 11,268 | 26,625,889 | 126,391 | 1,341,626 | 848,873 | ..... | ..... | 28,954,047 |
| Greenwood | 5,051 | 114,996 | 112,911,906 | 39,242 | 2,226,947 | 480,828 | ..... | ..... | 115,773,919 |
| Kamloops | 27,484 | 601,608 | 3,040,469 | 65,678 | 6,234,258 | 3,360,897 | 14,995 | 59,765 | 13,362,675 |
| Liard | 50,070 | 1,244,851 | 5,314 | 79 | 8,198,438 | 549,213 | 78,943 | 510,920 | 10,533,490[2] |
| Lillooet | 91,539 | 1,883,708 | 99,284,391 | 48,350 | 5,129 | 574,912 | ..... | ..... | 101,796,490 |
| Nanaimo | 866 | 19,300 | 5,876,314 | 20,167,596 | 603,336 | 20,495,253 | 79,284,503 | 290,741,699 | 337,903,498 |
| Nelson | 3,492 | 86,403 | 100,700,501 | 21,533,778 | 64,126 | 2,106,920 | ..... | ..... | 124,491,728 |
| New Westminster | 11,467 | 239,680 | 126,458 | 87,724 | 66,414 | 36,557,552 | ..... | ..... | 37,077,828 |
| Nicola | 230 | 4,652 | 568,779 | 17 | 9,610 | 256,941 | 2,926,121 | 11,041,565 | 11,881,564 |
| Omineca | 52,276 | 1,383,977 | 13,926,271 | 15,230,026 | 11,460 | 999,564 | 392,980 | 2,371,523 | 33,922,821 |
| Osoyoos | 190 | 4,142 | 50,042,747 | 1,020 | 1,382,180 | 873,579 | 1,122 | 5,008 | 52,308,676 |
| Revelstoke | 7,256 | 155,246 | 7,010,713 | 84,186 | ..... | 846,790 | ..... | ..... | 8,096,935 |
| Similkameen | 12,075 | 286,180 | 109,935,116 | 128,401 | 18,558 | 1,602,742 | 4,563,035 | 19,072,182 | 131,043,179 |
| Skeena | 4,603 | 105,569 | 204,342,646 | 269,575 | 1,240,215 | 4,132,547 | ..... | ..... | 210,090,552 |
| Slocan | 362 | 9,286 | 136,257,460 | 660,674 | ..... | 486,250 | ..... | ..... | 137,413,670 |
| Trail Creek[3] | 848 | 24,176 | 92,584,542[3] | 35,564[3] | 24,252,775 | 1,017,106 | ..... | ..... | 117,914,163 |
| Vancouver | 182 | 5,306 | 177,654,349 | 381,455 | 4,974,741 | 18,382,305 | ..... | ..... | 201,398,156 |
| Vernon | 2,344 | 62,172 | 188,310 | ..... | 3,978 | 1,389,936 | ..... | ..... | 1,644,396 |
| Victoria | 628 | 15,680 | 5,211,847 | 24,508 | 190,451 | 75,539,278 | ..... | ..... | 80,981,764 |
| Not assigned[3] | 1,577,661 | 18,176,703 | 26,046,883[3] | 36,600,895[3] | ..... | 25,927,555 | ..... | ..... | 106,752,036 |
| Totals | 5,193,495 | 95,764,719 | 2,565,265,558 | 102,817,144 | 52,538,931 | 202,482,770 | 137,688,559 | 523,521,783 | 3,542,415,580 |

[1] Quantity of placer gold is given in crude ounces. The year of first recorded production for the major placer-producing mining divisions was: Atlin, 1898; Cariboo, 1858; Lillooet, 1874; Quesnel, 1858.

[2] Includes value of natural gas.

[3] *Re* "Trail Creek" and *re* "not assigned," *see* footnotes under Tables VIIIB and VIIIC.

NOTE.—Full details for placer gold are given in this table. The columns headed "Principal Lode Metals," "Miscellaneous Metals," "Industrial Minerals," and "Structural Materials" give the total value only, details being set forth in Tables VIIIB, VIIIC, VIIID, and VIIIE. The quantity of coal is gross mine output; *see* footnotes to Tables IXA, IXB, and IXC.

## Table VIIIb.—Production to Date by Mining Divisions—Principal Lode Metals

| Division | Lode Gold | | Silver | | Copper | | Lead | | Zinc | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | Oz. | $ | Oz. | $ | Lb. | $ | Lb. | $ | Lb. | $ | $ |
| Alberni | 300,091 | 11,231,599 | 161,219 | 77,492 | 2,290,699 | 343,518 | 112,888 | 4,473 | ..... | ..... | 11,657,082 |
| Atlin | 315,241 | 11,143,234 | 2,100,261 | 1,767,920 | 15,692,012 | 5,077,769 | 15,485,333 | 2,216,157 | 57,488,195 | 6,803,945 | 27,009,025 |
| Cariboo | 935,868 | 33,897,725 | 105,067 | 63,382 | 82 | 17 | 24,560 | 3,724 | 505 | 19 | 33,964,867 |
| Clinton | 23,390 | 827,328 | 31,564 | 14,214 | 57,548 | 5,905 | 193 | 7 | ..... | ..... | 847,454 |
| Fort Steele | 3,349 | 85,008 | 186,234,004 | 101,416,405 | 28,592 | 6,193 | 10,486,824,862 | 696,335,894 | 7,465,733,453 | 521,602,725 | 1,319,446,225 |
| Golden | 100 | 2,503 | 2,338,912 | 1,626,811 | 327,066 | 108,404 | 168,113,450 | 14,049,975 | 163,849,076 | 10,838,196 | 26,625,889 |
| Greenwood | 1,133,188 | 24,375,130 | 28,893,162 | 16,357,413 | 441,252,412 | 70,513,094 | 12,568,003 | 850,869 | 13,114,983 | 815,400 | 112,911,906 |
| Kamloops | 47,867 | 1,608,294 | 303,405 | 180,995 | 6,411,583 | 1,179,668 | 520,651 | 42,281 | 433,539 | 29,231 | 3,040,469 |
| Liard | 114 | 4,120 | 204 | 146 | ..... | ..... | 5,810 | 1,048 | ..... | ..... | 5,314 |
| Lillooet | 2,820,271 | 98,880,417 | 706,987 | 401,391 | 400 | 41 | 62,463 | 2,542 | ..... | ..... | 99,284,391 |
| Nanaimo | 84,009 | 1,919,998 | 570,270 | 336,232 | 22,123,948 | 3,620,084 | ..... | ..... | ..... | ..... | 5,876,314 |
| Nelson | 1,328,548 | 41,543,426 | 7,352,476 | 4,246,036 | 14,702,422 | 1,648,622 | 154,202,754 | 17,468,758 | 266,314,645 | 35,793,659 | 100,700,501 |
| New Westminster | 4,416 | 112,407 | 13,259 | 6,072 | 26,489 | 6,379 | 28,425 | 1,119 | 12,755 | 481 | 126,458 |
| Nicola | 8,525 | 234,914 | 267,345 | 126,522 | 549,975 | 106,230 | 2,235,428 | 90,516 | 320,683 | 10,597 | 568,779 |
| Omineca | 22,481 | 685,679 | 7,762,304 | 6,012,796 | 6,603,734 | 1,496,112 | 21,018,997 | 2,549,601 | 25,449,783 | 3,182,083 | 13,926,271 |
| Osoyoos | 1,618,906 | 49,252,054 | 583,990 | 383,265 | 2,781,401 | 398,879 | 256,957 | 8,151 | 6,839 | 398 | 50,042,747 |
| Revelstoke | 31,267 | 882,919 | 3,360,961 | 2,109,725 | 31,360 | 8,357 | 25,593,487 | 2,302,182 | 13,887,250 | 1,707,530 | 7,010,713 |
| Similkameen | 174,046 | 5,986,802 | 4,058,104 | 2,438,914 | 574,523,594 | 101,494,977 | 246,806 | 10,459 | 72,275 | 3,964 | 109,935,116 |
| Skeena | 2,392,484 | 60,207,439 | 63,011,245 | 38,962,619 | 689,106,270 | 98,025,648 | 54,580,001 | 4,711,095 | 16,388,781 | 2,435,845 | 204,342,646 |
| Slocan | 14,391 | 407,789 | 65,678,385 | 41,026,268 | 229,696 | 43,512 | 693,996,515 | 48,505,235 | 515,182,126 | 46,274,656 | 136,257,460 |
| Trail Creek[1] [2] | 2,949,591 | 62,585,684 | 4,168,515 | 2,416,862 | 140,473,135 | 21,356,494 | 18,484,672 | 919,716 | 158,016,197 | 5,305,786 | 92,584,542 |
| Vancouver | 418,177 | 13,269,246 | 4,532,738 | 2,692,940 | 886,568,422 | 139,368,768 | 15,112,658 | 1,402,573 | 158,330,295 | 20,920,822 | 77,654,349 |
| Vernon | 5,223 | 176,048 | 12,823 | 8,084 | 654 | 100 | 24,913 | 2,932 | 10,816 | 1,146 | 188,310 |
| Victoria | 37,663 | 812,730 | 809,602 | 448,049 | 22,915,846 | 3,647,297 | 210,097 | 19,848 | 3,568,709 | 283,923 | 5,211,847 |
| Not assigned[3] | 51,845 | 962,679 | 3,235,239 | 2,232,300 | 8,697,042 | 2,448,120 | 24,798,735 | 4,257,724 | 141,768,784 | 16,146,060 | 26,046,883 |
| Totals | 14,721,151 | 421,095,172 | 386,292,041 | 225,352,853 | 2,835,394,382 | 450,904,188 | 11,719,223,118 | 795,756,879 | 8,999,949,689 | 672,156,466 | 2,565,265,558 |

[1] Includes zinc and lead recovered at the Trail smelter from current and reclaimed slags, prior to 1953. From 1953 this recovery is listed as "not assigned."

[2] Includes gold, silver, copper, and lead recovered at the Tacoma smelter from dross shipped by the Trail smelter, prior to 1953. From 1953 this recovery is listed as "not assigned."

[3] Includes all metals recovered from dross and slag (*see* notes 1 and 2) in 1954 and 1955.

## TABLE VIIIc.—PRODUCTION TO DATE BY MINING DIVISIONS—MISCELLANEOUS METALS

| Division | Antimony[1] | | Bismuth | | Cadmium[2] | | Chromite | | Cobalt | | Indium | | Iron Ore | | Magnesium | | Manganese | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| | Lb. | $ | Lb. | $ | Lb. | $ | Tons | $ | Lb. | $ | Oz. | $ | Tons | $ | Lb. | $ | Tons | $ |
| Atlin | | | | | 119,170 | 198,453 | | | | | | | | | | | | |
| Cariboo | | | | | | | | | | | | | | | | | | |
| Clinton | | | | | | | 126 | 900 | | | | | | | | | | |
| Fort Steele | | | | | 2,418 | 5,155 | | | | | | | | | 204,632 | 88,184 | | |
| Golden | 40,062 | 14,906 | | | 66,731 | 111,485 | | | | | | | | | | | | |
| Greenwood | | | | | 4,715 | 7,847 | | | | | | | | | | | | |
| Kamloops | | | | | | | 670 | 31,395 | | | | | 17,109 | 59,883 | | | | |
| Liard | | | | | | | | | | | | | | | | | | |
| Lillooet | 13,466 | 4,321 | | | | | | | | | | | | | | | | |
| Nanaimo | | | | | | | | | | | | | 3,207,858 | 20,167,596 | | | | |
| Nelson | | | | | 553,691 | 991,767 | | | | | | | | | | | | |
| New Westminster | | | | | | | | | | | | | | | | | | |
| Nicola | | | 12 | 17 | | | | | | | | | | | | | | |
| *Omineca* | 104,489 | 15,217 | | | 66,475 | 114,426 | | | 1,730 | 420 | | | | | | | | |
| Osoyoos | | | | | | | | | | | | | | | | | | |
| Revelstoke | 9,394 | 3,455 | | | 42,289 | 75,044 | | | | | | | | | | | | |
| Similkameen | | | | | | | | | | | | | | | | | | |
| Skeena | | | | | 120,349 | 248,835 | | | | | | | 1,200 | 6,000 | | | | |
| Slocan | 31,865 | 8,133 | | | 346,606 | 644,381 | | | | | | | | | | | 541 | 8,160 |
| Trail Creek | | | | | | | | | | | | | 550 | 1,925 | | | | |
| Vancouver | | | | | 163,133 | 381,455 | | | | | | | | | | | | |
| Victoria | | | | | | | | | | | | | | | | | 1,167 | 24,508 |
| Not assigned[1 2 3] | 31,560,363 | 7,248,979 | 4,275,701 | 6,838,144 | 16,389,066 | 22,243,354 | | | | | 119,101 | 270,418 | | | | | | |
| Totals | 31,759,643 | 7,295,011 | 4,275,713 | 6,838,161 | 17,875,643 | 25,022,202 | 796 | 32,295 | 1,730 | 420 | 119,101 | 270,418 | 3,226,717 | 20,235,404 | 204,632 | 88,184 | 1,708 | 32,668 |

[1] Antimony assigned to individual mining divisions is the reported content of concentrates exported to foreign smelters. Antimony "not assigned" is the antimony content of antimonial lead or of other antimony products recovered at the Trail smelter.

[2] Cadmium assigned to individual mining divisions is that reported by operators of individual mines from concentrates shipped to the Trail smelter and to foreign smelters. Cadmium "not assigned" is the remainder of the reported estimated recovery at the Trail refinery from British Columbia concentrates.

[3] The antimony, bismuth, and indium recovered at the Trail smelter are not assigned to mining divisions. In addition to the quantities of these metals from British Columbia sources, some may be from sources outside British Columbia.

Year of first recorded production: Antimony, 1907; bismuth, 1929; cadmium, 1929; chromite, 1918; cobalt, 1928; indium, 1942; iron ore, 1885; magnesium, 1941; manganese, 1918.

TABLE VIIIc.—PRODUCTION TO DATE BY MINING DIVISIONS—MISCELLANEOUS METALS—*Continued*

| Division | Mercury | | Molybdenite | | Nickel | | Palladium | | Platinum | | Selenium | | Tin | | Tungsten ($WO_3$) | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | Lb. | $ | Lb. | $ | Lb. | $ | Oz. | $ | Oz. | $ | Lb. | $ | Lb. | $ | Lb. | $ | $ |
| Atlin | | | | | | | | | | | | | | | 273 | 360 | 198,813 |
| Cariboo | | | | | | | | | 593 | 2,299 | | | | | 27,698 | 21,431 | 23,730 |
| Clinton | | | | | | | | | | | | | | | | | 900 |
| Fort Steele | | | | | | | | | | | | | 9,068,490 | 7,015,203 | | | 7,108,542 |
| Golden | | | | | | | | | | | | | | | | | 126,391 |
| Greenwood | | | | | | | | | | | | | | | | | 39,242 |
| Kamloops | 10,987 | 5,795 | | | | | | | | | | | | | | | 65,678 |
| Liard | | | | | | | | | 2 | 79 | | | | | | | 79 |
| Lillooet | 1,783 | 3,555 | 2,448 | 2,440 | | | | | 3 | 113 | | | | | 32,353 | 37,921 | 48,350 |
| Nanaimo | | | | | | | | | | | | | | | | | 20,167,596 |
| Nelson | | | 25,058 | 18,378 | | | | | | | | | | | 8,896,985 | 20,523,633 | 21,533,778 |
| New Westminster | | | | | 281,453 | 87,724 | | | | | | | | | | | 87,724 |
| Nicola | | | | | | | | | | | | | | | | | 17 |
| Omineca | 4,150,892 | 10,400,259 | 1,600 | 1,840 | | | | | 3 | 154 | | | | | 2,210,892 | 4,697,710 | 15,230,026 |
| Osoyoos | | | 1,020 | 1,020 | | | | | | | | | | | | | 1,020 |
| Revelstoke | | | | | | | | | | | | | | | 7,784 | 5,687 | 84,186 |
| Similkameen | | | | | | | | | 1,276 | 128,401 | | | | | | | 128,401 |
| Skeena | | | 13,022 | 13,020 | | | | | | | 731 | 1,389 | | | 366 | 331 | 269,575 |
| Slocan | | | | | | | | | | | | | | | | | 660,674 |
| Trail Creek | | | | | | | 749 | 30,462 | 53 | 3,177 | | | | | | | 35,564 |
| Vancouver | | | | | | | | | | | | | | | | | 381,455 |
| Victoria | | | | | | | | | | | | | | | | | 24,508 |
| Not assigned | | | | | | | | | | | | | | | | | 36,600,895 |
| Totals | 4,163,662 | 10,409,609 | 43,148 | 36,698 | 281,453 | 87,724 | 749 | 30,462 | 1,396 | 134,223 | 731 | 1,389 | 9,068,490 | 7,015,203 | 11,176,351 | 25,287,073 | 102,817,144 |

Year of first recorded production: Mercury, 1895; molybdenite, 1914; nickel, 1936; palladium, 1930; platinum, 1887; selenium, 1931; tin, 1941; tungsten, 1937.

## Table VIIID.—Production to Date by Mining Divisions—Industrial Minerals

| Division | Arsenious Oxide | | Asbestos | | Barite | | Bentonite | | Diatomite | | Fluorspar | | Flux (Quartz and Limestone) | | Granules (Roofing) | | Gypsum and Gypsite | | Hydro-magnesite | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| | Lb. | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ |
| Alberni | | | | | | | | | | | | | | | | | | | | |
| Atlin | | | | | | | | | | | | | | | | | | | 1,450 | 20,325 |
| Cariboo | | | | | | | | | 1,383 | 31,295 | | | | | 48 | 168 | | | | |
| Clinton | | | | | | | | | | | | | | | | | 983 | 6,676 | 803 | 7,211 |
| Fort Steele | | | | | 8 | 80 | | | | | | | | | | | 112,827 | 298,824 | | |
| Golden | | | | | 77,081 | 655,880 | | | | | | | | | | | 198,458 | 684,470 | | |
| Greenwood | | | | | | | | | | | 40,165 | 783,578 | 1,693,552 | 1,443,369 | | | | | | |
| Kamloops | | | | | | | | | | | | | | | | | 1,210,325 | 6,029,128 | | |
| Liard | | | 28,907 | 8,198,438 | | | | | | | | | | | | | | | | |
| Lillooet | | | | | | | | | | | | | | | | | | | | |
| Nanaimo | | | | | | | | | | | | | 559,415 | 603,336 | | | | | | |
| Nelson | | | | | | | | | | | | | 7,601 | 8,174 | 2 | 51 | | | | |
| New Westminster | | | | | | | | | | | | | | | 7,208 | 66,414 | | | | |
| Nicola | | | | | | | | | | | | | | | | | 2,297 | 9,610 | | |
| Omineca | 16,997 | 340 | | | | | | | | | | | | | | | | | | |
| Osoyoos | 22,002,423 | 272,861 | | | | | | | | | | | 187,395 | 982,176 | 6,358 | 79,905 | | | | |
| Similkameen | | | | | | | 791 | 16,858 | | | | | | | | | 250 | 1,700 | | |
| Skeena | | | | | | | | | | | | | 601,019 | 1,050,722 | | | | | | |
| Vancouver | | | | | | | | | | | | | | | 28,868 | 411,325 | | | | |
| Vernon | | | | | | | | | | | | | | | | | | | | |
| Victoria | | | | | | | | | | | | | 50 | 760 | 9,702 | 159,471 | | | | |
| Totals | 22,019,420 | 273,201 | 28,907 | 8,198,438 | 77,089 | 655,960 | 791 | 16,858 | 1,383 | 31,295[1] | 40,165 | 783,578 | 3,049,032 | 4,088,537 | 52,186 | 717,334 | 1,525,140 | 7,030,408 | 2,253 | 27,536 |

[1] Includes 30 tons of volcanic ash, worth $300.

Year of first recorded production: Arsenious oxide, 1917; asbestos, 1952; barite, 1940; bentonite, 1926; diatomite, 1928; fluorspar, 1918; flux (quartz and limestone), 1911; granules, 1930; gypsum and gypsite, 1911; hydromagnesite, 1904.

