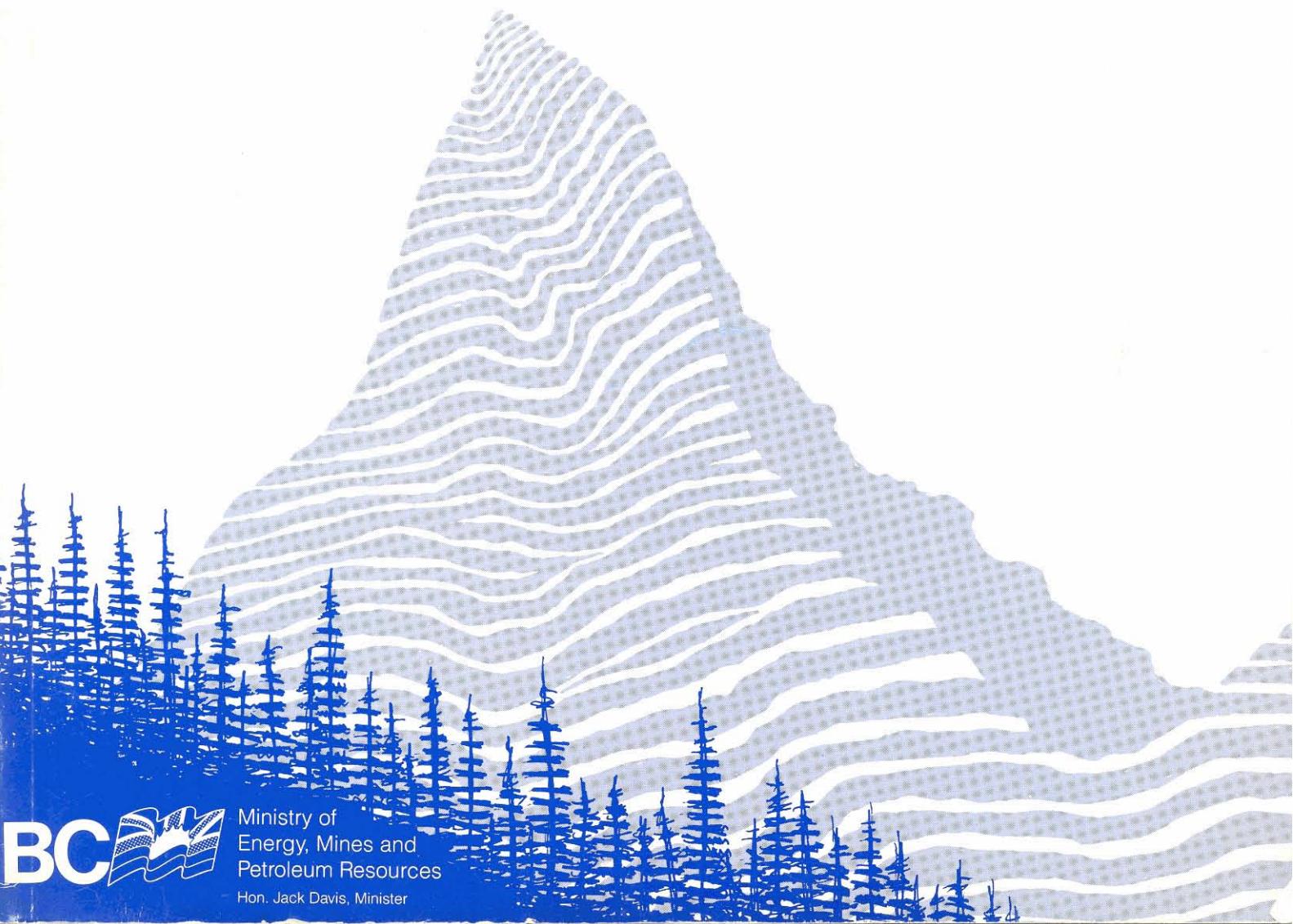


L.D.P.R.
Energy, Mines &
Petroleum Resources
Victoria, B.C.