TABLE VIIID.—PRODUCTION TO DATE BY MINING DIVISIONS—INDUSTRIAL MINERALS—*Continued*

| Division | Iron Oxide and Ochre | | Magnesium Sulphate | | Mica | | Natro-alunite | | Perlite | | Phosphate Rock | | Sodium Carbonate | | Sulphur | | Talc | | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | |
| | Tons | $ | Tons | $ | Lb. | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | $ |
| Alberni | | | | | | | 522 | 9,398 | | | | | | | | | | | 9,398 |
| Atlin | | | | | | | | | | | | | | | | | | | 20,325 |
| Cariboo | | | | | 9,263,800 | 125,717 | | | | | | | | | | | | | 157,180[1] |
| Clinton | | | 1,923 | 39,085 | | | | | | | | | 9,524 | 109,895 | | | | | 162,867 |
| Fort Steele | | | | | | | | | | | 3,842 | 16,894 | | | 67,984[2] | 1,049,121 | | | 1,364,919 |
| Golden | 27 | 920 | | | | | | | | | | | | | | | 5 | 346 | 1,341,626 |
| Greenwood | | | | | | | | | | | | | | | | | | | 2,226,947 |
| Kamloops | | | 8,742 | 193,967 | 424,700 | 2,075 | | | | | | | 968 | 9,088 | | | | | 6,234,258 |
| Liard | | | | | | | | | | | | | | | | | | | 8,198,438 |
| Lillooet | | | | | | | | | | | | | | | | | 296 | 5,129 | 5,129 |
| Nanaimo | | | | | | | | | | | | | | | | | | | 603,336 |
| Nelson | 7,292 | 55,901 | | | | | | | | | | | | | | | | | 64,126 |
| New Westminster | | | | | | | | | | | | | | | | | | | 66,414 |
| Nicola | | | | | | | | | | | | | | | | | | | 9,610 |
| Omineca | | | | | | | | | 1,112 | 11,120 | | | | | | | | | 11,460 |
| Osoyoos | | | 3,229 | 21,300 | 1,588,800 | 25,938 | | | | | | | | | | | | | 1,382,180 |
| Similkameen | | | | | | | | | | | | | | | | | | | 18,558 |
| Skeena | | | | | 634,250 | 10,815 | | | | | | | | | 41,624 | 178,678 | | | 1,240,215 |
| Vancouver | 10,669 | 97,389 | | | | | | | | | | | | | 531,964 | 4,466,027 | | | 4,974,741 |
| Vernon | | | | | 160,500 | 3,978 | | | | | | | | | | | | | 3,978 |
| Victoria | 120 | 840 | | | | | | | | | | | | | | | 1,504 | 29,380 | 190,451 |
| Not assigned | | | | | | | | | | | | | | | 2,440,247[3] | 24,252,775 | | | 24,252,775 |
| Totals | 18,108 | 155,050 | 13,894 | 254,352 | 12,072,050 | 168,523 | 522 | 9,398 | 1,112 | 11,120 | 3,842 | 16,894 | 10,492 | 118,983 | 3,081,819 | 29,946,601 | 1,805 | 34,865 | 52,538,931 |

[1] Includes 30 tons of volcanic ash, worth $300.
[2] Recovery in 1953, 1954, and 1955 for use in fertilizer plant at Marysville.
[3] Recovery at Trail smelter for use in Warfield fertilizer plants, and derived from ores from several mining divisions.

Year of first recorded production: Iron oxide and ochre, 1918; magnesium sulphate, 1915; mica, 1932; natro-alunite, 1912; perlite, 1953; phosphate rock, 1927; sodium carbonate, 1921; sulphur, 1916; talc, 1916.

## TABLE VIIIE.—PRODUCTION TO DATE BY MINING DIVISIONS—STRUCTURAL MATERIALS

| Division | Cement | Lime and Limestone | Building-stone | Rubble, Riprap, and Crushed Rock | Sand and Gravel | Brick (Common) | Face, Paving, and Sewer Brick | Fire-bricks, Blocks | Clays | Structural Tile (Hollow Blocks), Roof-tile, Floor-tile | Drain-tile and Sewer-pipe | Pottery (Glazed or Un-glazed) | Other Clay Products | Division Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ | $ |
| Alberni | ..... | ..... | ..... | 34,133 | 623,867 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 658,000 |
| Atlin | ..... | 1,108 | ..... | 63,971 | 94,479 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 159,558 |
| Cariboo | ..... | 7,500 | ..... | 209,695 | 1,916,962 | 1,193 | 184 | 4,651 | 15,807 | ..... | ..... | ..... | 9,242 | 2,165,234 |
| Clinton | ..... | ..... | ..... | 1,606 | 71,839 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 73,445 |
| Fort Steele | ..... | 5,350 | 71,941 | 379,846 | 2,777,307 | 7,800 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,242,244 |
| Golden | ..... | 1,000 | 24,000 | 83,781 | 855,989 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 964,770 |
| Greenwood | ..... | 102,442 | 30,500 | 125,583 | 317,912 | 114,361 | ..... | ..... | 6,922 | ..... | ..... | ..... | ..... | 697,720 |
| Kamloops | ..... | 12,000 | 18,000 | 1,213,439 | 2,229,816 | 72,379 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,545,634 |
| Liard | ..... | ..... | ..... | 23,842 | 552,809 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 576,651 |
| Lillooet | ..... | 100 | 2,000 | 275,111 | 511,701 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 788,912 |
| Nanaimo | ..... | 18,993,586 | 2,960,337 | 48,284 | 1,274,405 | 1,104,295 | 38,939 | ..... | 35,758 | ..... | ..... | ..... | ..... | 24,455,604 |
| Nelson | ..... | 34,543 | 356,679 | 232,546 | 1,665,894 | 19,110 | 2,864 | ..... | ..... | ..... | ..... | ..... | ..... | 2,311,636 |
| New Westminster | ..... | 543,628 | ..... | 4,555,298 | 10,446,341 | 1,326,222 | 2,098,846 | 8,350,171 | 706,188 | 2,203,550 | 7,216,567 | 71,224 | 146,199 | 38,474,234 |
| Nicola | ..... | ..... | 8,000 | 69,561 | 219,780 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 297,341 |
| Omineca | ..... | 3,077 | ..... | 220,364 | 896,590 | 5,274 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,125,305 |
| Osoyoos | ..... | 32,070 | 14,850 | 133,877 | 754,212 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 935,009 |
| Revelstoke | ..... | 1,000 | 5,575 | 258,273 | 705,137 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 969,985 |
| Similkameen | 10,500 | 11,571 | 24,000 | 444,544 | 1,175,022 | ..... | ..... | ..... | 1,363 | ..... | ..... | ..... | 11,992 | 1,678,992 |
| Skeena | ..... | 1,180,762 | 144,000 | 902,632 | 1,320,447 | ..... | ..... | ..... | 4,925 | ..... | ..... | ..... | 8,324 | 3,561,090 |
| Slocan | ..... | 1,000 | 115,143 | 64,284 | 362,023 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 542,450 |
| Trail Creek | ..... | 28,000 | 38,400 | 161,542 | 937,345 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,165,287 |
| Vancouver | 335,718 | 40,885 | 3,582,976 | 6,294,059 | 12,933,230 | 110,650 | 74,850 | 373,975 | 17,633 | ..... | ..... | 54,701 | 59,031 | 23,877,708 |
| Vernon | ..... | 46,499 | 81,052 | 139,609 | 1,023,047 | 131,467 | 6,202 | 1,011 | 5 | 18,224 | 4,325 | ..... | 20 | 1,451,461 |
| Victoria | 65,560,266 | 720,203 | ..... | 406,559 | 7,692,462 | 1,802,909 | 23,052 | 1,837 | ..... | 581,673 | 630,955 | 99,330 | 11,003 | 77,530,249 |
| Not assigned | ..... | 315,498 | 505,018 | 282,455 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 11,234,251[1] |
| Totals | 65,906,484 | 22,081,822 | 7,982,471 | 16,624,894 | 51,358,616 | 4,695,660 | 3,054,937 | 8,731,645 | 788,601 | 2,803,447 | 7,851,847 | 225,255 | 245,811 | 202,482,770[2] |

[1] Includes $315,498 for limestone, $505,018 for building-stone, $282,455 for rubble and crushed rock, and $3,150,828 for clay products, none of which can be allotted to specific mining divisions. The balance of $6,980,451 cannot at present be allotted to mining divisions nor class of material.

[2] Includes items noted in foot-note No. 1.

## TABLE IXA.—QUANTITY (GROSS[1]) AND VALUE OF COAL PER YEAR TO DATE

| Year | Tons (2,000 Lb.) | Value | Year | Tons (2,000 Lb.) | Value |
|---|---|---|---|---|---|
| 1836–59 | 41,871 | $149,548 | 1908 | 2,362,514 | $7,356,866 |
| 1860 | 15,956 | 56,988 | 1909 | 2,688,672 | 8,574,884 |
| 1861 | 15,427 | 55,096 | 1910 | 3,515,944 | 11,108,335 |
| 1862 | 20,292 | 72,472 | 1911 | 2,573,444 | 8,071,747 |
| 1863 | 23,906 | 85,380 | 1912 | 3,388,795 | 10,786,812 |
| 1864 | 32,068 | 115,528 | 1913 | 2,879,251 | 9,197,460 |
| 1865 | 36,757 | 131,276 | 1914 | 2,426,399 | 7,745,847 |
| 1866 | 28,129 | 100,460 | 1915 | 2,209,290 | 7,114,178 |
| 1867 | 34,988 | 124,956 | 1916 | 2,783,849 | 8,900,675 |
| 1868 | 49,286 | 176,020 | 1917 | 2,686,561 | 8,484,343 |
| 1869 | 40,098 | 143,208 | 1918 | 2,888,170 | 12,833,994 |
| 1870 | 33,424 | 119,372 | 1919 | 2,698,022 | 11,975,671 |
| 1871 | 55,458[2] | 164,612 | 1920 | 3,020,387 | 13,450,169 |
| 1872 | 55,458[2] | 164,612 | 1921 | 2,877,995 | 12,836,013 |
| 1873 | 55,459[2] | 164,612 | 1922 | 2,890,625 | 12,880,060 |
| 1874 | 91,334 | 244,641 | 1923 | 2,848,146 | 12,678,548 |
| 1875 | 123,362 | 330,435 | 1924 | 2,226,037 | 9,911,935 |
| 1876 | 155,895 | 417,576 | 1925 | 2,737,607 | 12,168,905 |
| 1877 | 172,540 | 462,156 | 1926 | 2,609,640 | 11,650,180 |
| 1878 | 191,348 | 522,538 | 1927 | 2,748,286 | 12,269,135 |
| 1879 | 270,257 | 723,903 | 1928 | 2,829,906 | 12,633,510 |
| 1880 | 299,708 | 802,785 | 1929 | 2,521,402 | 11,256,260 |
| 1881 | 255,760 | 685,171 | 1930 | 2,113,586 | 9,435,650 |
| 1882 | 315,997 | 846,417 | 1931 | 1,912,501 | 7,684,155 |
| 1883 | 238,895 | 639,897 | 1932 | 1,719,172 | 6,523,644 |
| 1884 | 441,358 | 1,182,210 | 1933 | 1,416,516 | 5,375,171 |
| 1885 | 409,468 | 1,096,788 | 1934 | 1,508,741 | 5,725,133 |
| 1886 | 365,832 | 979,908 | 1935 | 1,330,524 | 5,048,864 |
| 1887 | 462,964 | 1,240,080 | 1936 | 1,508,048 | 5,722,502 |
| 1888 | 548,017 | 1,467,903 | 1937 | 1,618,051 | 6,139,920 |
| 1889 | 649,411 | 1,739,490 | 1938 | 1,466,559 | 5,565,069 |
| 1890 | 759,518 | 2,034,420 | 1939 | 1,655,217 | 6,280,956 |
| 1891 | 1,152,590 | 3,087,291 | 1940 | 1,867,966 | 7,088,265 |
| 1892 | 925,495 | 2,479,005 | 1941 | 2,018,635 | 7,660,000 |
| 1893 | 1,095,690 | 2,934,882 | 1942 | 2,170,737 | 8,237,172 |
| 1894 | 1,134,509 | 3,038,859 | 1943 | 2,040,253 | 7,742,030 |
| 1895 | 1,052,412 | 2,824,687 | 1944 | 2,165,676 | 8,217,966 |
| 1896 | 1,002,268 | 2,693,961 | 1945 | 1,700,914 | 6,454,360 |
| 1897 | 999,372 | 2,734,522 | 1946 | 1,639,277 | 6,732,470 |
| 1898 | 1,263,272 | 3,582,595 | 1947 | 1,923,573 | 8,680,440 |
| 1899 | 1,435,314 | 4,126,803 | 1948 | 1,809,018 | 9,765,395 |
| 1900 | 1,781,000 | 4,744,530 | 1949 | 1,917,296 | 10,549,924 |
| 1901 | 1,894,544 | 5,016,398 | 1950 | 1,756,667 | 10,119,303 |
| 1902 | 1,838,621 | 4,832,257 | 1951 | 1,824,384 | 10,169,617 |
| 1903 | 1,624,742 | 4,332,297 | 1952 | 1,650,619 | 9,729,739 |
| 1904 | 1,887,981 | 4,953,024 | 1953 | 1,576,105 | 9,528,279 |
| 1905 | 2,044,931 | 5,511,861 | 1954 | 1,447,608 | 9,154,544 |
| 1906 | 2,126,965 | 5,548,044 | 1955 | 1,484,066 | 8,986,501 |
| 1907 | 2,485,961 | 7,637,713 | Totals | 137,688,559 | $523,521,783 |

## TABLE IXB.—COAL PRODUCTION (GROSS[1]) BY DISTRICTS AND MINING DIVISIONS

| District and Mining Division | Total to Date | | | 1954 | | 1955 | |
|---|---|---|---|---|---|---|---|
| | Period | Quantity | Value | Quantity | Value | Quantity | Value |
| *Vancouver Island District* | | Tons | $ | Tons | $ | Tons | $ |
| Nanaimo Mining Division | 1836–1955 | 79,284,503 | 290,741,699 | 205,920 | 2,029,099 | 209,784 | 1,769,682 |
| *Nicola-Princeton District* | | | | | | | |
| Kamloops Mining Division | 1893–1945 | 14,995 | 59,765 | ..... | ..... | ..... | ..... |
| Nicola Mining Division | 1907–1955 | 2,926,121 | 11,041,565 | 1,256 | 12,769 | 1,259 | 12,904 |
| Osoyoos Mining Division | 1926–1927 | 1,122 | 5,008 | ..... | ..... | ..... | ..... |
| Similkameen Mining Division | 1909–1955 | 4,563,035 | 19,072,182 | 29,713 | 138,080 | 73,475 | 379,511 |
| District totals | 1893–1955 | 7,505,273 | 30,178,520 | 30,969 | 150,849 | 74,734 | 392,415 |
| *Northern District* | | | | | | | |
| Cariboo Mining Division | 1942–1944 | 290 | 1,100 | ..... | ..... | ..... | ..... |
| Liard Mining Division | 1923–1955 | 78,943 | 510,920 | 4,359 | 33,079 | 3,650 | 32,850 |
| Omineca Mining Division | 1918–1955 | 392,980 | 2,371,523 | 36,572 | 292,862 | 31,460 | 227,010 |
| District totals | 1918–1955 | 472,213 | 2,883,543 | 40,931 | 325,941 | 35,110 | 259,860 |
| *East Kootenay District* | | | | | | | |
| Fort Steele Mining Division | 1898–1955 | 50,426,570 | 199,718,021 | 1,169,788 | 6,648,655 | 1,164,438 | 6,564,544 |
| Provincial totals | 1836–1955 | 137,688,559 | 523,521,783 | 1,447,608 | 9,154,544 | 1,484,066 | 8,986,501 |

[1] Gross mine output, including washery loss and coal used in making coke (*see* Table X and discussion under "Fuel," page A 14).

[2] A combined total for 1871, 1872, and 1873 has previously been noted in Annual Reports and the above breakdown is estimated.

## TABLE IXc.—QUANTITY[3] AND VALUE OF COAL SOLD AND USED,[4] 1946–55

| Year | District and Mining Division | Total Sales[4]* | Used under Companies' Boilers[4]† | Used in Making Coke[4]‡ | Total Sold and Used[4] | | District Totals, 1955 | |
|---|---|---|---|---|---|---|---|---|
| | | Tons | Tons | Tons | Tons | $ | Tons | $ |
| | Vancouver Island | ..... | ..... | ..... | ..... | ..... | **174,326** | **1,769,682** |
| 1946 | Nanaimo | 502,406 | 4,396 | ..... | 506,802 | 3,474,182 | | |
| 1947 | ,, | 450,968 | 3,786 | ..... | 454,754 | 3,625,348 | | |
| 1948 | ,, | 365,328 | 2,801 | ..... | 368,129 | 3,219,868 | | |
| 1949 | ,, | 451,074 | 3,925 | ..... | 454,999 | 4,055,572 | | |
| 1950 | ,, | 472,690 | 4,329 | ..... | 477,019 | 4,060,337 | | |
| 1951 | ,, | 391,687 | 3,425 | ..... | 395,112 | 3,486,615 | | |
| 1952 | ,, | 267,346 | 2,986 | ..... | 270,332 | 2,749,206 | | |
| 1953 | ,, | 204,931 | 1,798 | ..... | 206,729 | 2,059,828 | | |
| 1954 | ,, | 181,534 | 536 | ..... | 182,070 | 2,029,099 | | |
| **1955** | ,, | **173,861** | **465** | ..... | **174,326** | **1,769,682** | | |
| | Nicola-Princeton | ..... | ..... | ..... | ..... | ..... | **74,734** | **392,415** |
| 1946 | Nicola | 1,711 | 81 | ..... | 1,792 | 8,957 | | |
| 1947 | ,, | 1,997 | 261 | ..... | 2,258 | 15,493 | | |
| 1948 | ,, | 1,777 | ..... | ..... | 1,777 | 15,281 | | |
| 1949 | ,, | 1,672 | ..... | ..... | 1,672 | 14,809 | | |
| 1950 | ,, | 1,125 | ..... | ..... | 1,125 | 9,926 | | |
| 1951 | ,, | 899 | ..... | ..... | 899 | 8,640 | | |
| 1952 | ,, | 1,139 | ..... | ..... | 1,139 | 11,493 | | |
| 1953 | ,, | 1,040 | ..... | ..... | 1,040 | 10,400 | | |
| 1954 | ,, | 1,256 | ..... | ..... | 1,256 | 12,769 | | |
| **1955** | ,, | **1,259** | ..... | ..... | **1,259** | **12,904** | | |
| 1946 | Similkameen | 43,556 | ..... | ..... | 43,556 | 214,098 | | |
| 1947 | ,, | 49,324 | ..... | ..... | 49,324 | 329,179 | | |
| 1948 | ,, | 49,859 | ..... | ..... | 49,859 | 299,387 | | |
| 1949 | ,, | 49,906 | ..... | ..... | 49,906 | 298,293 | | |
| 1950 | ,, | 16,784 | ..... | ..... | 16,784 | 87,483 | | |
| 1951 | ,, | 3,941 | ..... | ..... | 3,941 | 28,094 | | |
| 1952 | ,, | 6,306 | ..... | ..... | 6,306 | 48,760 | | |
| 1953 | ,, | 7,047 | ..... | ..... | 7,047 | 51,012 | | |
| 1954 | ,, | 29,713 | ..... | ..... | 29,713 | 138,080 | | |
| **1955** | ,, | **73,475** | ..... | ..... | **73,475** | **379,511** | | |
| | Northern | ..... | ..... | ..... | ..... | ..... | **33,665** | **259,860** |
| 1946 | Liard | 2,501 | 78 | ..... | 2,579 | 14,540 | | |
| 1947 | ,, | 5,958 | 59 | ..... | 6,017 | 35,012 | | |
| 1948 | ,, | 8,570 | 60 | ..... | 8,630 | 52,721 | | |
| 1949 | ,, | 12,364 | ..... | ..... | 12,364 | 76,697 | | |
| 1950 | ,, | 12,250 | ..... | ..... | 12,250 | 82,258 | | |
| 1951 | ,, | 3,199 | ..... | ..... | 3,199 | 26,095 | | |
| 1952 | ,, | 3,854 | ..... | ..... | 3,854 | 42,606 | | |
| 1953 | ,, | 4,815 | 20 | ..... | 4,835 | 50,895 | | |
| 1954 | ,, | 4,359 | ..... | ..... | 4,359 | 33,079 | | |
| **1955** | ,, | **3,650** | ..... | ..... | **3,650** | **32,850** | | |
| 1946 | Omineca | 12,087 | 51 | ..... | 12,138 | 67,928 | | |
| 1947 | ,, | 10,751 | 59 | ..... | 10,810 | 63,375 | | |
| 1948 | ,, | 10,920 | 66 | ..... | 10,986 | 85,981 | | |
| 1949 | ,, | 11,468 | 63 | ..... | 11,531 | 92,865 | | |
| 1950 | ,, | 13,037 | 62 | ..... | 13,099 | 104,790 | | |
| 1951 | ,, | 27,904 | ..... | ..... | 27,904 | 206,799 | | |
| 1952 | ,, | 37,270 | ..... | ..... | 37,270 | 285,732 | | |
| 1953 | ,, | 42,079 | ..... | ..... | 42,079 | 324,986 | | |
| 1954 | ,, | 36,572 | ..... | ..... | 36,572 | 292,862 | | |
| **1955** | ,, | **30,015** | ..... | ..... | **30,015** | **227,010** | | |
| | East Kootenay | ..... | ..... | ..... | ..... | ..... | **1,050,149** | **6,564,544** |
| 1946 | Fort Steele | 744,941 | 21,161 | 106,122 | 872,224 | 2,952,765 | | |
| 1947 | ,, | 973,358 | 24,163 | 175,665 | 1,173,186 | 4,612,033 | | |
| 1948 | ,, | 990,530 | 20,227 | 154,342 | 1,165,099 | 6,092,157 | | |
| 1949 | ,, | 842,979 | 19,025 | 228,792 | 1,090,796 | 6,011,688 | | |
| 1950 | ,, | 825,315 | 15,196 | 213,218 | 1,053,729 | 5,774,509 | | |
| 1951 | ,, | 889,669 | 15,977 | 236,871 | 1,142,517 | 6,413,374 | | |
| 1952 | ,, | 822,071 | 15,813 | 245,528 | 1,083,412 | 6,591,942 | | |
| 1953 | ,, | 878,865 | 12,729 | 230,814 | 1,122,408 | 7,031,158 | | |
| 1954 | ,, | 820,081 | 15,310 | 218,923 | 1,054,314 | 6,648,655 | | |
| **1955** | ,, | **803,125** | **16,560** | **230,464** | **1,050,149** | **6,564,544** | | |
| 1946 | Provincial totals | 1,307,202 | 25,767 | 106,122 | 1,439,091 | 6,732,470 | | |
| 1947 | ,, | 1,492,356 | 28,328 | 175,665 | 1,696,349 | 8,680,440 | | |
| 1948 | ,, | 1,426,984 | 23,154 | 154,342 | 1,604,480 | 9,765,395 | | |
| 1949 | ,, | 1,369,463 | 23,013 | 228,792 | 1,621,268 | 10,549,924 | | |
| 1950 | ,, | 1,341,201 | 19,587 | 213,218 | 1,574,006 | 10,119,303 | | |
| 1951 | ,, | 1,317,299 | 19,402 | 236,871 | 1,573,572 | 10,169,617 | | |
| 1952 | ,, | 1,137,986 | 18,799 | 245,528 | 1,402,313 | 9,729,739 | | |
| 1953 | ,, | 1,138,777 | 14,547 | 230,814 | 1,384,138 | 9,528,279 | | |
| 1954 | ,, | 1,073,515 | 15,846 | 218,923 | 1,308,284 | 9,154,544 | | |
| **1955** | ,, | **1,085,385** | **17,025** | **230,464** | **1,332,874** | **8,986,501** | **1,332,874** | **8,986,501** |

[3] For differences between gross mine output and coal sold refer to table "Production and Distribution by Collieries and by Districts" in section headed "Coal" or "Coal-mining" in Annual Reports of the Minister of Mines.

[4] The totals "sold and used" include:—

* Sales to retail and wholesale dealers, industrial users, and company employees.

† Coal used in company boilers, including steam locomotives.

‡ Coal used in making coke.

*See also* discussion under "Fuel," page A 14.

## TABLE X.—COKE AND BY-PRODUCTS PRODUCTION FOR YEARS 1895 TO 1925 AND 1926 TO 1955

| Year | Coal Used in Making Coke | | Coke Made in Bee-hive Ovens | | Coke Made in By-product Ovens | | Coke Made in Gas Plants | | Total Coke Made | | Gas Sold and Used | Tar Produced | Other By-products[1] | Total Production Value of Coke Industry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | | | | |
| | Tons | $ | Tons | $ | Tons | $ | Tons | $ | Tons | $ | $ | $ | $ | $ |
| 1895–1925 | 7,955,795 | 25,673,600 | 4,920,457 | 25,673,600 | ..... | ..... | ..... | ..... | 4,920,457 | 25,673,600 | ..... | ..... | ..... | 25,673,600 |
| 1926 | 299,839 | 1,338,565 | 105,227 | 795,841 | 42,209 | 244,469 | 42,468 | 221,600 | 189,904 | 1,261,910 | 1,009,613 | 50,035 | 45,772 | 2,367,330 |
| 1927 | 269,482 | 1,290,760 | 95,281 | 595,504 | 35,900 | 327,215 | 39,464 | 178,682 | 170,645 | 1,101,401 | 1,222,379 | 44,402 | 18,080 | 2,386,262 |
| 1928 | 210,207 | 940,668 | 68,734 | 429,590 | 32,322 | 263,781 | 41,711 | 187,882 | 142,767 | 881,253 | 1,313,407 | 45,313 | 14,036 | 2,254,009 |
| 1929 | 226,363 | 950,243 | 75,426 | 574,279 | 33,339 | 308,867 | 46,573 | 214,732 | 155,338 | 1,097,878 | 1,461,445 | 61,084 | 39,203 | 2,659,610 |
| 1930 | 225,325 | 1,002,684 | 73,708 | 558,801 | 31,904 | 298,004 | 45,751 | 232,917 | 151,363 | 1,089,722 | 1,547,092 | 65,770 | 11,935 | 2,714,519 |
| 1931 | 211,334 | 924,279 | 73,248 | 548,550 | 27,717 | 236,537 | 41,836 | 210,470 | 142,801 | 995,557 | 1,541,454 | 66,506 | 32,603 | 2,636,120 |
| 1932 | 151,750 | 710,432 | 33,090 | 247,615 | 25,436 | 217,221 | 44,645 | 237,174 | 103,171 | 702,010 | 1,589,656 | 54,771 | 14,109 | 2,360,546 |
| 1933 | 107,400 | 554,152 | 6,097 | 44,813 | 24,263 | 213,750 | 34,156 | 214,454 | 64,516 | 473,017 | 1,473,433 | 45,610 | 3,666 | 1,995,726 |
| 1934 | 141,384 | 571,167 | 24,840 | 154,105 | 23,512 | 213,653 | 51,184 | 198,217 | 99,536 | 565,975 | 1,439,287 | 43,939 | 4,756 | 2,053,957 |
| 1935 | 127,776 | 494,492 | 27,066 | 160,565 | 14,911 | 109,684 | 46,111 | 160,694 | 88,088 | 430,943 | 1,430,057 | 44,876 | 3,081 | 1,908,957 |
| 1936 | 125,810 | 436,595 | 34,009 | 191,843 | ..... | ..... | 48,859 | 138,787 | 82,868 | 330,630 | 1,422,783 | 38,872 | ..... | 1,792,285 |
| 1937 | 166,124 | 570,250 | 48,393 | 277,726 | ..... | ..... | 59,141 | 330,821 | 107,534 | 608,547 | 1,746,047 | 46,698 | ..... | 2,401,292 |
| 1938 | 176,877 | 623,649 | 54,602 | 315,294 | ..... | ..... | 58,643 | 345,790 | 113,245 | 661,084 | 1,770,839 | 44,324 | ..... | 2,476,247 |
| 1939 | 171,242 | 569,945 | 50,153 | 286,491 | 7,196 | 37,015 | 55,395 | 325,435 | 112,744 | 648,941 | 1,768,977 | 44,108 | ..... | 2,462,026 |
| 1940 | 184,160 | 577,706 | 37,845 | 220,211 | 29,124 | 151,931 | 60,726 | 303,421 | 127,695 | 675,563 | 1,810,083 | 54,379 | 3,060 | 2,543,085 |
| 1941 | 235,809 | 717,584 | 64,707 | 392,473 | 86,656 | 467,440 | 8,378 | 43,758 | 159,741 | 903,671 | 1,925,270 | 63,569 | 1,716 | 2,894,226 |
| 1942 | 255,862 | 866,795 | 66,824 | 439,464 | 96,428 | 608,521 | 6,528 | 54,307 | 169,780 | 1,102,292 | 2,165,888 | 86,113 | 22,028 | 3,376,321 |
| 1943 | 260,334 | 983,910 | 42,766 | 291,843 | 43,895 | 274,402 | 93,714 | 647,482 | 180,375 | 1,213,727 | 2,453,592 | 96,249 | 18,321 | 3,781,889 |
| 1944 | 212,883 | 1,439,891 | 36,966 | 301,201 | 47,401 | 347,245 | 88,430 | 565,393 | 172,797 | 1,213,839 | 2,562,610 | 56,476 | 19,046 | 3,851,971 |
| 1945 | 230,868 | 1,211,584 | 13,464 | 117,369 | 59,098 | 434,876 | 91,682 | 577,479 | 164,244 | 1,129,724 | 2,721,690 | 83,828 | 20,756 | 3,955,998 |
| 1946 | 251,954 | 1,441,415 | 20,542 | 178,556 | 53,525 | 423,025 | 101,094 | 648,297 | 175,161 | 1,249,878 | 3,079,009 | 88,947 | 53,097 | 4,470,931 |
| 1947 | 284,049 | 1,682,602 | 44,517 | 427,330 | 59,638 | 531,114 | 91,755 | 579,635 | 195,910 | 1,538,079 | 3,390,713 | 124,885 | 25,780 | 5,079,457 |
| 1948 | 235,297 | 1,440,415 | 47,461 | 559,735 | 57,112 | 630,390 | 57,678 | 455,096 | 162,251 | 1,645,221 | 4,520,886 | 153,130 | 19,489 | 6,338,726 |
| 1949 | 323,899 | 1,979,138 | 66,407 | 690,045 | 89,268 | 1,018,288 | 67,449 | 496,933 | 223,124 | 2,205,266 | 4,148,124 | 194,728 | 27,406 | 6,575,524 |
| 1950 | 333,955 | 2,027,470 | 23,703 | 269,728 | 127,477 | 997,200 | 92,704 | 686,871 | 243,884 | 1,953,799 | 4,298,161 | 277,138 | 27,944 | 6,557,042 |
| 1951 | 332,416 | 1,949,117 | 32,598 | 387,796 | 138,051 | 1,552,764 | 72,215 | 571,161 | 242,864 | 2,511,721 | 4,263,754 | 277,786 | 22,132 | 7,075,393 |
| 1952 | 323,922 | 1,972,918 | 35,110 | 440,756 | 142,156 | 1,729,924 | 64,906 | 525,384 | 242,172 | 2,696,064 | 4,625,747 | 252,070 | 25,639 | 7,599,520 |
| 1953 | 310,431 | 2,005,551 | ..... | ..... | 177,790 | 2,090,147 | 60,407 | 525,411 | 238,197 | 2,615,558 | 4,857,116 | 238,771 | 21,046 | 7,732,491 |
| 1954 | 302,052 | 2,052,641 | ..... | ..... | 168,982 | 2,032,902 | 67,108 | 566,660 | 236,090 | 2,599,562 | 5,113,334 | 226,824 | 20,586 | 7,960,306 |
| 1955 | 314,994 | 2,122,303 | ..... | ..... | 177,031 | 2,180,516 | 70,387 | 594,482 | 247,418 | 2,774,998 | 5,407,842 | 292,984 | 18,369 | 8,494,193 |
| Totals | 14,959,593 | 59,122,521 | 6,223,241 | 35,571,124 | 1,852,341 | 17,940,881 | 1,751,098 | 11,039,425 | 9,825,777 | 64,551,430 | 78,080,288 | 3,264,185 | 533,656 | 146,429,559 |

[1] "Other by-products" total includes ammonium sulphate, $52,492; ammonia liquor, $103,850; light oils, $16,571; motor fuel, $7,009; naphthalene, $4,077; creosote, $34; benzol (thinning), $312; solvent naphtha, $644; cinders, $323,721; pitch, $5,131; sulphuric acid, $6,658; tar-paint, $2,330; and miscellaneous, $10,827.

## TABLE XI.—DIVIDENDS PAID BY MINING COMPANIES, 1897–1955

*Dividends Paid during 1954 and 1955*

| | 1954 | 1955 |
|---|---|---|
| Bralorne Mines Ltd. | ..... | $187,050 |
| Britannia Mining and Smelting Co. Ltd. | $579,899 | ..... |
| Bulkley Valley Collieries Ltd. | 6,000 | ..... |
| Canadian Exploration Ltd. | ..... | 4,722,000 |
| Consolidated Mining and Smelting Co. of Canada, Ltd. | 22,113,331 | 28,665,451 |
| Crow's Nest Pass Coal Co. Ltd. | 248,472 | 248,472 |
| Granby Consolidated Mining Smelting and Power Co. Ltd. | 225,116 | 225,116 |
| Island Mountain Mines Co. Ltd. | 735,501[1] | 157,607[1] |
| Kelowna Mines Hedley Ltd. | 180,000 | ..... |
| Pioneer Gold Mines of B.C. Ltd. | 218,969 | 175,175 |
| Silver Standard Mines Ltd. | 192,974 | 42,883 |
| Torbrit Silver Mines Ltd. | 150,000 | 240,000 |
| Violamac Mines (B.C.) Ltd. | 400,000 | ..... |
| Yale Lead and Zinc Mines Ltd. | ..... | 92,840 |
| Others | 318,000 | 314,989 |
| Totals | $25,368,262 | $35,071,583 |

[1] First and second "liquidating" payments.

*Dividends Paid Yearly, 1917 to 1955, Inclusive*

| Year | Amount Paid | Year | Amount Paid |
|---|---|---|---|
| 1917 | $3,269,494 | 1937 | $15,085,293 |
| 1918 | 2,704,469 | 1938 | 12,068,875 |
| 1919 | 2,494,283 | 1939 | 11,865,698 |
| 1920 | 1,870,296 | 1940 | 14,595,530 |
| 1921 | 736,629 | 1941 | 16,598,110 |
| 1922 | 3,174,756 | 1942 | 13,627,104 |
| 1923 | 2,983,570 | 1943 | 11,860,159 |
| 1924 | 2,977,276 | 1944 | 11,367,732 |
| 1925 | 5,853,419 | 1945 | 10,487,395 |
| 1926 | 8,011,137 | 1946 | 15,566,047 |
| 1927 | 8,816,681 | 1947 | 27,940,213 |
| 1928 | 9,572,536 | 1948 | 37,672,319 |
| 1929 | 11,263,118 | 1949 | 33,651,096 |
| 1930 | 10,543,500 | 1950 | 34,399,330 |
| 1931 | 4,650,857 | 1951 | 40,921,238 |
| 1932 | 2,786,958 | 1952 | 32,603,956 |
| 1933 | 2,471,735 | 1953 | 22,323,089 |
| 1934 | 4,745,905 | 1954 | 25,368,262 |
| 1935 | 7,386,070 | 1955 | 35,071,583 |
| 1936 | 10,513,705 | | |
| | | Total | $529,899,423 |

## TABLE XI.—DIVIDENDS PAID BY MINING COMPANIES, 1897–1955—*Continued*

### *Lode-gold Mines*[1]

| Company or Mine | Locality | Class | Amount Paid |
|---|---|---|---|
| Arlington | Erie | Gold | $94,872 |
| Athabasca | Nelson | Gold | 25,000 |
| Bayonne | Tye Siding | Gold | 25,000 |
| Bralorne Mines Ltd. | Bridge River | Gold | 16,886,600 |
| Belmont-Surf Inlet | Princess Royal Island | Gold | 1,437,500 |
| Cariboo Gold Quartz Mining Co. Ltd. | Wells | Gold | 1,679,976 |
| Cariboo-McKinney Con. M. & M. Co. | Camp McKinney | Gold | 565,588 |
| Canadian Pacific Exploration (Porto Rico) | Nelson | Gold | 37,500 |
| Centre Star | Rossland | Gold-copper | 472,255 |
| Fairview Amalgamated | Oliver | Gold | 5,254 |
| Fern Gold Mining & Milling Co. Ltd. | Nelson | Gold | 9,375 |
| Gold Belt Mining Co. Ltd. | Sheep Creek | Gold | 668,595[2] |
| Goodenough (leasers) | Ymir | Gold | 13,731 |
| Hedley Mascot Gold Mines Ltd. | Hedley | Gold | 1,290,553 |
| Island Mountain Mines Ltd. | Wells | Gold | 2,411,382[2] |
| I.X.L. | Rossland | Gold | 134,025 |
| Jewel-Denero | Greenwood | Gold | 11,751 |
| Kelowna Exploration Co. Ltd. (Nickel Plate) | Hedley | Gold | 2,040,000 |
| *Kelowna Mines Hedley Ltd.* | Hedley | Gold | 780,000[3] |
| Kootenay Belle Gold Mines Ltd. | Sheep Creek | Gold | 357,856 |
| Le Roi Mining Co. | Rossland | Gold-copper | 1,475,000 |
| Le Roi No. 2 Ltd. | Rossland | Gold-copper | 1,574,640 |
| Lorne (later Bralorne) | Bridge River | Gold | 20,450 |
| Motherlode | Sheep Creek | Gold | 163,500 |
| Mount Zeballos Gold Mines Ltd. | Zeballos | Gold | 165,000 |
| Nickel Plate (Hedley Gold Mining Co. Ltd.) | Hedley | Gold | 3,423,191 |
| Pioneer Gold Mines of B.C. Ltd. | Bridge River | Gold | 9,868,712 |
| Poorman | Nelson | Gold | 25,000 |
| Premier Gold Mining Co. Ltd. | Premier | Gold | 18,858,075[4] |
| Privateer Mine Ltd. | Zeballos | Gold | 1,914,183 |
| Queen (prior to Sheep Creek Gold Mines Ltd.) | Sheep Creek | Gold | 98,674 |
| Relief Arlington Mines Ltd. (Second Relief) | Erie | Gold | 308,000[2] |
| Reno Gold Mines Ltd. | Sheep Creek | Gold | 1,433,640[2] |
| Sheep Creek Gold Mines Ltd. | Sheep Creek | Gold | 3,609,375[5] |
| Silbak Premier Mines Ltd. | Premier | Gold | 2,425,000[4] |
| Spud Valley Gold Mines Ltd. | Zeballos | Gold | 168,000 |
| Sunset No. 2 | Rossland | Gold-copper | 115,007 |
| Surf Inlet Consolidated Gold Mines Ltd. | Surf Inlet | Gold | 120,279 |
| War Eagle | Rossland | Gold-copper | 1,245,250 |
| Ymir Gold | Ymir | Gold | 300,000 |
| Ymir Yankee Girl | Ymir | Gold | 415,002[2] |
| Miscellaneous mines | | Gold | 108,623 |
| Total, lode-gold mines | | | $76,541,414 |

[1] The gold-copper properties of Rossland are included in this table.

[2] Includes "return of capital" and "liquidating" payments.

[3] Former Kelowna Exploration Company Limited; changed in January, 1951.

[4] Up to and including 1936, dividends paid by Premier Gold Mining Company Limited were derived from operations of the company in British Columbia. Subsequent dividends paid by Premier Gold Mining Company Limited have been derived from the operations of subsidiary companies in British Columbia and elsewhere and are not included in the figure given. In 1936, Silbak Premier, a subsidiary of Premier Gold Mining Company, took over the former gold operations of that company in British Columbia. Dividends paid by Silbak Premier are given above.

[5] In several years, preceding 1953, company revenue has included profits from operation of the Lucky Jim zinc-lead mine.