BRITISH COLUMBIA MINERAL STATISTICS

ANNUAL SUMMARY TABLES

HISTORICAL MINERAL PRODUCTION TO 1987



Ministry of
Energy, Mines and
Petroleum Resources

Hon. Jack Davis, Minister

Library
Energy, Mines &
Petroleum Resources
Victoria, B.C.

BRITISH COLUMBIA MINERAL STATISTICS

ANNUAL SUMMARY TABLES

HISTORICAL MINERAL PRODUCTION TO 1987



Prepared by:

Mineral Statistics Section
Mineral Policy Branch
Mineral Resources Division

British Columbia Cataloguing in Publication Data

Main entry under title:

B.C. mineral statistics annual summary tables. -- 1985-

Continues in part: Summary of operations - Mineral Resources Division. ISSN 0825-6896

ISSN 0838-5998 = B.C. mineral statistics annual summary tables

1. Mines and mineral resources - British Columbia - Statistics - Periodicals. I. British Columbia. Mineral Statistics Section.

HD9506.C33B756

338.2'09711

Rev. Aug. 1989

B.C. Mineral Statistics Annual Summary Tables Historical Mineral Statistics To 1987

Table of Contents

	<u>Page</u>
<u>Notes on Statistics</u>	
Source of the Numbers	1
Who is Surveyed	1
Why Statistics are Gathered	1
Comparability of Numbers	2
Changes in Publication Format	2
<u>Methods of Computing Production</u>	
Metals	
Average Prices	3
Gross and Net Content	3
Value of Production	3
Industrial Minerals and Structural Materials	4
Coal	4
Petroleum and Natural Gas	4
Additional Notes	4
<u>Annual Highlights of the Mining Industry</u>	
Highlights - 1986	5
Highlights - 1987	6
<u>Notes on Products</u>	
Antimony	7
Arsenius Oxide	7
Asbestos	7
Barite	7
Bentonite	7
Bismuth	7
Brick	7
Cadmium	7
Cement	8
Chromite	8
Clay and Shale Products	8
Coal	8
Cobalt	9

Table of Contents
Notes on Products (Cont'd)

Page

Coke	9
Copper	9
Diatomite	9
Dimension Stone	9
Fluorite	10
Flux	10
Gold, Lode	10
Gold, Placer	10
Granules	11
Gypsum and Gyspite	11
Hydromagnesite	11
Indium	11
Iron	11
Iron Oxide	11
Jade	11
Lead	12
Limestone	12
Magnesite	12
Magnesium	12
Magnesium Sulphate	12
Manganese	12
Mercury	12
Mica	13
Molybdenum	13
Natro-alunite	13
Nickel	13
Niobium	13
Palladium	13
Perlite	13
Phosphate Rock	13
Platinum	13
Rhenium	13
Rock	14
Sand and gravel	14
Selenium	14
Silver	14
Sodium Antimonate	14
Sodium Carbonate	14
Sodium Sulphate	14
Stone	14
Sulphur	14
Talc	14
Thorium - see Niobium	15
Tin	15

Table of Contents
Page

Notes on Products (Cont'd)

Tungsten	15
Uranium - see Niobium	15
Volcanic Ash	15
Zinc	15

Annual Summary Tables - Historical Mineral Statistics To 1987

Mineral Production and Value

Mineral Production - Total To-Date, 1986 and 1987 (Table 1-A)	19
Total Value of Mineral Production 1836 - 1987 (Table 2-A)	21
Mineral Production	
1976 - 1978 (Table 3-A)	23
1979 - 1981 (Table 4-A)	24
1982 - 1984 (Table 5-A)	25
1985 - 1987 (Table 6-A)	26

Prices

Prices Used in Valuing Production of Gold, Silver, Copper, Lead, Zinc and Coal (Table 7-A)	27
---	----

Metal Production and Value

Production of Gold and Silver 1858 - 1987 (Table 8-A)	29
Production of Copper, Lead and Zinc 1858 - 1987 (Table 9-A)	31
Production of Molybdenum and	
Iron Concentrates 1858 - 1987 (Table 10-A)	33
Metal Production - Major Mines 1986 (Table 11-A (86))	35
Metal Production - Major Mines 1987 (Table 11-A (87))	37