TABLE XI.—DIVIDENDS PAID BY MINING COMPANIES, 1897–1955—*Continued*

*Silver-Lead-Zinc Mines*

| Company or Mine | Locality | Class | Amount Paid |
|---|---|---|---|
| Antoine | Rambler | Silver-lead-zinc | $10,000 |
| Base Metals Mining Corporation Ltd. (Monarch and Kicking Horse) | Field | Silver-lead-zinc | 586,143[1] |
| Beaverdell-Wellington | Beaverdell | Silver-lead-zinc | 97,200 |
| Beaver Silver Mines Ltd. | Greenwood | Silver-lead-zinc | 48,000 |
| Bell | Beaverdell | Silver-lead-zinc | 388,297 |
| Bosun (Rosebery-Surprise) | New Denver | Silver-lead-zinc | 25,000 |
| Canadian Exploration Ltd. | Salmo | Silver-lead-zinc | 4,722,000 |
| Capella | New Denver | Silver-lead-zinc | 5,500 |
| Consolidated Mining and Smelting Co. of Canada, Ltd. | Trail | Silver-lead-zinc | 406,551,244[2] |
| Couverapee | Field | Silver-lead-zinc | 5,203 |
| Duthie Mines Ltd. | Smithers | Silver-lead-zinc | 50,000 |
| Florence Silver | Ainsworth | Silver-lead-zinc | 35,393 |
| Goodenough | Cody | Silver-lead-zinc | 45,668 |
| H.B. Mining Co. | Hall Creek | Silver-lead-zinc | 8,904 |
| Highland Lass Ltd. | Beaverdell | Silver-lead-zinc | 132,464 |
| Highland-Bell Ltd. | Beaverdell | Silver-lead-zinc | 1,398,025 |
| Horn Silver | Similkameen | Silver-lead-zinc | 6,000 |
| Idaho-Alamo | Sandon | Silver-lead-zinc | 400,000 |
| Iron Mountain (Emerald) | Salmo | Silver-lead-zinc | 20,000 |
| Jackson | Retallack | Silver-lead-zinc | 20,000 |
| Last Chance | Three Forks | Silver-lead-zinc | 213,000 |
| Lone Bachelor | Sandon | Silver-lead-zinc | 50,000 |
| Lucky Jim | Three Forks | Silver-lead-zinc | 80,000 |
| Mercury | Sandon | Silver-lead-zinc | 6,000 |
| Meteor | Slocan City | Silver-lead-zinc | 10,257 |
| Monitor and Ajax | Three Forks | Silver-lead-zinc | 70,500 |
| Mountain Con | Cody | Silver-lead-zinc | 71,387 |
| McAllister | Three Forks | Silver-lead-zinc | 45,088 |
| Noble Five | Cody | Silver-lead-zinc | 72,859 |
| North Star | Kimberley | Silver-lead-zinc | 497,901 |
| No. One | Sandon | Silver-lead-zinc | 6,754 |
| Ottawa | Slocan City | Silver-lead-zinc | 110,429 |
| Payne | Sandon | Silver-lead-zinc | 1,438,000 |
| Providence | Greenwood | Silver-lead-zinc | 142,328[3] |
| Queen Bess | Alamo | Silver-lead-zinc | 25,000 |
| Rambler-Cariboo | Rambler | Silver-lead-zinc | 467,250 |
| Reeves MacDonald Mines Ltd. | Remac | Silver-lead-zinc | 1,169,000 |
| Reco | Cody | Silver-lead-zinc | 334,992 |
| Ruth Mines Ltd. | Sandon | Silver-lead-zinc | 125,490 |
| St. Eugene | Moyie | Silver-lead-zinc | 566,000 |
| Silversmith and Slocan Star[4] | Sandon | Silver-lead-zinc | 1,267,600 |
| Silver Standard Mines Ltd. | Hazelton | Silver-lead-zinc | 1,715,333 |
| Spokane-Trinket | Ainsworth | Silver-lead-zinc | 10,365 |
| Standard Silver Lead | Silverton | Silver-lead-zinc | 2,734,688 |
| Sunset and Trade Dollar | Retallack | Silver-lead-zinc | 88,000 |
| Torbrit Silver Mines Ltd. | Alice Arm | Silver-lead-zinc | 390,000 |
| Utica | Kaslo | Silver-lead-zinc | 64,000 |
| Violamac Mines (B.C.) Ltd. | New Denver | Silver-lead-zinc | 850,000 |
| Wallace Mines Ltd. (Sally) | Beaverdell | Silver-lead-zinc | 135,000 |
| Washington | Rambler Station | Silver-lead-zinc | 20,000 |
| Western Exploration Co. Ltd. | Silverton | Silver-lead-zinc | 30,867 |
| Whitewater | Retallack | Silver-lead-zinc | 592,515 |
| Yale Lead and Zinc Mines Ltd. | Ainsworth | Silver-lead-zinc | 92,840 |
| Miscellaneous mines | | Silver-lead-zinc | 70,239 |
| Total, silver-lead-zinc mines | | | $428,118,723 |

[1] Includes $466,143 "return of capital" distribution prior to 1949.
[2] Earnings of several company mines, and customs smelter at Trail.
[3] Includes $10,504 paid in 1944 but not included in the yearly figure.
[4] These two properties were amalgamated as Silversmith Mines Limited in August, 1939.

## TABLE XI.—DIVIDENDS PAID BY MINING COMPANIES, 1897–1955—*Continued*

### *Copper Mines*

| Company or Mine | Locality | Class | Amount Paid |
|---|---|---|---|
| Britannia M. & S. Co.[1] | Britannia Beach | Copper | $18,803,772 |
| Canada Copper Corporation | Greenwood | Copper | 615,399 |
| Cornell | Texada Island | Copper | 8,500 |
| Granby Cons. M.S. & P. Co.[2] | Copper Mountain | Copper | 29,760,168 |
| Marble Bay | Texada Island | Copper | 175,000 |
| Hall Mines | Nelson | Copper | 233,280 |
| Miscellaneous mines | | Copper | 261,470 |
| Total, copper mines | | | $49,857,589 |

[1] Britannia Mining and Smelting Company Limited is a subsidiary of the Howe Sound Company, which is the holding company for Britannia and for other mines in Canada, Mexico, and the United States. Dividends paid by the Howe Sound Company, therefore, cannot be credited to British Columbia. Dividends in the above table for Britannia have been paid by that company, none being paid subsequent to 1930, until 1939. In making comparison with yearly totals, the amounts shown as paid by the Howe Sound Company have been deducted for the years shown, so the total in the annual report concerned will show the higher figure.

[2] The Granby Consolidated Mining Smelting and Power Company dividends commenced in 1904 and cover all company activities in British Columbia to date, the present operations being conducted at Allenby and Copper Mountain. The dividends as set out in the table in the Minister of Mines Annual Report for 1942 were incorrect; the correct total is as above. The figure now includes all dividends, capital distributions, and interim liquidating payments, the latter being $4,500,000, paid, in 1936, prior to reorganization.

### *Coal Mines*

| Company or Mine | Locality | Class | Amount Paid |
|---|---|---|---|
| Wellington Collieries Ltd. | Nanaimo | Coal | $16,000,000 |
| Bulkley Valley Collieries Ltd. | Telkwa | Coal | 24,000 |
| Crow's Nest Pass Coal Co. Ltd. | Fernie | Coal | 15,725,310 |
| Canadian Collieries (D.) Ltd. | Nanaimo | Coal | 563,272 |
| Total, coal mines | | | $32,312,582 |

### *Aggregate of All Classes*

| | |
|---|---|
| Lode-gold mining | $76,541,414 |
| Silver-lead-zinc mining and smelting | 428,118,723 |
| Copper-mining | 49,857,589 |
| Coal-mining | 32,312,582 |
| Miscellaneous, structural, and placer gold | 5,958,159 |
| Total | $592,788,467 |

NOTE.—The term "miscellaneous" noted in each class of dividend covers all payments of $5,000 and under, together with payments made by companies or individuals requesting that the item be not disclosed.

In compiling the foregoing table of dividends paid, the Department wishes to acknowledge the kind assistance given by companies, individuals, and trade journals in giving information on the subject.

## TABLE XII.—PRINCIPAL ITEMS OF EXPENDITURE, REPORTED FOR MINING OPERATIONS OF ALL CLASSES

| Class | Salaries and Wages | Fuel and Electricity | Process Supplies |
|---|---|---|---|
| Lode-mining | $38,931,020 | $2,206,289[1] | $18,332,380[1] |
| Placer-mining | 132,116 | 11,300 | 42,406 |
| Coal-mining | 5,798,913 | 673,682 | 4,321,565 |
| Miscellaneous metals and industrial minerals | 3,043,748 | 795,286 | 904,980 |
| Structural materials industry | 3,984,449 | 1,945,992 | 1,041,726 |
| **Totals, 1955** | **$51,890,246** | **$5,632,549[1]** | **$24,643,057[1]** |
| Totals, 1954 | 48,702,746 | 7,128,669 | 19,654,724 |
| 1953 | 55,543,490 | 8,668,099 | 20,979,411 |
| 1952 | 62,256,631 | 8,557,845 | 27,024,500 |
| 1951 | 52,561,952 | 7,283,051 | 24,724,101 |
| 1950 | 42,738,035 | 6,775,998 | 17,500,663 |
| 1949 | 41,023,786 | 7,206,637 | 17,884,408 |
| 1948 | 38,813,506 | 6,139,174 | 11,532,121 |
| 1947 | 32,160,338 | 5,319,470 | 13,068,948 |
| 1946 | 26,190,200 | 5,427,458 | 8,367,705 |
| 1945 | 22,620,975 | 7,239,726 | 5,756,628 |
| 1944 | 23,131,874 | 5,788,671 | 6,138,084 |
| 1943 | 26,051,467 | 7,432,585 | 6,572,317 |
| 1942 | 26,913,160 | 7,066,109 | 6,863,398 |
| 1941 | 26,050,491 | 3,776,747 | 7,260,441 |
| 1940 | 23,391,330 | 3,474,721 | 6,962,162 |
| 1939 | 22,357,035 | 3,266,000[2] | 6,714,347 |
| 1938 | 22,765,711 | 3,396,106 | 6,544,500 |
| 1937 | 21,349,690 | 3,066,311 | 6,845,330 |
| 1936 | 17,887,619 | 2,724,144 | 4,434,501 |
| 1935 | 16,753,367 | 2,619,639 | 4,552,730 |
| Grand totals, 1935–55 | $701,153,649 | $117,989,709 | $254,024,076 |

[1] A major operator reported fuel, electricity, and process supplies for 1955 as a combined figure under the heading "Process Supplies." For that reason the lode-mining item "Fuel and Electricity" is unduly small and "Process Supplies" unduly large.

[2] Estimated.

NOTE.—"Process supplies" include explosives, chemicals, drill-steel, lubricants, etc.

## TABLE XIII.—AVERAGE NUMBER EMPLOYED IN THE MINING INDUSTRY, 1901–55

| Year | Placer-mining | Lode-mining | | | In Concentrators | In Smelters | Coal-mining | | | Structural Materials | | Miscellaneous | Total[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Under | Above | Total | | | Under | Above | Total | Quarries and Pits | Plants | | |
| 1901 | ..... | 2,736 | 1,212 | 3,948 | ..... | ..... | 3,041 | 931 | 3,974 | ..... | ..... | ..... | 7,922 |
| 1902 | ..... | 2,219 | 1,126 | 3,345 | ..... | ..... | 3,101 | 910 | 4,011 | ..... | ..... | ..... | 7,356 |
| 1903 | ..... | 1,662 | 1,088 | 2,750 | ..... | ..... | 3,137 | 1,127 | 4,264 | ..... | ..... | ..... | 7,014 |
| 1904 | ..... | 2,143 | 1,163 | 3,306 | ..... | ..... | 3,278 | 1,175 | 4,453 | ..... | ..... | ..... | 7,759 |
| 1905 | ..... | 2,470 | 1,240 | 3,710 | ..... | ..... | 3,127 | 1,280 | 4,407 | ..... | ..... | ..... | 8,117 |
| 1906 | ..... | 2,680 | 1,303 | 3,983 | ..... | ..... | 3,415 | 1,390 | 4,805 | ..... | ..... | ..... | 8,788 |
| 1907 | ..... | 2,704 | 1,239 | 3,943 | ..... | ..... | 2,862 | 907 | 3,769 | ..... | ..... | ..... | 7,712 |
| 1908 | ..... | 2,567 | 1,127 | 3,694 | ..... | ..... | 4,432 | 1,641 | 6,073 | ..... | ..... | ..... | 9,767 |
| 1909 | ..... | 2,184 | 1,070 | 3,254 | ..... | ..... | 4,713 | 1,705 | 6,418 | ..... | ..... | ..... | 9,672 |
| 1910 | ..... | 2,472 | 1,237 | 3,709 | ..... | ..... | 5,903 | 1,855 | 7,758 | ..... | ..... | ..... | 11,467 |
| 1911 | ..... | 2,435 | 1,159 | 3,594 | ..... | ..... | 5,212 | 1,661 | 6,873 | ..... | ..... | ..... | 10,467 |
| 1912 | ..... | 2,472 | 1,364 | 3,837 | ..... | ..... | 5,275 | 1,855 | 7,130 | ..... | ..... | ..... | 10,967 |
| 1913 | ..... | 2,773 | 1,505 | 4,278 | ..... | ..... | 4,950 | 1,721 | 6,671 | ..... | ..... | ..... | 10,949 |
| 1914 | ..... | 2,741 | 1,433 | 4,174 | ..... | ..... | 4,267 | 1,465 | 5,732 | ..... | ..... | ..... | 9,906 |
| 1915 | ..... | 2,709 | 1,435 | 4,144 | ..... | ..... | 3,708 | 1,283 | 4,991 | ..... | ..... | ..... | 9,135 |
| 1916 | ..... | 3,357 | 2,036 | 5,393 | ..... | ..... | 3,694 | 1,366 | 5,060 | ..... | ..... | ..... | 10,453 |
| 1917 | ..... | 3,290 | 2,198 | 5,488 | ..... | ..... | 3,760 | 1,410 | 5,170 | ..... | ..... | ..... | 10,658 |
| 1918 | ..... | 2,626 | 1,764 | 4,390 | ..... | ..... | 3,658 | 1,769 | 5,247 | ..... | ..... | ..... | 9,637 |
| 1919 | ..... | 2,513 | 1,746 | 4,259 | ..... | ..... | 4,145 | 1,821 | 5,966 | ..... | ..... | ..... | 10,225 |
| 1920 | ..... | 2,074 | 1,605 | 3,679 | ..... | ..... | 4,191 | 2,158 | 6,349 | ..... | ..... | ..... | 10,028 |
| 1921 | ..... | 1,355 | 975 | 2,330 | ..... | ..... | 4,722 | 2,163 | 6,885 | ..... | ..... | ..... | 9,215 |
| 1922 | ..... | 1,510 | 1,239 | 2,749 | ..... | ..... | 4,712 | 1,932 | 6,644 | ..... | ..... | ..... | 9,393 |
| 1923 | ..... | 2,102 | 1,516 | 3,618 | ..... | ..... | 4,342 | 1,807 | 6,149 | ..... | ..... | ..... | 9,767 |
| 1924 | ..... | 2,353 | 1,680 | 4,033 | ..... | ..... | 3,894 | 1,524 | 5,418 | ..... | ..... | ..... | 9,451 |
| 1925 | ..... | 2,298 | 2,840 | 5,138 | ..... | ..... | 3,828 | 1,615 | 5,443 | ..... | ..... | ..... | 10,581 |
| 1926 | 299 | 2,606 | 1,735 | 4,341 | 808 | 2,461 | 3,757 | 1,565 | 5,322 | 493 | 324 | 124 | 14,172 |
| 1927 | 415 | 2,671 | 1,916 | 4,587 | 854 | 2,842 | 3,646 | 1,579 | 5,225 | 647 | 138 | 122 | 14,830 |
| 1928 | 355 | 2,707 | 2,469 | 5,176 | 911 | 2,748 | 3,814 | 1,520 | 5,334 | 412 | 368 | 120 | 15,424 |
| 1929 | 341 | 2,926 | 2,052 | 4,978 | 966 | 2,948 | 3,675 | 1,353 | 5,028 | 492 | 544 | 268 | 15,565 |
| 1930 | 425 | 2,316 | 1,260 | 3,576 | 832 | 3,197 | 3,389 | 1,256 | 4,645 | 843 | 344 | 170 | 14,032 |
| 1931 | 688 | 1,463 | 834 | 2,297 | 581 | 3,157 | 2,957 | 1,125 | 4,082 | 460 | 526 | 380 | 12,171 |
| 1932 | 874 | 1,355 | 900 | 2,255 | 542 | 2,036 | 2,628 | 980 | 3,608 | 536 | 329 | 344 | 10,524 |
| 1933 | 1,134 | 1,786 | 1,335 | 3,121 | 531 | 2,436 | 2,241 | 853 | 3,094 | 376 | 269 | 408 | 11,369 |
| 1934 | 1,122 | 2,796 | 1,729 | 4,525 | 631 | 2,890 | 2,050 | 843 | 2,893 | 377 | 187 | 360 | 12,985 |
| 1935 | 1,291 | 2,740 | 1,497 | 4,237 | 907 | 2,771 | 2,145 | 826 | 2,971 | 536 | 270 | 754 | 13,737 |
| 1936 | 1,124 | 2,959 | 1,840 | 4,799 | 720 | 2,678 | 2,015 | 799 | 2,814 | 931 | 288 | 825 | 14,179 |
| 1937 | 1,371 | 3,603 | 1,818 | 5,421 | 1,168 | 3,027 | 2,286 | 867 | 3,153 | 724 | 327 | 938 | 16,129 |
| 1938 | 1,303 | 3,849 | 2,266 | 6,115 | 919 | 3,158 | 2,088 | 874 | 2,962 | 900 | 295 | 369 | 16,021 |
| 1939 | 1,252 | 3,905 | 2,050 | 5,955 | 996 | 3,187 | 2,167 | 809 | 2,976 | 652 | 311 | 561 | 15,890 |
| 1940 | 1,004 | 3,923 | 2,104 | 6,027 | 1,048 | 2,944 | 2,175 | 699 | 2,874 | 827 | 334 | 647 | 15,705 |
| 1941 | 939 | 3,901 | 1,823 | 5,724 | 1,025 | 3,072 | 2,229 | 494 | 2,723 | 766 | 413 | 422 | 15,084 |
| 1942 | 489 | 2,920 | 1,504 | 4,424 | 960 | 3,555 | 1,892 | 468 | 2,360 | 842 | 378 | 262 | 13,270 |
| 1943 | 212 | 2,394 | 1,699 | 4,093 | 891 | 2,835 | 2,240 | 611 | 2,851 | 673 | 326 | 567 | 12,448 |
| 1944 | 255 | 1,896 | 1,825 | 3,721 | 849 | 2,981 | 2,150 | 689 | 2,839 | 690 | 351 | 628 | 12,314 |
| 1945 | 209 | 1,933 | 1,750 | 3,683 | 822 | 2,834 | 1,927 | 503 | 2,430 | 921 | 335 | 586 | 11,820 |
| 1946 | 347 | 1,918 | 1,817 | 3,735 | 672 | 2,813 | 1,773 | 532 | 2,305 | 827 | 555 | 679 | 11,933 |
| 1947 | 360 | 3,024 | 2,238 | 5,262 | 960 | 3,461 | 1,694 | 731 | 2,425 | 977 | 585 | 869 | 14,899 |
| 1948 | 348 | 3,143 | 2,429 | 5,572 | 1,126 | 3,884 | 1,594 | 872 | 2,466 | 1,591 | 656 | 754 | 16,397 |
| 1949 | 303 | 3,034 | 2,724 | 5,758 | 1,203 | 3,763 | 1,761 | 545 | 2,306 | 2,120 | 542 | 626 | 16,621 |
| 1950 | 327 | 3,399 | 2,415 | 5,814 | 1,259 | 3,759 | 1,745 | 516 | 2,261 | 1,916 | 616 | 660 | 16,612 |
| 1951 | 205 | 3,785 | 3,695 | 7,480 | 1,307 | 4,044 | 1,462 | 463 | 1,925 | 1,783 | 628 | 491 | 17,863 |
| 1952 | 230 | 4,171 | 3,923 | 8,094 | 1,516 | 4,120 | 1,280 | 401 | 1,681 | 1,530 | 557 | 529 | 18,257 |
| 1953 | 132 | 3,145 | 2,589 | 5,734 | 1,371 | 3,901 | 1,154 | 396 | 1,550 | 1,909 | 559 | 634 | 15,790 |
| 1954 | 199 | 2,644 | 2,520 | 5,164 | 1,129 | 3,119 | 1,076 | 358 | 1,434 | 1,861 | 638 | 584 | 14,128 |
| **1955** | **103** | **2,564** | **2,553** | **5,117** | **1,091** | **3,304** | **1,100** | **378** | **1,478** | **1,646** | **641** | **722** | **14,102** |

[1] The average number employed in the industry is the sum of the averages for individual companies. The average for each company is obtained by taking the sum of the numbers employed each month and dividing by 12, regardless of the number of months worked.

## TABLE XIV.—LODE-METAL MINES—TONNAGE, NUMBER OF MINES, NET AND GROSS VALUE OF PRINCIPAL METALS,[4] 1901–55

| Year | Tonnage[1] | Number of Shipping Mines | Number of Mines Shipping over 100 Tons | Gross Value as Reported by Shipper[2] | Freight and Treatment[2] | Net Value to Shipper[3] | Gross Value of Lode Metals Produced[4] |
|---|---|---|---|---|---|---|---|
| 1901 | 926,162 | 119 | 78 | ..... | ..... | ..... | $14,100,282 |
| 1902 | 1,009,016 | 124 | 75 | ..... | ..... | ..... | 11,581,153 |
| 1903 | 1,288,466 | 125 | 74 | ..... | ..... | ..... | 12,103,237 |
| 1904 | 1,461,609 | 142 | 76 | ..... | ..... | ..... | 12,909,035 |
| 1905 | 1,706,679 | 146 | 79 | ..... | ..... | ..... | 15,980,164 |
| 1906 | 1,963,872 | 154 | 77 | ..... | ..... | ..... | 18,484,102 |
| 1907 | 1,805,614 | 147 | 72 | ..... | ..... | ..... | 17,316,847 |
| 1908 | 2,083,606 | 108 | 59 | ..... | ..... | ..... | 15,847,411 |
| 1909 | 2,057,713 | 89 | 52 | ..... | ..... | ..... | 15,451,141 |
| 1910 | 2,216,428 | 83 | 50 | ..... | ..... | ..... | 14,728,731 |
| 1911 | 1,770,755 | 80 | 45 | ..... | ..... | ..... | 11,454,063 |
| 1912 | 2,688,532 | 86 | 51 | ..... | ..... | ..... | 17,662,766 |
| 1913 | 2,663,809 | 110 | 58 | ..... | ..... | ..... | 17,190,838 |
| 1914 | 2,175,971 | 98 | 56 | ..... | ..... | ..... | 15,225,061 |
| 1915 | 2,720,669 | 132 | 59 | ..... | ..... | ..... | 19,992,149 |
| 1916 | 3,229,942 | 169 | 81 | ..... | ..... | ..... | 31,483,014 |
| 1917 | 2,797,368 | 193 | 87 | ..... | ..... | ..... | 26,788,474 |
| 1918 | 2,912,516 | 175 | 80 | ..... | ..... | ..... | 27,590,278 |
| 1919 | 2,146,920 | 144 | 74 | ..... | ..... | ..... | 19,750,498 |
| 1920 | 2,215,445 | 121 | 60 | ..... | ..... | ..... | 19,444,365 |
| 1921 | 1,586,428 | 80 | 35 | ..... | ..... | ..... | 12,920,398 |
| 1922 | 1,592,163 | 98 | 33 | ..... | ..... | ..... | 19,227,857 |
| 1923 | 2,447,672 | 77 | 28 | ..... | ..... | ..... | 25,347,092 |
| 1924 | 3,413,912 | 86 | 37 | ..... | ..... | ..... | 35,538,247 |
| 1925 | 3,849,269 | 102 | 40 | ..... | ..... | ..... | 46,200,135 |
| 1926 | 4,775,327 | 138 | 55 | ..... | ..... | $38,558,613 | 51,508,031 |
| 1927 | 5,416,411 | 132 | 52 | ..... | ..... | 27,750,364 | 44,977,082 |
| 1928 | 6,241,672 | 110 | 49 | ..... | ..... | 29,070,075 | 48,281,825 |
| 1929 | 6,977,903 | 106 | 48 | ..... | ..... | 34,713,887 | 51,174,859 |
| 1930 | 6,804,276 | 68 | 32 | ..... | ..... | 21,977,688 | 40,915,395 |
| 1931 | 5,549,622 | 44 | 22 | ..... | ..... | 10,513,931 | 22,535,573 |
| 1932 | 4,354,904 | 75 | 29 | ..... | ..... | 7,075,393 | 19,700,235 |
| 1933 | 4,063,775 | 109 | 47 | ..... | ..... | 13,976,358 | 25,007,137 |
| 1934 | 5,141,744 | 145 | 69 | ..... | ..... | 20,243,278 | 33,895,930 |
| 1935 | 4,927,204 | 177 | 72 | ..... | ..... | 25,407,914 | 40,597,569 |
| 1936 | 4,381,173 | 168 | 70 | ..... | ..... | 30,051,207 | 43,666,452 |
| 1937 | 6,145,244 | 185 | 113 | $48,617,920 | $4,663,843 | 43,954,077 | 62,912,783 |
| 1938 | 7,377,117 | 211 | 92 | 40,222,237 | 4,943,754 | 35,278,483 | 53,877,333 |
| 1939 | 7,212,171 | 217 | 99 | 45,133,788 | 4,416,919 | 40,716,869 | 53,522,098 |
| 1940 | 7,949,736 | 216 | 92 | 50,004,909 | 6,334,611 | 43,670,298 | 62,848,642 |
| 1941 | 8,007,937 | 200 | 96 | 52,354,870 | 5,673,048 | 46,681,822 | 62,216,019 |
| 1942 | 6,894,844 | 126 | 76 | 50,494,041 | 5,294,637 | 45,199,404 | 55,359,479 |
| 1943 | 5,786,864 | 48 | 32 | 37,234,070 | 3,940,367 | 33,293,703 | 46,089,042 |
| 1944 | 4,879,851 | 51 | 31 | 29,327,114 | 2,877,706 | 26,449,408 | 39,315,910 |
| 1945 | 4,377,722 | 36 | 27 | 34,154,917 | 2,771,292 | 31,383,625 | 49,997,071 |
| 1946 | 3,705,594 | 50 | 32 | 48,920,971 | 2,904,130 | 46,016,841 | 56,519,691 |
| 1947 | 5,011,271 | 75 | 33 | 81,033,093 | 4,722,010 | 76,311,087 | 93,176,165 |
| 1948 | 5,762,321 | 97 | 51 | 118,713,859 | 18,585,183 | 100,128,727 | 125,979,961 |
| 1949 | 6,125,460 | 118 | 54 | 99,426,678 | 19,613,185 | 79,814,604 | 105,259,001 |
| 1950 | 6,802,482 | 112 | 58 | 108,864,792 | 22,113,431 | 86,751,361 | 121,635,457 |
| 1951 | 6,972,400 | 119 | 64 | 142,590,427 | 25,096,743 | 117,493,684 | 146,140,477 |
| 1952 | 9,174,617 | 95 | 58 | 140,070,389 | 30,444,575 | 106,601,451 | 134,111,567 |
| 1953 | 9,660,281 | 80 | 48 | 94,555,069 | 27,815,152 | 66,739,892 | 110,341,548 |
| 1954 | 8,513,865 | 63 | 40 | 106,223,833 | 29,135,673 | 77,088,160 | 111,844,340 |
| **1955** | **9,126,902** | **53** | **34** | **119,039,285** | **30,696,044** | **88,343,241** | **129,455,122** |

[1] Includes mercury ores, tungsten ores, iron ores, and silica (flux).

[2] Data not collected before 1937.

[3] Previous to 1937 the shipper reported "Net Value at Shipping Point," no indication being given as to how the net value was computed. From 1937 on, the shipper has reported "Gross Value," from which deduction of freight and treatment gives "Net Value."

[4] Gross value as represented by valuing gold, silver, copper, lead, and zinc at yearly average prices.

## TABLE XV.—LODE-METAL PRODUCERS IN 1955

| Property or Operator | Location of Mine | Owner or Agent | Ore Shipped or Treated | Product Shipped | Gross Metal Contents | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Gold | Silver | Copper | Lead | Zinc | Cadmium |
| NORTHERN BRITISH COLUMBIA | | | | | | | | | | |
| *Atlin Mining Division* | | | Tons | | Oz. | Oz. | Lb. | Lb. | Lb. | Lb. |
| Big Bull and Tulsequah Chief | Tulsequah | Tulsequah Mines Ltd., Trail | 196,700 | Zinc concentrates, 18,062 tons; lead concentrates, 4,276 tons; copper and gold concentrates, 13,912 tons; bullion | 20,867 | 670,916 | 5,350,522 | 5,345,187 | 24,410,825 | 86,807 |
| *Liard Mining Division* | | | | | | | | | | |
| *Nil* | | | | | | | | | | |
| CENTRAL BRITISH COLUMBIA | | | | | | | | | | |
| *Cariboo Mining Division* | | | | | | | | | | |
| Cariboo Gold Quartz | Wells | Cariboo Gold Quartz Mining Co. Ltd., Vancouver | 108,652 | Bullion | 41,464 | 3,989 | | | | |
| *Clinton Mining Division* | | | | | | | | | | |
| *Nil* | | | | | | | | | | |
| *Omineca Mining Division* | | | | | | | | | | |
| American Boy | Hazelton | J. Gallo, lessee, Hazelton | 21 | Crude ore | 1 | 1,567 | | 7,871 | 7,502 | |
| Silver Standard | Hazelton | Silver Standard Mines Ltd., Vancouver | 10,048 | Lead concentrates, 935 tons; zinc concentrates, 1,286 tons | 642 | 362,196 | 48,816 | 901,974 | 1,537,854 | 19,299 |
| COAST AND ISLANDS | | | | | | | | | | |
| *Alberni Mining Division* | | | | | | | | | | |
| *Nil* | | | | | | | | | | |
| *Nanaimo Mining Division* | | | | | | | | | | |
| Iron Hill | Quinsam Lake | Utah Co. of the Americas, Campbell River | 643,032 | Iron-ore concentrates, 343,653 tons | | | | | | |
| Prescott, Paxton, Lake | Texada Island | Texada Mines Ltd., Vananda | 421,936 | Iron-ore concentrates, 267,277 tons | | | | | | |
| *New Westminster Mining Division* | | | | | | | | | | |
| *Nil* | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Skeena Mining Division* | | | | | | | | | | |
| Toric | Kitsault River | Torbrit Silver Mines Ltd., Toronto | 151,863 | Silver-lead concentrates, 1,655 tons; silver bullion | ..... | 1,819,593 | ..... | 1,128,833 | ..... | ..... |
| *Vancouver Mining Division* | | | | | | | | | | |
| Britannia | Britannia Beach | Britannia Mining and Smelting Co. Ltd., Britannia Beach | 878,661 | Copper concentrates and precipitates, 27,708 tons; zinc concentrates, 16,372 tons; iron pyrite concentrates, 55,662 tons | 10,969 | 89,872 | 16,624,387 | 1,355,188 | 19,381,812 | 76,889 |
| *Victoria Mining Division* | | | | | | | | | | |
| Blue Grouse | Cowichan Lake | Cowichan Copper Co. Ltd., Lake Cowichan | 3,749 | Crude ore | ..... | 2,092 | 407,943 | ..... | ..... | ..... |
| SOUTH CENTRAL BRITISH COLUMBIA | | | | | | | | | | |
| *Greenwood Mining Division* | | | | | | | | | | |
| Copper Queen | Greenwood | W. E. McArthur, Sr., Greenwood | 162 | Crude ore | 24 | 253 | 16,309 | ..... | ..... | ..... |
| Dynamo | Greenwood | M. Butorac, Trail | 16 | Crude ore | ..... | 61 | ..... | 2,476 | 1,159 | ..... |
| Highland-Bell | Beaverdell | Highland-Bell Ltd., Vancouver | 13,229 | Lead concentrates, 421 tons; zinc concentrates, 312 tons; jig concentrates, 113 tons | 193 | 526,682 | ..... | 263,061 | 381,266 | 3,188 |
| *Kamloops Mining Division* | | | | | | | | | | |
| Ex No. 1 | Squilax | Trans-Mountain Mines, c/o Royal Bank of Canada, Kamloops | 40 | Crude ore | ..... | 529 | ..... | 15,743 | 8,269 | ..... |
| *Lillooet Mining Division* | | | | | | | | | | |
| Bralorne | Bridge River | Bralorne Mines Ltd., Vancouver | 166,831 | Bullion; gold concentrates, 2,807 tons | 65,525 | 14,177 | ..... | ..... | ..... | ..... |
| Pioneer | Bridge River | Pioneer Gold Mines of B.C. Ltd., Vancouver | 89,063 | Bullion | 53,920 | 10,880 | ..... | ..... | ..... | ..... |
| *Nicola Mining Division* | | | | | | | | | | |
| *Nil* | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| *Osoyoos Mining Division* | | | | | | | | | | |
| Fairview | Oliver | Cons. Mining & Smelting Co. of Canada, Ltd., Trail | 28,269 | Silica flux | ..... | ..... | ..... | ..... | ..... | ..... |
| Nickel Plate | Hedley | Kelowna Mines Hedley Ltd., Vancouver | 90,572 | Gold precipitates, 3.67 tons | 38,521 | 3,536 | ..... | ..... | ..... | ..... |
| Oregon (French) | Hedley | Kelowna Mines Hedley Ltd., Vancouver | 3,250 | Gold precipitates and contents included in Nickel Plate | ..... | ..... | ..... | ..... | ..... | ..... |

TABLE XV.—LODE-METAL PRODUCERS IN 1955—*Continued*

| Property or Operator | Location of Mine | Owner or Agent | Ore Shipped or Treated | Product Shipped | Gross Metal Contents | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Gold | Silver | Copper | Lead | Zinc | Cadmium |
| SOUTH CENTRAL BRITISH COLUMBIA—*Continued* | | | | | | | | | | |
| *Similkameen Mining Division* | | | Tons | | Oz. | Oz. | Lb. | Lb. | Lb. | Lb. |
| Copper Mountain | Copper Mountain | Granby Cons. M.S. & P. Co. Ltd., Copper Mountain | 1,966,999 | Copper concentrates, 49,565 tons | 6,930 | 155,091 | 21,249,879 | ..... | ..... | ..... |
| Keystone | Coquihalla | Golden Ledge Syndicate Ltd. | 89 | Crude ore[1] | ..... | ..... | ..... | ..... | ..... | ..... |
| *Vernon Mining Division* | | | | | | | | | | |
| *Nil* | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| SOUTHEASTERN BRITISH COLUMBIA | | | | | | | | | | |
| *Fort Steele Mining Division* | | | | | | | | | | |
| Sullivan | Kimberley | Cons. Mining & Smelting Co. of Canada, Ltd., Trail | 2,836,577 | Lead concentrates, 143,940 tons; zinc concentrates, 273,908 tons; tin concentrates, 337 tons | 335 | 2,907,749 | 249,082 | 225,526,483 | 265,363,560 | ..... |
| *Golden Mining Division* | | | | | | | | | | |
| Mineral King and Paradise | Invermere | Sheep Creek Gold Mines Ltd., Nelson | 161,962 | Lead concentrates, 3,981 tons; zinc concentrates, 9,742 tons | ..... | 126,709 | 144,980 | 4,933,145 | 11,377,570 | 59,765 |
| Silver Giant | Spillimacheen | Giant Mascot Mines Ltd., Vancouver | 169,269 | Lead concentrates, 8,973 tons; zinc concentrates, 864 tons | ..... | 111,122 | 198,934 | 12,558,284 | 1,511,133 | 3,525 |
| *Nelson Mining Division* | | | | | | | | | | |
| H.B. | Salmo | Cons. Mining & Smelting Co. of Canada, Ltd., Trail | 247,303 | Lead concentrates, 1,901 tons; zinc concentrates, 12,925 tons | ..... | 26,184 | ..... | 2,525,368 | 13,683,921 | 166,680 |
| Emerald-Feeney-Dodger | Salmo | Canadian Exploration Ltd., Vancouver | 162,506 | **Tungsten concentrates, 95,700 units $WO_3$** | ..... | ..... | ..... | ..... | ..... | ..... |
| Jersey | Salmo | Canadian Exploration Ltd., Vancouver | 357,099 | Lead concentrates, 7,097 tons; zinc concentrates, 23,266 tons | ..... | 24,848 | ..... | 10,763,578 | 35,134,642 | 197,245 |
| Goodenough (Protection) | Ymir | J. Turk, Ymir | 46 | Crude ore | 33 | 277 | ..... | 5,412 | 6,298 | ..... |
| Reeves MacDonald | Remac | Reeves MacDonald Mines Ltd., Vancouver | 65,071 | Lead concentrates, 925 tons; zinc concentrates, 9,776 tons (includes some zinc concentrates produced in 1953) | ..... | 7,504 | ..... | 1,627,671 | 10,222,865 | 56,302 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Revelstoke Mining Division* | | | | | | | | | | |
| Spider | Camborne | Sunshine Lardeau Mines Ltd., Vancouver | 28,345 | Lead concentrates, 3,832 tons; zinc concentrates, 4,625 tons | 2,475 | 326,828 | ..... | 5,143,334 | 5,608,261 | 31,027 |
| *Slocan Mining Division* | | | | | | | | | | |
| Bluebell | Riondel | Cons. Mining & Smelting Co. of Canada, Ltd., Trail | 241,788 | Lead concentrates, 17,085 tons; zinc concentrates, 27,777 tons | ..... | 345,905 | 345,241 | 24,972,006 | 28,353,216 | 129,773 |
| Caledonia | Retallack | G. E. McCready, Kaslo | 112 | Crude ore, 8 tons; lead concentrates, 6 tons; zinc concentrates, 20 tons | 2 | 1,130 | ..... | 18,583 | 25,162 | 86 |
| Chieftain | Burton | R. Harding, Silverton | 3 | Crude ore | 1 | 72 | ..... | 61 | 34 | ..... |
| Dixie Fraction | Woodbury Creek | J. G. Isaacs and L. Pittman, Kaslo | 109 | Crude ore | ..... | 158 | ..... | 9,935 | 769 | ..... |
| Hercules | Kaslo | Triumph Mines, Inc., c/o C. Lind, Kaslo | 6 | Crude ore | 1 | 136 | ..... | 159 | 102 | ..... |
| Hewitt | Silverton | H. Lyon and E. Merrill, lessees, Silverton | 26 | Crude ore | ..... | 1,923 | ..... | 9,178 | 7,198 | ..... |
| Highlander | Ainsworth | Yale Lead & Zinc Mines Ltd., Ainsworth | 56,530 | Lead concentrates, 4,141 tons; zinc concentrates, 987 tons | 5 | 94,834 | ..... | 4,949,118 | 1,278,956 | ..... |
| Hinckley | Silverton | W. D. Pengelly, Silverton | 14 | Crude ore | 1 | 1,078 | ..... | 15,220 | 1,508 | ..... |
| Jackson | Retallack | Jackson Basin Mining Co. Ltd., Vancouver | 595 | Crude ore | ..... | 614 | ..... | 11,660 | 147,326 | ..... |
| Noble Five, Slocan Sovereign | Sandon | Cody-Reco Mines Ltd., Toronto, Ont. | 1,500 | Tonnage estimated; zinc concentrates, 150 tons | ..... | 1,915 | ..... | 3,559 | 155,683 | 1,033 |
| Noonday-Curley | Silverton | M. Arishenkoff, lessee, Shoreacres | 10 | Crude ore | ..... | 304 | ..... | 931 | 890 | ..... |
| Shady Fraction | Sandon | N. Sibilleau, Sandon | 1 | Crude ore | ..... | 121 | ..... | 2,080 | 89 | ..... |
| Silver Bear | Kaslo | A. V. Fiala, Ainsworth | 6 | Crude ore | ..... | 368 | ..... | 852 | 913 | ..... |
| Keystone-Charleston | Retallack | Slocan-Charleston Mining Co. Ltd., Seattle, Wash. | 602 | Lead concentrates, 20 tons; zinc concentrates, 48 tons | 1 | 2,146 | ..... | 29,949 | 56,038 | 443 |
| Standard, Enterprise, Mammoth | Silverton | Western Exploration Co. Ltd., Silverton | 541 | Crude ore and 212 tons of zinc concentrates from 1952 stockpile | 3 | 6,406 | ..... | 38,179 | 330,411 | 2,504 |
| Star | Ainsworth | D. H. Norcross and A. Endersby, Jr., Nelson | 55 | Oxidized lead ore and crude lead ore | 1 | 273 | ..... | 7,843 | 6,337 | ..... |
| Tariff | Ainsworth | T. Lane and F. Dumas, Ainsworth | 17 | Crude ore | ..... | 233 | ..... | 12,050 | 3,361 | ..... |
| Trinket | Ainsworth | T. Hawes, Ainsworth | 6 | Crude ore | ..... | 25 | ..... | 4,091 | 590 | ..... |
| Utica | Kaslo Creek | J. A. Cooper, Kaslo | 115 | Crude ore | ..... | 16,260 | ..... | 32,909 | 38,165 | ..... |
| Van Roi | Silverton | Lessees from Slocan Van Roi Mines Ltd., Vancouver | 1,457 | Crude ore, 23 tons; lead concentrates, 205 tons, and zinc concentrates, 161 tons, from ore milled at Western Exploration Co. | 6 | 18,380 | ..... | 337,506 | 207,396 | 1,624 |
| V. & M. | Slocan | A. Archibald *et. al.*, Slocan City | 3 | Crude ore | 3 | 398 | ..... | 51 | 19 | ..... |
| Victor | Sandon | Violamac Mines Ltd., New Denver | 22,253 | Crude ore, 288 tons; lead concentrates, 4,072 tons; zinc concentrates, 3,056 tons | 226 | 450,351 | ..... | 6,500,206 | 3,797,249 | 23,588 |
| Yale Lead & Zinc | Ainsworth | Lessee, W. E. Lane, Ainsworth | 9 | Clean-up material | 3 | 455 | ..... | 7,287 | 3,082 | ..... |
| *Trail Creek Mining Division* | | | | | | | | | | |
| Snowdrop | Rossland | Snowdrop Mining Co. Ltd., Rossland | 2 | Crude ore | 135 | 25 | ..... | ..... | ..... | ..... |
| Velvet | Rossland | Velvet lessees, Rossland | 495 | Tonnage estimated; 45 tons of concentrates produced | 44 | 36 | 6,648 | ..... | ..... | ..... |

[1] Contents not available, sample only.

## TABLE XVI.—LODE-METAL MINES EMPLOYING AN AVERAGE OF TEN OR MORE MEN DURING 1955[1]

| Name of Mine or Operator | Days Operating | | Tons | | Average Number Employed | |
|---|---|---|---|---|---|---|
| | Mine | Mill | Mined | Milled | Mine | Mill |
| *Shipping Mines* | | | | | | |
| Big Bull and Tulsequah Chief (Tulsequah Mines Ltd.) | 365 | 365 | 196,700 | 196,700 | 199 | 20 |
| Cariboo Gold Quartz Mining Co. Ltd. | 282 | 365 | 108,652 | 108,652 | 243 | 18 |
| Silver Standard Mines Ltd. | 278 | 175 | 10,048 | 10,048 | 79 | 6 |
| Torbrit Silver Mines Ltd. | 365 | 365 | 151,863 | 151,863 | 108 | 24 |
| Britannia Mining & Smelting Co. Ltd. | 255 | 274 | 878,661 | 878,661 | 656 | 215 |
| Highland-Bell Ltd. | 273 | 273 | 13,229 | 13,229 | 48 | 5 |
| Bralorne Mines Ltd. | 365 | 365 | 166,831 | 166,831 | 403 | 21 |
| Pioneer Gold Mines of B.C. Ltd. | 365 | 365 | 96,725 | 89,063 | 242 | 23 |
| Nickel Plate and French mine (Kelowna Mines Hedley Ltd.) | 204 | 273 | 93,822[2] | 93,822[2] | 59 | 44 |
| Copper Mountain (Granby Cons. M.S. & P. Co. Ltd.) | 365 | 365 | 1,966,999 | 1,966,999 | 379 | 145 |
| Bluebell (Cons. M. & S. Co. of Canada, Ltd.) | 264 | 356 | 241,788 | 241,788 | 267 | 20 |
| Highlander (Yale Lead & Zinc Mines Ltd.) | 280 | 343 | 56,530 | 56,530 | 56 | 14 |
| Jackson (Jackson Basin Mining Co. Ltd.) | 304 | ..... | 595 | ..... | 13 | ..... |
| Standard, Enterprise, and Mammoth (Western Exploration Co. Ltd.) | 228 | 212 | 700 | 541 | 25 | 13 |
| Victor (Violamac Mines Ltd.) | 365 | ..... | 22,253 | 21,965 | 82 | ..... |
| H.B. (Cons. M. & S. Co. of Canada, Ltd.) | 237 | 237 | 247,303 | 247,303 | 109 | 11 |
| Jersey and Emerald-Dodger-Feeney (Canadian Exploration Ltd.) | 261 | 245 | 519,605 | 519,605 | 297 | 42 |
| Reeves MacDonald Mines Ltd. | 55 | 59 | 65,071 | 65,071 | 32 | 6 |
| Sullivan (Cons. M. & S. Co. of Canada, Ltd.) | 255 | 263 | 2,836,577 | 2,836,577 | 1,115 | 385 |
| Mineral King and Paradise (Sheep Creek Gold Mines Ltd.) | 306 | 347 | 161,962 | 161,962 | 83 | 12 |
| Silver Giant (Giant Mascot Mines Ltd.) | 365 | 365 | 169,269 | 169,269 | 102 | 15 |
| Spider (Sunshine Lardeau Mines Ltd.) | 305 | 341 | 29,055 | 28,345 | 53 | 12 |
| Blue Grouse (Cowichan Copper Co. Ltd.) | 283 | ..... | 3,749 | ..... | 31 | ..... |
| Argonaut Mine Division of Utah Co. of the Americas | 365 | 365 | 643,032 | 643,032 | 87 | 19 |
| Texada Mines Ltd. | 365 | 365 | 420,721 | 421,936 | 79 | 10 |
| *Non-shipping Mines* | | | | | | |
| Noranda Exploration Co. Ltd. (Gabbro and Yreka) | ..... | ..... | ..... | ..... | 19 | ..... |
| Northwestern Explorations, Ltd. (exploration, Cranbrook area) | ..... | ..... | ..... | ..... | 17 | ..... |
| Canam Copper Co. Ltd. | ..... | ..... | ..... | ..... | 34 | ..... |
| Silbak Premier Mines Ltd. | ..... | ..... | ..... | ..... | 11 | ..... |
| Granduc | ..... | ..... | ..... | ..... | 45 | ..... |

[1] The average number employed includes wage-earners and salaried employees. The average is obtained by adding the monthly figures and dividing by 12, irrespective of the number of months worked.

[2] Includes ore mined and milled from French mine.

# Departmental Work

## OFFICES

The Department of Mines offices in Victoria are on the fourth floor of the Douglas Building. The analytical laboratories are housed in the one-story building that originally housed the Legislative Assembly and now faces Superior Street.

## ADMINISTRATION BRANCH

The Administration Branch is responsible for the administration of the Provincial laws regarding the acquisition of rights to mineral and to coal, petroleum and natural gas, and deals with other departments of the Provincial service for the Department or for any branch. P. J. Mulcahy is Chief Gold Commissioner and K. B. Blakey is Deputy Chief Gold Commissioner. Under the terms of the "Petroleum and Natural Gas Act, 1954," which became effective on April 1st, 1954, P. J. Mulcahy was appointed Chief Commissioner, and K. B. Blakey was appointed Deputy Chief Commissioner.

Gold Commissioners, Mining Recorders, and Sub-Mining Recorders, whose duties are laid down in the "Mineral Act" and the "Placer-mining Act," administer these Acts and other Acts relating to mining. Mining Recorders, in addition to their own functions, may also exercise the powers conferred upon Gold Commissioners with regard to mineral claims within the mining division for which they have been appointed. Similar duties may be performed by Mining Recorders with regard to placer claims but not in respect of placer-mining leases. Recording of location and of work upon a mineral claim as required by the "Mineral Act" and upon a placer claim or a placer-mining lease as required by the "Placer-mining Act" must be made at the office of the Mining Recorder for the mining division in which the claim or lease is located. Information concerning claims and leases and concerning the ownership and standing of claims and leases in any mining division may be obtained from the Mining Recorder for the mining division in which the property is situated or from the Department's offices at Victoria, and Room 104, 739 West Hastings Street, Vancouver. Sub-Mining Recorders, who act as forwarding agents, are appointed at various places throughout the Province. They are authorized to accept documents and fees, and forward them to the office of the Mining Recorder for the correct mining division. Officials and their offices in various parts of the Province are listed in the table on pages A 52 and A 53.

### Central Records Offices (Victoria and Vancouver)

The transcripts of all recordings made in Mining Recorders' offices throughout the Province are sent to the office of the Chief Gold Commissioner in Victoria twice each month, and include the names of lessees of reverted Crown-granted mineral claims. These records and maps showing the approximate positions of mineral claims held by record and of placer-mining leases may be consulted by the public during office hours at Victoria and at the office of the Gold Commissioner at Vancouver, Room 104, 739 West Hastings Street. The maps conform in geographical detail, size, and number to the reference and mineral reference maps issued by the Department of Lands, and the approximate positions of mineral claims held by record and of placer-mining leases are plotted from details supplied by the locators. Provision has been made to supply the general public, on request to the office of the Chief Gold Commissioner, with copies of the maps. The charge for these maps is $1 plus 5 per cent tax for each sheet.

A marked upsurge in staking took place in 1955, 12,567 mineral claims being recorded, more than twice the number recorded in 1954. The major centre of interest, in this respect, was in the Highland Valley area in the Kamloops Mining Division.

## Mining Divisions Amalgamated since 1949

| Date | Mining Divisions Amalgamated | New Name | Mining Recorder's Office |
|---|---|---|---|
| Oct. 1, 1949 | Revelstoke and Lardeau | Revelstoke | Revelstoke. |
| Dec. 1, 1949 | Kamloops and Ashcroft | Kamloops | Kamloops. |
| Apr. 1, 1951 | Skeena and Portland Canal | Skeena | Prince Rupert. |
| Mar. 1, 1952 | Stikine and Peace River | Liard | Victoria. |
| Aug. 2, 1954 | Slocan and Ainsworth | Slocan | Kaslo. |
| May 1, 1955 | Cariboo and Quesnel | Cariboo | Quesnel. |

## List of Gold Commissioners, Mining Recorders, and Sub-Mining Recorders in the Province

| Mining Division | Location of Office | Gold Commissioner | Mining Recorder | Sub-Mining Recorder |
|---|---|---|---|---|
| Alberni | Alberni | T. G. O'Neill | T. G. O'Neill. | |
| Sub-office | Lake Cowichan | | | W. W. Deans. |
| Sub-office | Nanaimo | | | W. H. Cochrane. |
| Sub-office | Quatsino | | | Axel Hansen. |
| Sub-office | Tofino | | | R. R. Barr. |
| Sub-office | Zeballos | | | W. Gilchrist. |
| Atlin | Atlin | W. E. McLean | W. E. McLean. | |
| Sub-office | Lower Post | | | J. Dowsett. |
| Sub-office | Pouce Coupe | | | H. O. Callahan. |
| Sub-office | Telegraph Creek | | | Mrs. S. E. Brand. |
| Sub-office | Tulsequah | | | H. L. Abbott. |
| Cariboo | Quesnel | F. E. P. Hughes | F. E. P. Hughes. | |
| Sub-office | Barkerville | | | D. H. Bruce. |
| Sub-office | Fort McLeod | | | J. E. McIntyre. |
| Sub-office | Fort St. James | | | N. Henry. |
| Sub-office | Likely | | | C. W. Speed. |
| Sub-office | McBride | | | R. J. Mercer. |
| Sub-office | Prince George | | | S. M. Carling. |
| Sub-office | Williams Lake | | | Mrs. J. Pigeon. |
| Clinton | Clinton | W. H. Cope | W. H. Cope. | |
| Sub-office | Haylmore | | | W. Haylmore. |
| Sub-office | Williams Lake | | | Mrs. J. Pigeon. |
| Fort Steele | Cranbrook | E. L. Hedley | E. L. Hedley. | |
| Sub-office | Fernie | | | B. J. H. Ryley. |
| Golden | Golden | W. T. McGruder | W. T. McGruder. | |
| Sub-office | Invermere | | | T. N. Weir. |
| Greenwood | Grand Forks | R. MacGregor | R. MacGregor. | |
| Sub-office | Greenwood | | | G. A. Hartley. |
| Sub-office | Oliver | | | L. M. McKinnon. |
| Kamloops | Kamloops | D. Dalgleish | D. Dalgleish. | |
| Sub-office | Ashcroft | | | W. A. Munro. |
| Sub-office | Chu Chua | | | G. M. Fennell. |
| Sub-office | Likely | | | C. W. Speed. |
| Sub-office | Salmon Arm | | | H. S. Tatchell. |
| Liard | Victoria | R. H. McCrimmon. | | |
| Sub-office | Atlin | | | W. E. McLean. |
| Sub-office | Burns Lake | | | W. H. M. Collison. |
| Sub-office | Fort Nelson | | | A. Fisher. |
| Sub-office | Fort St. James | | | N. Henry. |
| Sub-office | Fort St. John | | | R. W. Sangster. |
| Sub-office | Lower Post | | | J. Dowsett. |
| Sub-office | Pouce Coupe | | | H. O. Callahan. |
| Sub-office | Prince George | | | S. M. Carling. |
| Sub-office | Telegraph Creek | | | Mrs. S. E. Brand. |
| Lillooet | Lillooet | E. B. Offin | E. B. Offin. | |
| Sub-office | Haylmore | | | W. Haylmore. |
| Nanaimo | Nanaimo | W. H. Cochrane | W. H. Cochrane. | |
| Sub-office | Alberni | | | T. G. O'Neill. |
| Sub-office | Alert Bay | | | D. J. Phillips. |
| Sub-office | Courtenay | | | G. W. McFarland. |
| Sub-office | Powell River | | | J. V. Gaspard. |
| Sub-office | Quatsino | | | Axel Hansen. |
| Nelson | Nelson | K. D. McRae | K. D. McRae | F. S. MacKay. |
| Sub-office | Creston | | | R. S. Allen. |
| Sub-office | Salmo | | | M. C. Donaldson. |
| New Westminster | New Westminster | J. F. McDonald | G. C. Kimberley. | |
| Sub-office | Chilliwack | | | E. L. Anderson. |
| Sub-office | Hope | | | J. H. Richmond. |

## List of Gold Commissioners, Mining Recorders, and Sub-Mining Recorders in the Province—*Continued*

| Mining Division | Location of Office | Gold Commissioner | Mining Recorder | Sub-Mining Recorder |
|---|---|---|---|---|
| Nicola | Merritt | D. Dalgleish (Kamloops) | T. S. Dobson. | |
| Omineca | Smithers | G. H. Beley | G. H. Beley. | |
| Sub-office | Burns Lake | | | W. H. M. Collison. |
| Sub-office | Dorreen | | | W. E. Horwill. |
| Sub-office | Fort St. James | | | N. Henry. |
| Sub-office | Fort St. John | | | R. W. Sangster. |
| Sub-office | Hazelton | | | C. H. Drake. |
| Sub-office | Manson Creek | | | T. C. Hamilton. |
| Sub-office | Prince George | | | S. M. Carling. |
| Sub-office | Takla Landing | | | Mrs. G. M. Henry. |
| Sub-office | Telkwa | | | T. J. Thorp. |
| Sub-office | Terrace | | | D. Warren. |
| Sub-office | Vanderhoof | | | L. D. Sands. |
| Osoyoos | Penticton | T. S. Dalby | T. S. Dalby. | |
| Sub-office | Keremeos | | | L. S. Coleman. |
| Sub-office | Oliver | | | L. M. McKinnon. |
| Revelstoke | Revelstoke | W. G. Fleming | W. G. Fleming. | |
| Sub-office | Beaton | | | J. T. Slater. |
| Similkameen | Princeton | B. Kennelly | B. Kennelly. | |
| Skeena | Prince Rupert | T. H. W. Harding | T. H. W. Harding. | |
| Sub-office | Alice Arm | | | A. D. York. |
| Sub-office | Burns Lake | | | W. H. M. Collison. |
| Sub-office | Leduc Glacier | | | J. J. Crowhurst. |
| Sub-office | Queen Charlotte | | | H. R. Beaven. |
| Sub-office | Stewart | | | Mrs. F. Macleod. |
| Sub-office | Telegraph Creek | | | Mrs. S. E. Brand. |
| Sub-office | Terrace | | | D. Warren. |
| Slocan | Kaslo | C. Macdonald | B. F. Palmer. | |
| Sub-office | New Denver | | | T. P. McKinnon. |
| Sub-office | Poplar | | | A. Robb. |
| Sub-office | Slocan | | | W. E. Graham. |
| Trail Creek | Rossland | W. L. Draper | W. L. Draper. | |
| Vancouver | Vancouver | J. Egdell | Mrs. F. Sherman (Deputy). | |
| Sub-office | Alert Bay | | | D. J. Phillips. |
| Sub-office | Powell River | | | J. V. Gaspard. |
| Vernon | Vernon | G. F. Forbes | G. F. Forbes. | |
| Sub-office | Kelowna | | | E. R. Oatman. |
| Victoria | Victoria | R. H. McCrimmon | R. H. McCrimmon. | |
| Sub-office | Lake Cowichan | | | W. W. Deans. |

## GOLD COMMISSIONERS' AND MINING RECORDERS' OFFICE STATISTICS, 1955

| Mining Division | Free Miners' Certificates | | | | Lode-mining | | | | | Placer-mining | | | | Revenue | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Individual | Company | Special | Provincial (Placer) | Mineral Claims Recorded | Certificates of Work | Certificates of Improvements | Bills of Sale, etc. | Leases of Reverted Crown-granted Mineral Claims | Placer Claims Recorded | Placer Leases Granted | Certificates of Work, Placer Leases | Bills of Sale, etc. | Free Miners' Certificates | Mining Receipts | Total |
| Alberni | 81 | 4 | ..... | ..... | 362 | 198 | 4 | 61 | 5 | ..... | 2 | 1 | 3 | $899.50 | $3,170.25 | $4,069.75 |
| Atlin | 289 | 1 | 2 | ..... | 621 | 219 | ..... | 72 | 16 | 8 | 13 | 153 | 26 | 1,465.75 | 10,397.25 | 11,863.00 |
| Cariboo | 814 | 12 | 8 | ..... | 622 | 269 | ..... | 56 | 34 | 5 | 61 | 307 | 69 | 4,345.50 | 19,858.20 | 24,203.70 |
| Clinton | 41 | ..... | ..... | ..... | 80 | 79 | 10 | 3 | ..... | ..... | 1 | 25 | 4 | 173.25 | 3,211.50 | 3,384.75 |
| Fort Steele | 328 | ..... | 3 | ..... | 294 | 145 | ..... | 30 | 7 | ..... | 11 | 13 | 9 | 1,583.75 | 2,907.25 | 4,491.00 |
| Golden | 182 | 4 | 1 | ..... | 317 | 344 | 1 | 85 | 14 | ..... | 14 | 47 | 27 | 1,141.00 | 7,501.75 | 8,642.75 |
| Greenwood | 129 | ..... | 1 | ..... | 430 | 230 | ..... | 22 | 148 | ..... | ..... | 2 | ..... | 558.50 | 7,598.00 | 8,156.50 |
| Kamloops | 631 | 5 | 15 | 3 | 3,476 | 1,064 | 23 | 494 | 38 | ..... | ..... | 2 | 1 | 3,352.50 | 19,121.23 | 22,473.73 |
| Liard | 291 | ..... | 4 | ..... | 425 | 322 | 32 | 36 | ..... | ..... | 6 | 14 | 6 | 2,293.00 | 9,841.50 | 12,134.50 |
| Lillooet | 215 | 2 | ..... | ..... | 284 | 263 | 10 | 50 | 10 | ..... | 6 | 28 | 5 | 1,136.25 | 3,415.15 | 4,551.40 |
| Nanaimo | 157 | 3 | 2 | ..... | 180 | 168 | ..... | 27 | 20 | ..... | ..... | ..... | ..... | 907.00 | 3,489.00 | 4,396.00 |
| Nelson | 545 | 12 | 8 | 2 | 911 | 379 | 36 | 45 | 35 | 3 | 1 | 1 | ..... | 3,958.75 | 6,101.25 | 10,060.00 |
| New Westminster | 324 | 6 | ..... | 14 | 454 | 254 | ..... | 174 | 3 | ..... | 1 | 13 | ..... | 1,877.25 | 11,651.75 | 13,529.00 |
| Nicola | 46 | ..... | ..... | ..... | 359 | 145 | ..... | 17 | ..... | ..... | ..... | ..... | ..... | 165.50 | 1,827.50 | 1,993.00 |
| Omineca | 428 | 2 | 5 | ..... | 832 | 754 | 23 | 153 | 43 | 3 | 16 | 50 | 9 | 2,044.75 | 16,426.55 | 18,471.30 |
| Osoyoos | 162 | 1 | ..... | 2 | 196 | 147 | ..... | 27 | 10 | ..... | ..... | 1 | ..... | 907.25 | 2,528.75 | 3,436.00 |
| Revelstoke | 88 | 3 | ..... | ..... | 138 | 82 | 8 | 45 | 44 | ..... | 4 | 11 | 18 | 600.25 | 9,662.40 | 10,262.65 |
| Similkameen | 160 | 3 | 5 | ..... | 211 | 144 | ..... | 33 | 23 | 1 | 5 | 9 | 2 | 992.50 | 3,266.00 | 4,258.50 |
| Skeena | 323 | 5 | 6 | ..... | 343 | 776 | ..... | 375 | 137 | ..... | 1 | ..... | 5 | 1,937.50 | 18,009.25 | 19,490.00 |
| Slocan | 320 | 5 | 3 | ..... | 769 | 389 | 2 | 90 | 54 | ..... | ..... | ..... | 2 | 1,811.75 | 7,193.00 | 9,004.75 |
| Trail Creek | 156 | 1 | 7 | ..... | 174 | 36 | ..... | ..... | 25 | ..... | 1 | ..... | ..... | 890.00 | 1,695.00 | 2,585.00 |
| Vancouver | 1,845 | 138 | 18 | 4 | 78 | 208 | ..... | 12 | 7 | ..... | ..... | ..... | ..... | 20,392.00 | 2,100.50 | 22,492.50 |
| Vernon | 278 | 2 | 2 | 10 | 244 | 54 | ..... | 44 | 3 | ..... | ..... | 11 | 13 | 1,232.00 | 2,449.00 | 3,681.00 |
| Victoria | 493 | 17 | 1 | ..... | 767 | 80 | ..... | 79 | 5 | ..... | 12 | 21 | 20 | 3,947.75 | 4,211.75 | 8,159.50 |
| Totals for Province, 1955 | 8,326 | 226 | 91 | 35 | 12,567 | 6,749 | 149 | 2,030 | 681 | 20 | 155 | 709 | 219 | $58,613.00 | $177,183.28 | $235,796.98 |
| Totals for Province, 1954 | 5,844 | 205 | 100 | 59 | 5,296 | 7,165 | 41 | 1,513 | 454 | 33 | 245 | 637 | 220 | 46,523.00 | 140,791.24 | 187,314.24 |

## Coal, Petroleum, and Natural Gas

The Administration Branch has been responsible for the administration of the "Petroleum and Natural Gas Act, 1954," and for the "Coal Act, 1944," since April 1st, 1953. Information concerning applications for permits and leases issued under the "Petroleum and Natural Gas Act" and concerning the ownership and standing of them may be obtained upon application to the office of the Chief Commissioner, Department of Mines, Victoria, B.C. Similar information may be obtained respecting licences and leases issued under the "Coal Act." A series of maps showing the locations of permits and leases under the "Petroleum and Natural Gas Act" is provided, and copies may be obtained upon application to the office of the Department of Mines, Victoria, B.C., accompanied by payment of $3 per sheet. Monthly reports listing additions and revisions to permit-location maps and giving information listing changes in title to permits, licences, and leases and related matters are available from the office of the Chief Commissioner upon application and payment of a fee of $1 per annum.

*Petroleum and Natural-gas Statistics, 1955*

| | |
|---|---|
| Permits— | |
| Issued | 50 |
| Renewed | 273 |
| Assigned | 92 |
| Leases— | |
| Issued | 96 |
| Renewed | 4 |
| Assigned | 2 |

*Petroleum and Natural-gas Revenue, 1955*

| | | |
|---|---|---|
| Permits— | | |
| Fees | $86,825.00 | |
| Rent | 2,873,036.15 | |
| Cash in lieu of work | 505,434.26 | |
| | | $3,465,295.41 |
| Leases— | | |
| Fees | $2,450.00 | |
| Rent | 75,838.13 | |
| | | 78,288.13 |
| Tender bonus | | 605,306.64 |
| Assignment fees | | 1,740.00 |
| Operators' licences | | 8,870.00 |
| Royalties— | | |
| Gas | $2,611.67 | |
| Oil | 16.65 | |
| | | 2,628.32 |
| Miscellaneous | | 1,782.50 |
| | | $4,163,911.00 |

*Coal Revenue, 1955*

| | | |
|---|---|---|
| Licences— | | |
| Fees | $775.00 | |
| Rent | 5,750.35 | |
| | | $6,525.35 |
| Leases— | | |
| Fees | $700.00 | |
| Rent | 2,982.53 | |
| Cash in lieu of work | 700.00 | |
| | | 4,382.53 |
| Miscellaneous | | 20.00 |
| | | $10,927.88 |

## Mining Laws and Laws Related to the Mineral Industry

Synopses of mining laws and of laws related to mining are available on application. The titles of the various Acts and the price charged for each are listed below. Upon payment of the price, plus 5 per cent tax, a copy of any Act may be obtained from the office of the Queen's Printer, Victoria.

| | Price |
|---|---|
| Department of Mines Act | $0.15 |
| Mineral Act | .25 |
| Placer-mining Act | .25 |
| Metalliferous Mines Regulation Act | .50 |
| Coal-mines Regulation Act | .70 |
| Mines Right-of-way Act | .15 |
| Iron and Steel Bounties Act | .15 |
| Indian Reserves Mineral Resources Act | .15 |
| Prospectors' Grub-stake Act | .15 |
| Taxation Act | .75 |
| Forest Act | .80 |
| Greater Vancouver Water District Act | .80 |
| Security Frauds Prevention Act | .30 |
| Coal Sales Act | .15 |
| Coal Act | .15 |
| Petroleum and Natural Gas Act | .25 |
| [1]Drilling and Production Regulations under Petroleum and Natural Gas Act, 1954 (including tax) | .40 |
| [1]Geophysical Regulations, Petroleum and Natural Gas Act, 1954 (including tax) | .25 |
| [1]Permit and Lease Grid System, Petroleum and Natural Gas Act, 1954 (including tax) | 1.00 |
| [1]Schedule of Wells Drilled for Oil and Natural Gas (including tax) | 1.25 |

[1] Obtained from Chief Commissioner, Petroleum and Natural Gas, Victoria.

## ANALYTICAL AND ASSAY BRANCH

By G. C. B. Cave, Chief Analyst

### Rock Samples

During 1955 the chemical laboratory in Victoria issued reports on 2,278 samples from prospectors* and Departmental engineers. A laboratory examination of a prospector's sample generally consists of the following: (1) A spectrographic analysis to determine if any base metals are present in interesting percentages; (2) assays for precious metals, and for base metals shown by the spectrographic analysis to be present in interesting percentages. The degree of radioactivity is measured on all samples submitted by prospectors and Departmental engineers; these radiometric assays are not listed below in the table.

The laboratory reports were distributed in the following manner among prospectors who were not grantees, prospectors who were grantees under the "Prospectors' Grub-stake Act," and Departmental engineers:—

| | Samples | Spectrographic Analyses | Assays |
|---|---|---|---|
| Prospectors (not grantees) | 1,418 | 1,368 | 2,960 |
| Prospectors (grantees) | 272 | 273 | 592 |
| Departmental engineers | 588 | 391 | 1,356 |
| Totals | 2,278 | 2,032 | 4,908 |

Mineralogical specimens submitted for identification and rocks for classification are examined by the Mineralogical Branch of the Department.

### Coal, Petroleum, and Gas Samples

A total of eighty-seven samples was analysed. Of these, four were samples of coal for proximate analysis and calorific value; sixty-three were samples of formation water from wells being drilled for oil and gas in the Province; three were samples of suspected oil seepages; five were gas samples, four of which were of mine air to be analysed for carbon dioxide, carbon monoxide, and oxygen, and one was of gas seepage; and twelve were samples of diesel exhaust gas to be analysed for aldehydes and nitrogen oxides.

### Police and Coroners' Exhibits

For the Attorney-General's Department and the Royal Canadian Mounted Police, sixty-seven cases of a chemico-legal nature were undertaken. They involved a scientific examination of 141 exhibits.

Seven of the sixty-seven cases required analysis for narcotics under the " Opium and Narcotic Drug Act," sixteen were toxicological analyses for possible poisons in viscera, fifteen were determinations of the alcoholic content of blood, twelve were for analysis of liquor for alcoholic content, and eight samples required the identification of marker dyestuff in gasoline for the " Coloured Gasoline Tax Act." The remaining nine cases were of a diversified nature and required examinations of metal, paint, explosives, and soil. Expert evidence was presented in Court on seven occasions.

### Miscellaneous Samples

For the Purchasing Commission, specification tests were made on nine samples of anti-freeze, on eight samples of fibre and cloth, on six samples of soap, on three samples of jelly powder, and on three spoons for the thickness of the plating.

* A reasonable number of samples are assayed, without charge, for a prospector who makes application for free assays and who satisfies the Chief Analyst that prospecting is his principal occupation during the summer months. A form for use in applying for free assays may be obtained from the office of any Mining Recorder.

For the Taxation Branch of the Department of Finance, five samples of gasoline were analysed for marker dyestuff, and the dyestuff in ten envelopes was weighed.

For the Department of Agriculture, sixteen samples of soil were analysed for twelve constituents, one sample of limestone was analysed for lime and magnesia, one sample of limestone was analysed spectrographically and for lime, and one sample of tinsel was analysed spectrographically for all constituents.

For the Department of Lands and Forests, 180 samples of foliage were analysed for their fluorine content. The preparation of samples prior to their analysis was completed in 1954. One sample of ammonia reagent was analysed for ammonia.

For the Department of Public Works, one sample of gravel and a water extract therefrom were analysed spectrographically and chemically.

For the Department of Health, sixteen samples of duplicator-machine fluid were analysed for methyl alcohol.

For H.M.C.S. " Naden " hospital, Esquimalt, one sample of blood was analysed for alcohol.

For the British Columbia Research Council, spectrographic analyses were made on three mineral samples and on four metal samples. A chemical assay was made on one metal sample.

For the Department of Mining and Metallurgy, University of British Columbia, spectrographic analyses were made on three mineral samples.

### Research

A study of analytical methods for the inorganic analysis of oilfield waters was commenced, in order to select more rapid methods which are at least as accurate as the classical methods. Calcium and magnesium were chosen for study first. Recently developed volumetric methods for these two metals were found to provide more accurate results than the routine gravimetric methods, and took less than one-quarter the time required for the gravimetric methods. Accordingly, these methods were adopted for routine work. The determination of bromide and iodide is now being studied.

Spectrographic analyses for trace metals in oilfield waters was begun on a routine basis this year. A quantitative spectrographic method was established to determine the concentrations of thirteen trace metals in feldspar.

### Examinations for Assayers

Provincial Government examinations for certificates of competency and licence to practise assaying in British Columbia were held in May and in December. In May five candidates were examined; three passed and two failed. In December three candidates were examined, and all three passed.

## INSPECTION BRANCH

### Organization and Staff

*Inspectors and Resident Engineers*

| | |
|---|---|
| H. C. Hughes, Chief Inspector | Victoria |
| Robert B. Bonar, Senior Inspector of Mines | Victoria |
| J. D. Lineham, Senior Inspector and Acting Chief Conservation Engineer | Victoria |
| L. Wardman, Electrical Inspector | Victoria |
| J. A. Mitchell, Senior Inspector of Mines | Victoria |
| J. W. Patterson, Inspector and Resident Engineer | Lillooet |
| Robert B. King, Inspector and Resident Engineer | Vancouver |

A. R. C. James, Inspector and Resident Engineer.....Prince Rupert
J. E. Merrett, Inspector and Resident Engineer.....Cranbrook
E. R. Hughes, Inspector and Resident Engineer.....Princeton
J. W. Peck, Inspector and Resident Engineer.....Nelson
D. R. Morgan, Inspector and Resident Engineer.....Fernie
R. R. McLeod, District Petroleum and Natural Gas Engineer.....
.....Dawson Creek

The Inspectors are stationed at the places listed and inspect coal mines, metalliferous mines, and quarries in their respective districts. They also examine prospects and mining properties.

J. A. Mitchell supervises the Department's programme as regards roads and trails and grub-stakes.

J. D. Lineham is responsible for the administration of regulations governing the drilling, completion, and abandonment of all wells drilled for oil and gas in British Columbia.

R. R. McLeod undertakes inspection work in connection with drilling, completion, and abandonment of all wells drilled for oil and gas in the Peace River area.

*Instructors, Mine-rescue Stations*

Arthur Williams.....Cumberland Station
T. H. Cunliffe.....Princeton Station
Joseph J. Haile.....Fernie Station
H. W. Aitchison.....Nelson Station

*Board of Examiners for Coal-mine Officials*

H. C. Hughes, Chairman.....Victoria
Robert B. Bonar, Secretary.....Victoria
E. R. Hughes, Member.....Princeton

R. B. Bonar, E. R. Hughes, and the Inspectors for the district in which an examination is being held form the Board for granting certificates of competency to coal-miners. In the absence of the Inspector, the mine-rescue instructor is authorized to act in his stead.

An Inspector is empowered to grant provisional certificates to coal-miners for a period not exceeding sixty days between regular examinations.

## MINERALOGICAL BRANCH

Field work by officers of the Mineralogical Branch includes geological mapping and examination of mineral deposits, and studies related to groundwater and engineering geology. The results are published partly in the Annual Report of the Minister of Mines and partly in a series of bulletins. The Mineralogical Branch supplies information regarding mineral deposits and the mineral industry, in response to inquiries received in great number. The activities of the Branch also include identification of rock and mineral specimens submitted by prospectors and others, including, if required, the identification of rocks and mineral submitted by prospectors to the Analytical Branch. Since April 1st, 1953, the Mineralogical Branch has been responsible for preparing and logging samples representing the bit cuttings from wells drilled for petroleum and natural gas and cores from the wells.

### Professional Staff

On December 31st, 1955, the professional staff included the following engineers classified as geologists or mineral engineers: H. Sargent, Chief of the Mineralogical Branch; M. S. Hedley, S. S. Holland, W. R. Bacon, J. W. McCammon, N. D. McKechnie, G. E. P. Eastwood, J. T. Fyles, A. Sutherland Brown, S. S. Cosburn, H. W. Nasmith, A. F. Shepherd, R. A. Stuart, C. G. Hewlett, and J. E. Hughes.

Technical editing of the Annual Report of the Minister of Mines and of other publications was directed by M. S. Hedley. Copy for printing was prepared under the direction of Mrs. C. C. Savage, who serves as editor for English. Messrs. Hedley and Holland assisted in directing and supervising field work. Most of the other members of the professional staff are assigned to mapping the geology of the selected areas and of mineral deposits. The following have special assignments: J. W. McCammon, industrial minerals and structural materials; H. W. Nasmith, groundwater and engineering geology; S. S. Cosburn, preparation and logging of well samples; A. F. Shepherd, records and library.

## Staff Changes

Mr. Stuart was on leave of absence throughout 1955 and resigned in December.

## Field Work

Twelve field assistants were employed for the 1955 season to work under members of the professional staff who had the following assignments.

W. R. Bacon examined the Harrison property on Lindquist Lake in June, and spent the major part of the season mapping the bedrock geology in the area bounded by the Summit Lake-Salmon Glacier valley, the Alaska boundary, and 56° 15′ north latitude. The mapping was 1 inch to one-half mile. The area mapped includes the Granduc property and the route under study for an access tunnel to the property.

A. Sutherland Brown completed mapping in the Rocher Déboulé Range which was begun in 1953. This work included study of mineral deposits and their relation to the Rocher Déboulé granodiorite stock. Reconnaissance in the Cariboo Mountains (Bowron Lake Game Reserve), begun in 1954, was continued.

S. S. Cosburn spent six weeks on reconnaissance in the Lone Mountain area and visiting wells being drilled for oil and gas in northeastern British Columbia.

G. E. P. Eastwood continued mapping in the Lardeau area at 1 inch to 1,000 feet. Much of the work has been in a strip designed to cross the Lardeau group; this part of the work in 1955 was in the area east of the north end of Trout Lake, along Lardeau and Gainer Creeks. Mapping was also done between Beaton and Trout Lake and on Pool Creek.

J. T. Fyles and C. G. Hewlett concluded the field study of the stratigraphy and structure of the lead-zinc belt in the Salmo-Pend d'Oreille River area of southeastern British Columbia. More detailed study of some of the mineral deposits in the area is required in order to complete this programme of work begun in 1951.

S. S. Holland spent the early part of the field season studying the application of a method of prospecting for uranium and niobium. Heavy mineral concentrates obtained by panning stream gravels are sprinkled on a stainless-steel plate. The plate is heated to fuse the heavy mineral grains with a sodium fluoride flux. When cool the plate is examined under an ultra-violet light; golden-yellow fluorescence indicates the presence of uranium and bluish-white fluorescence indicates the presence of niobium. On the North Thompson River, uranium was detected on Foghorn Creek below the Rexspar property but not downstream on the main river.

Mr. Holland examined mineral prospects in the McDame Creek-Dease River area, including an occurrence of the beryllium mineral, helvite, on Needlepoint Mountain, some 25 miles by road from the Cassiar asbestos mine, and occurrences of beryl in the Horseranch Range east of Dease River. He also examined a uranium prospect near Surprise Lake east of Atlin, a uranium-niobium prospect on Granite Creek in the Wolverine Mountains, and an occurrence of secondary uranium mineral in rhyolite on Nithi Mountain 6 miles from Fraser Lake.

J. E. Hughes continued mapping stratigraphy and structure in the area traversed by the John Hart Highway between Commotion Creek and the West Pine bridge.

J. W. McCammon devoted the 1955 field season to reconnaissance geological examinations of dam-site areas on the upper Fraser River, the West Road (Blackwater), and the lower Nechako Rivers. For the first month of the season Mr. Nasmith and Mr. McCammon worked together on the project. Nineteen dam-sites were examined. The geology was plotted on air photos and on topographic maps supplied by the Water Rights Branch of the British Columbia Department of Lands and Forests.

The examinations were made to check rock conditions that might affect dams about 100 feet high. Bedrock was mapped to a minimum height of 200 feet above high-water level and at least half a mile upstream and downstream from the proposed sites. At several sites the extent of outcrop was well below the limits set. In such cases all rock showing was examined.

H. W. Nasmith spent the first month of the 1955 field season collaborating with J. W. McCammon in mapping proposed dam-sites on the Fraser River, referred to more specifically in the preceding note. Thereafter Mr. Nasmith continued studies of ground-water and glacial geology in the southern part of the Okanagan Valley. Features formed during the melting of glacial ice were examined in detail in areas near Summerland and between Okanagan Falls and Oliver, and studies relating to municipal water-supplies and to engineering problems were made. A study to determine the effect of excess irrigation-water on the chemical quality of the water from a spring was started at Westbank.

## PETROLEUM AND NATURAL GAS CONSERVATION BRANCH

This Branch was established officially on April 1st, 1956, although it has functioned, nominally under the Inspection Branch, since the administration of the " Petroleum and Natural Gas Act " was transferred to the Department of Mines on April 1st, 1953.

The main responsibility of the Branch is the enforcement of the " Regulations Governing the Drilling, Production, and Working of Wells and the Conservation of Petroleum and Natural Gas," and part of the Geophysical Regulations. These regulations were made pursuant to the provisions of the " Petroleum and Natural Gas Act, 1954."

The chief purpose of the regulations is to protect the interests of the Crown and of the operator by ensuring that all operations are conducted in accordance with acceptable practices so as to prevent waste and effect conservation of this expendable natural resource. The regulations also protect the public and the land-owner against such hazards as fire, uncontrolled flow of oil, gas, or water, and the results of careless well abandonments.

In addition to the enforcement of the regulations, the Branch is responsible for the collection and consolidation of technical information and data gained from each drilling operation. This material is compiled and recorded for use by the Department when field studies will be required. Well information is also reproduced and is available to anyone interested, within the limits provided by Regulation 34; that is, two years following the date of completion or abandonment of an exploratory well or thirty days in the case of a development well.

The staff, on April 1st, consisted of two engineers—J. D. Lineham, Chief of the Branch and Chief Conservation Engineer in Victoria, and R. R. McLeod, Petroleum and Natural Gas Engineer stationed at Dawson Creek. Clerical and stenographic work is done by some members of the staff of the Central Records Office and the stenographic pool. In view of the increased activity it is expected that two additional engineers and other personnel will be required this year.

## GRUB-STAKING PROSPECTORS

Under authority of the " Prospectors' Grub-stake Act," as amended in March, 1944, the Department of Mines has provided grub-stakes each year since 1943 to a limited

number of applicants able to qualify. The maximum grub-stake is $300, but an additional amount up to $200 may be added for travelling expenses to and from the prospecting area.

To qualify at the present time the Department requires that the applicant shall be a physically fit male British subject, holder of a valid free miner's certificate, who has been resident in the Province during the year preceding his application for a grub-stake, or who has been honourably discharged from Her Majesty's services, who is between the ages of 18 and 70, and who can identify common rocks and minerals.

It is required that in order to obtain the maximum grub-stake he agree to spend at least sixty days actually prospecting for lode occurrences in one area of his choice in British Columbia considered favourable by officers of the Department of Mines. If he prospects a lesser time, the grant will be reduced proportionately. In the past, rebates have been recovered from grantees to whom payments have exceeded the proper amount for the time and effort devoted to prospecting.

The grantee must not accept pay from any other source for services rendered during the period credited to the grub-stake. At the end of the season he shall provide the Department with a diary and maps outlining his activities while working under the grub-stake. Any discoveries made, staked, and recorded are exclusively his own property.

Statistical information covering the grub-stake programme since its inception is given in the following table:—

GRUB-STAKE STATISTICS

| Field Season | Approximate Expenditure | Men Grub-staked | Samples and Specimens Received at Department Laboratory | Mineral Claims Recorded |
|---|---|---|---|---|
| 1943 | $18,500 | 90 | 773 | 87 |
| 1944 | 27,215 | 105 | 606 | 135 |
| 1945 | 27,310 | 84 | 448 | 181 |
| 1946 | 35,200 | 95 | 419 | 162 |
| 1947 | 36,230 | 91 | 469 | 142 |
| 1948 | 35,975 | 92 | 443 | 138 |
| 1949 | 31,175 | 98 | 567 | 103 |
| 1950 | 26,800 | 78 | 226 | 95 |
| 1951 | 19,385 | 63 | 255 | 137 |
| 1952 | 19,083 | 50 | 251 | 95 |
| 1953 | 17,850 | 41 | 201 | 141 |
| 1954 | 19,989 | 48 | 336 | 123 |
| 1955 | 21,169 | 47 | 288 | 183 |

Samples and specimens received from grub-staked prospectors are spectrographed, assayed, and tested for radioactivity. Mineralogical identifications are made on request.

Of the forty-seven grantees in 1955, twenty were given grants for the first time, and only four of these proved unsatisfactory. Two grantees who had received previous grub-stakes were also struck from the list for unsatisfactory work. Generally speaking, however, the 1955 performance was very satisfactory and several new discoveries were recorded. Two groups in particular did excellent work, and one of these groups has more than one worth-while discovery to its credit. Options have been taken on at least three of the discoveries recorded.

Since the start of the programme, D. H. Rae has given invaluable service interviewing applicants and supervising grantees in the field. It is necessary that he work long hours, and that he make many arduous trips by every means of travel each year in all kinds of country and weather in order to visit as many of the grantees as possible, for the purpose of providing whatever aid or advice they may require.

The following notes have been largely compiled by Mr. Rae from information provided in the diaries of the grantees, and from his own observations while in the field.

*Atlin Mining Division.*—In the Taku area some prospecting was done on the south slope of Mount Manville, up the Stuhini valley, and up Ryans Creek. No discoveries of apparent importance were reported.

In the Stikine River area, prospecting was done in the vicinity of Mount Kirk, Helveker Creek, behind Jacksons Landing, and in the Contact Creek, Anuk River, and Jack Wilson Creek areas. Large pieces of float well mineralized with galena and chalcopyrite were found but were not traced to their source. At the end of the season the same man prospected the Iskut and Inhini Rivers area, but his work there was stopped by inclement weather.

A well-organized group worked northwesterly from a base camp on Jennings Lake and followed McNaughton Creek as far as the Alaska Highway. They reported no discoveries of interest. It appears that the rocks are largely granodiorite.

A reconnaissance was made from Crescent Lake just north of the Whiting River at the Alaska boundary through to Disella Lake in the Teslin River watershed. One copper occurrence was reported, but it was considered of little importance.

*Liard Mining Division.*—The group based at Jennings Lake prospected easterly from there into the Blue River watershed. There was much coarse granodiorite close to Jennings Lake, but no mineral occurrences were found. At the headwaters of the Blue River, outcrops of basic rocks, principally dunites and peridotites, were thoroughly prospected, and outcrops of chromite were found over an extensive area. Claims were staked and later optioned to a mining company which intends to do exploratory work on the property in 1956.

Another grantee located claims to the north of this occurrence, but information regarding the nature of the mineral has not been made available.

Following float discovered last year in his first year of prospecting, a grantee discovered copper minerals in place in the Toad River area and promptly optioned the property to one of the larger mining companies. Farther up the Toad River and in the Racing River area another prospector has been successful in locating copper minerals.

Copper mineralization has also been discovered in the Smith River area but at present does not appear particularly important. An occurrence of hematite in sedimentary rocks was discovered in the vicinity of the airport.

*Vancouver and Skeena Mining Divisions.*—In the early part of the season, prospectors using their boats as a base of operations worked along the coast-line around Blenkinsop Bay, Minstrel Island, Wakeman Sound, Wolfe Cove, Bullock Channel, Poison Cove River, Emily Lake, and Kynoch Lagoon. These areas are underlain mainly by granite and granodiorite. No discoveries of ore minerals were reported.

Skowquiltz Creek area was prospected for a distance of 3 miles upstream. Some metamorphic rocks and granite were observed, and much magnetite was found in the stream gravels.

*Omineca Mining Division.*—A well-organized and hard-working group of prospectors which has several discoveries to its credit continued to prospect in the Wolverine Range, in the vicinity of Manson Creek, in the vicinity of Discovery Creek north of the Omineca River, around Mission Mountain and Murray Ridge in the vicinity of Trembleur and Stuart Lakes, and near Tchentlo and Tsayta Lakes. It was reported that some indications of nickel were found and will be further investigated in 1956.

South of the Canadian National Railway the same group prospected shear zones on Sinkut Mountain, the serpentine belt on Bobtail Mountain, and mineralization and rock alteration along the margin of diorite and granodiorite intrusives in the Hallett Lake area. It again met with success near the east end of François Lake where a radioactive quartz porphyry dyke was discovered on Nithi Mountain. A wide area showing autunite and torbernite, apparently in commercial amounts, was uncovered. Claims were staked and the property optioned for further investigation.

Another prospector, a grantee for the first time, discovered strongly mineralized chalcopyrite-bornite zones near Twenty Mile Creek, 10 miles north of the Germansen–Silver Lake road. Further work is contemplated here in 1956.

The discoverers of the Gordon and Davies groups near Nina Lake in the Osilinka valley continued prospecting in the vicinity of these groups and found float which led to other well-mineralized zones which were investigated.

Another prospector spent a very discouraging season combating bad weather and rugged mountain country northwest of Dorreen. His work was largely confined to the Lorne Creek watershed. Nothing of interest was discovered.

*Quesnel Mining Division.*—On the north side of Horsefly Lake near the east end a limestone belt was investigated, and 20 miles south of the east end of the lake some difficult terrain was prospected. Interesting float was found in the latter area, but nothing was found in place. Further work will be done here next season.

*Clinton Mining Division.* — Some prospecting was done near Quartz Mountain, Lorna Lake, Tyaughton Lake, Spruce Lake, and in the Poison Mountain area. Some time was also spent in the area close to the Taylor Windfall mine. A few claims were located but probably on old discoveries. At the south end of Chilco Lake, work was carried on for part of the season without interesting results.

*Kamloops Mining Division.*—In the North Thompson area near Lempriere, prospecting was done in an area underlain by mica schist, gneiss, and limestone. Pegmatite dykes were prospected in the valleys of Gravel Creek, Serpentine Creek, Bone Creek, and Thunder River. Small beryl and tourmaline crystals were found in a dyke in the Thunder River valley. An occurrence of nepheline syenite was reported at Paradise Lake.

*Similkameen Mining Division.*—The Pasayten River valley and adjoining area, from where the river joins the Similkameen south to Peeve Creek, was under investigation during the season.

*Vernon Mining Division.*—Inconclusive work was done in the area between Vernon and Lumby.

*Greenwood Mining Division.*—Sutherland Creek in the old Union mine area, the terrain close to the Rock Candy mine, Tenderloin Mountain area, and the ground adjacent to Lynch Creek were prospected during the season. Some good samples were brought in, but nothing of economic importance was reported.

*Nelson Mining Division.*—In the vicinity of Creston, intensive prospecting was carried on throughout the season in the Sanca valley up to a point 8 miles from Kootenay Lake, in the Cultus Creek area, along the west side of Kootenay Lake, 14 miles up Summit Creek, and 6 miles up Corn Creek. Claims were located mostly on old showings, which may be of interest at the present time. The Goat River valley was also given some attention.

*Slocan Mining Division.*—Near Nakusp a great deal of work was done over a wide area. Arrowpark Creek, Fosthall Creek, Scalping Knife Mountain, Caribou Creek, and Burton Creek areas were included. Some pegmatite dykes were investigated, several mineralized limestone outcrops were reported, and some interesting radioactive material was found on Snow Creek. Further work is to be done in this area.

*Golden Mining Division.*—On Holt Creek southwest of Moberly, on Gorman and Lang Creeks, and in the area close to Gorman Lake, careful prospecting was done throughout the season but was not productive.

*New Westminster Mining Division.*—Some prospecting was done in difficult country and under very bad weather conditions in the Dewdney valley and up Cedarflat Creek. Nothing of interest was reported.

*Alberni Mining Division.*—On the west coast of Vancouver Island, boat-based prospectors investigated areas where float quartz, limonite, and graphite were found. The head of Pipestem Inlet and Cataract Creek areas were also prospected. Work was also done in the area of Effingham Inlet and Vernon Bay. Nothing of interest was reported.

In the Zeballos area, work was continued some 6 miles northwest of the town of Zeballos. Additional finds were not reported.

*Nanaimo Mining Division.*—Further prospecting was done in the Humpback Bay and Rock Bay areas and on Thurlow Island. Nothing of interest was found.

## MUSEUMS

The Department has a large exhibit of mineral rock specimens in the Douglas Building, Victoria; collections are also displayed in the joint office in Vancouver and in the offices of the Inspectors of Mines in Nelson and Prince Rupert.

Information regarding collections of specimens of rocks and minerals available to prospectors and schools in British Columbia will be found on page 187.

Specimens from the collection in Victoria, accumulated in a period of nearly sixty years, are displayed in cases on the fourth floor of the Douglas Building. The collection includes specimens from many of the mines and prospects in the Province, and also specimens of type rocks and special minerals from British Columbia and elsewhere.

British Columbia material includes specimens collected by officers of the Department of Mines and specimens donated by property-owners. The collection also includes type specimens purchased from distributers. Other valued specimens or groups of specimens have been donated or loaned to the museum.

## PUBLICATIONS

Annual Reports of the Minister of Mines, bulletins, and other publications of the Department, with prices charged for them, are listed on pages 183 to 186.

Publications may be obtained from the offices of the Department in Victoria and elsewhere in the Province. They are also available for reference use in the Department's library (Mineralogical Branch) at Victoria, in the joint office in Vancouver, and in the offices of the Inspectors of Mines in Nelson and Prince Rupert, as well as in public libraries listed on page 189.

## MAPS SHOWING MINERAL CLAIMS, PLACER CLAIMS, AND PLACER-MINING LEASES

From the details supplied by the locators, the approximate positions of mineral claims held by record and of placer-mining leases are shown on maps that may be inspected in the Central Records Offices of the Department of Mines in Victoria and in Vancouver. Copies of these maps may be obtained on request. The boundaries of surveyed claims and leases are shown on the reference maps and other maps of the British Columbia Department of Lands and Forests.

## JOINT OFFICES OF THE BRITISH COLUMBIA DEPARTMENT OF MINES AND THE DEPARTMENT OF MINES AND TECHNICAL SURVEYS, CANADA.

The Provincial Department's Inspector and Resident Engineer, the Gold Commissioner and Mining Recorder for the Vancouver Mining Division, and the officers of the Federal Geological Survey occupy one suite of offices. All official information relating to mining is now available to the public in the one suite of offices in Vancouver.

The services offered to the public include technical information on mining, the identification of mineral specimens, distribution of Federal and Provincial mining publications, a reference library, a display of rocks and minerals, and a central records office.

# Topographic Mapping and Air Photography

Topographic mapping and air photography continue to be carried on by the Surveys and Mapping Branch of the British Columbia Department of Lands and Forests and by the Canadian Government Departments of Mines and Technical Surveys and of National Defence.

In addition, the Legal Surveys Division of the British Columbia Surveys and Mapping Branch makes various types of cadastral surveys which, in the 1955 season, consisted of approximately 26,000 acres of Crown lands surveyed in the Peace River District for settlement purposes; 72 miles of control and right-of-way survey along highways in their final location, these covering part of the Cariboo Highway between Lac la Hache and Williams Lake, the Southern Trans-Provincial Highway from Cranbrook to Wardner, and part of the highway on the Sechelt Peninsula; and various lots for alienation and reserve varying in size from half an acre to 640 acres and totalling 335 parcels. During the year this Division replaced, by permanent monuments, 284 old lot corners.

Interim maps based on air photographs and existing ground control are compiled by the Air Division of the British Columbia Surveys and Mapping Branch. On a scale of 2 inches to 1 mile, they include planimetric and cadastral information and also show the centres of vertical air photographs used, but do not show contours. During 1955 some 43,000 square miles were covered with this type of map, with a further 40,000 square miles in hand at the end of the year. As a result, with the exception of Queen Charlotte Islands and the area adjacent to Mount Waddington, the entire south half of the Province is either mapped in this manner or is in the process of being mapped where adequate maps are not already available.

During 1955 the Topographic Division of the British Columbia Surveys and Mapping Branch completed its project of obtaining ground control in the northeastern part of the Province for the purpose of providing horizontal control to enable the co-ordinating of permits located under the "Petroleum and Natural Gas Act, 1954." This season's work covered 8,000 square miles, utilizing sixty-two tower stations. Five ties were made to the 60th parallel. The key reference point of the petroleum and natural-gas permits in the western section—namely, the old Hudson's Bay Company post at Nelson Forks—was also fixed.

The Canadian Government Departments of Mines and Technical Surveys and of National Defence, working in close co-operation together during 1955 in the Province, completed the field work for nineteen half-sheets of the 1:50,000 topographic series and one and three-quarter sheets of the 1:250,000 topographic series.

Already an integral part of current mapping, increased use is being made of air photographs as recorded in loans by the Air-photo Library in Victoria. During 1955 some 26,000 square miles of new photography of various scales involving nearly 17,500 photographs was added to the said library. The total of all air photographs, Federal and Provincial, now on hand in the Air-photo Library in Victoria is 415,285.

In the Annual Report of the Deputy Minister of Lands for 1955, coverage by air photographs and by topographic and interim maps is indicated on a series of base maps. Further information concerning these or the corresponding Federal mapping may be obtained from the Director, Surveys and Mapping Branch of the Department of Lands and Forests.

# Department of Mines and Technical Surveys

The Canadian Government Department of Mines and Technical Surveys, created by an Act of Parliament introduced in November, 1949, took over most of the branches and functions related to mining of the former Department of Mines and Resources. The Mines Branch, Geological Survey of Canada, and Surveys and Mapping Branch are the three branches of the Department of the most direct interest to the mining industry. Brief reference to the work of the Surveys and Mapping Branch in British Columbia is made in the preceding note headed " Topographic Mapping and Air Photography." A note on the Geological Survey of Canada follows this paragraph and is followed by a note on the Mines Branch.

## GEOLOGICAL SURVEY OF CANADA

By an arrangement made at the time the Province of British Columbia entered Confederation, geological investigations and mapping in the Province are carried on by the Geological Survey of Canada. Several geological parties are in the field each year. Many excellent reports and maps covering areas of British Columbia have been issued by the Geological Survey of Canada, and they have made available a great amount of information that has been of much benefit to the mining and prospecting activities in British Columbia.

A branch office of the Geological Survey of Canada is maintained in Vancouver. Maps and reports on British Columbia can be obtained there. J. E. Armstrong is in charge of this office, having relieved W. E. Cockfield in September, 1955. Dr. Cockfield, in charge of the Vancouver office since 1929, died on January 4th, 1956.

### Field Work by the Geological Survey of Canada in British Columbia, 1955

J. D. Aitken completed the geological mapping of the Atlin map-area (104N).

S. Duffell completed the geological mapping of the Terrace may-area (103I, E. ½).

J. E. Armstrong completed the geological mapping of the Tertiary, Pleistocene, and Recent sedimentary deposits of the Canadian portion of the Lower Fraser Valley (Flood to Gulf of Georgia).

J. A. Roddick completed the geological mapping of the Coquitlam 4-mile map-area (92G, E. ½).

H. W. Little continued the geological mapping of the Kettle River map-area (82E, E. ½).

J. E. Reesor continued the geological mapping of the Lardeau map-area (82K, E. ½).

W. E. Cockfield undertook various geological investigations logically handled from the British Columbia office of the Geological Survey.

H. W. Tipper continued the geological mapping of the Anahim Lake map-area (93C, W. ½).

W. L. Fry continued a detailed study of the Tertiary palæobotany and stratigraphy of southwestern and south central British Columbia, paying particular attention to the Princeton and Coalmont areas.

E. C. Halstead completed a groundwater survey of Matsqui and Sumas.

E. Hall continued to assist the Engineering and Water Resources Branch, Department of Northern Affairs and National Resources, by examining drill cuttings and cores at prospective dam-sites on the Columbia River, and by other geological means.

H. Frebold commenced a detailed study of the Jurassic fauna and stratigraphy of southern British Columbia, examining sections in the Harrison Lake, Lillooet, and Ashcroft areas.

G. B. Leech completed most of the geological mapping of the Canal Flats map-area (82 J/4).

E. J. W. Irish commenced the geological mapping of the Charlie Lake map-area (94A).

B. A. Latour investigated the coal reserves of the Crowsnest Basin.

R. B. Rowe examined various niobium (columbium) deposits in British Columbia.

### Publications of the Geological Survey

The following reports relating to British Columbia published by the Geological Survey were received by the British Columbia Department of Mines during 1955:—

National Advisory Committee on Research in the Geological Sciences, Fifth Annual Report, 1954–55.

Paper 54–9: Atlin, British Columbia, by J. D. Aitken.

Paper 54-11: Nechako River, British Columbia, H. W. Tipper.

Special reports—Misc. G-50: A List of Recently Published General Reports and Maps of Canada.

Bulletin 29: Wall-rock Alteration at Certain Lead-Zinc Replacement Deposits in Limestone, Salmo Map Area, British Columbia, by L. H. Green.

Map 900A: Canada, Principal Mineral Areas.

## MINES BRANCH

The Mines Branch has branches dealing with mineral resources, mineral dressing and process metallurgy, physical metallurgy, radioactivity, and fuels and explosives. Publications of the Mines Branch pertaining to British Columbia received in 1955 included tabular pamphlets dealing with coal mines, gold mines, stone quarries, petroleum refineries, and milling plants in Canada, and the reports listed below:—

Mines Branch No. 844: The Canadian Mineral Industry, 1952.

Mines Branch No. 850: Analysis Directory of Canadian Coals, Second Edition, 1953, Supplement No. 1-1955, by E. Swartzman and T. E. Tibbetts.

Memorandum Series 129: Durability of Aggregates in Concrete Mixes (Final Report), by R. H. Picher.

Memorandum Series 130: Nickel in Canada with a Survey of World Conditions, by W. R. McClelland.

Technical Paper No. 11: Refining Antimony by Electrodeposition and by Distillation, by R. R. Rogers and R. A. Campbell.

Technical Paper No. 12: The Constitution of Bone China, Part III, by P. D. S. St. Pierre.

Technical Paper No. 13: Development of the Port Radium Leaching Process for Recovery of Uranium, Radioactivity Division.

Technical Paper No. 14: Measurement of Thorium in Ores by the Thorium Emanation Method, by J. B. Zimmerman and J. A. F. Bouvier.

Information Circular No. M.R. 13: A Survey of the Iron Ore Industry in Canada during 1954 (with special emphasis on production, development, and exploration), by W. Keith Buck.

Information Circular No. M.R. 14: A Survey of Developments in the Titanium Industry during 1954, by W. Keith Buck.

Information Circular No. M.R. 15: A Survey of the Petroleum Industry in Canada during 1954, by R. B. Toombs.

Information Circular No. M.R. 16: A Survey of the Natural Gas Industry in Canada during 1954, by R. B. Toombs.

Topical reports, Radioactivity Division, No. TR-126-55: Data on Portable Counters Available in Canada, by G. G. Eichholz.

The Mineral Dressing and Process Metallurgy Division investigates the milling of ores and industrial minerals from many deposits and also tests clays and other ceramic materials. The British Columbia Department of Mines has received the following report on work performed by the Mineral Dressing and Process Metallurgy Division, in 1955, on British Columbia ores:—

| Investigation No. | Title |
|---|---|
| MD3104. | Concentration Tests on a Sample of Lead-Barite Ore from Giant Mascot Mines Ltd., Spillimacheen, British Columbia. |