Coal Production, Sales and Value

Production of Coal 1836 - 1987 (Table 12-A)	39
Raw and Clean Coal Produced 1973 - 1987 (Table 13-A)	41
Metallurgical and Thermal	
Clean Coal Sold and Used 1973 - 1987 (Table 14-A)	42
Total Clean Coal Sold and Used 1973 - 1987 (Table 15-A)	43
Coal Production By Mine 1986 (Table 16-A (86))	44
Coal Sales By Mine 1986 (Table 17-A (86))	45
Coal Production By Mine 1987 (Table 16-A (86))	46
Coal Sales By Mine 1987 (Table 17-A (87))	47

	<u>Page</u>
Table of Contents	
<u>Coal Markets</u>	
Destination of Metallurgical Coal -	
Clean Coal Sold 1986 (Table 18-A (86))	48
Destination of Thermal Coal -	
Clean Coal Sold 1986 (Table 19-A (86))	49
Destination of British Columbia Coal -	
Total Clean Coal Sold 1986 (Table 20-A (86))	50
Destination of All British Columbia Coal	
By Region 1986 (Table 21-A (86))	51
Destination of Metallurgical Coal -	
Clean Coal Sold 1987 (Table 18-A (87))	52
Destination of Thermal Coal -	
Clean Coal Sold 1987 (Table 19-A (87))	53
Destination of British Columbia Coal -	
Total Clean Coal Sold 1987 (Table 20-A (87))	54
Destination of All British Columbia Coal	
By Region 1987 (Table 21-A (87))	55
<u>Employment Statistics</u>	
Employment in Placer and Metal Mining 1901 - 1987 (Table 22-A)	56
Employment in the Coal Industry 1901 - 1987 (Table 23-A)	58
Employment in Non-Metals Mining 1901 - 1987 (Table 24-A)	59
Employment in the Solid Mineral Industry	
1901 - 1987 (Table 25-A)	60
Employment At Major B.C. Mines 1986 (Table 26-A (86))	61
Employment At Major B.C. Mines 1987 (Table 26-A (87))	62
Employment At Major B.C. Coal Mines 1986 (Table 27-A (86))	63
Employment At Major B.C. Coal Mines 1987 (Table 27-A (87))	64
<u>Operating Statistics</u>	
Operating Statistics - B.C. Metal Mines 1986 -	
(Table 28-A (86))	65
Operating Statistics - B.C. Metal Mines 1987 -	
(Table 28-A (87))	66
Major Active Metal Mines 1986 (Table 29-A (86))	67
Major Active Metal Mines 1987 (Table 29-A (87))	68
Principal Items of Expenditure for	
Solid Mineral Production By Type 1972 - 1987 (Table 30-A)	69

Table of Contents
Page

Metal Markets

Destination of Metals in British Columbia Ores and Concentrates	
Gold, Silver and Copper (Table 31-A (86))	70
Lead, Zinc and Molybdenum (Table 32-A (86))	71
Cadmium, Iron and Tin (Table 33-A (86))	72
Total Value (Table 34-A (86))	73
Destination of Metals in British Columbia Ores and Concentrates	
Gold, Silver and Copper (Table 31-A (87))	74
Lead, Zinc and Molybdenum (Table 32-A (87))	75
Cadmium, Iron and Tin (Table 33-A (87))	76
Total Value (Table 34-A (87))	77

Notes on Statistics

Statistics on the British Columbia mineral industry are collected, compiled and tabulated for publication in this report by the Mineral Statistics Section, Mineral Policy Branch, of the Mineral Resources Division.

Petroleum industry statistics are collected and compiled by the Energy Resources Division and are included here for comparative purposes.

The annual summary tables reflect "actual final" totals and supercede all figures previously released. As such, they represent final statistics of record and are not subject to further revision, except in the case of previously unreported extraordinary adjustments, or in the event that reporting errors in previous years' data become known.

Source of the Numbers

Data on the province's mineral industry are obtained from a direct census of the industry, which is undertaken as a cooperative effort between the Ministry of Energy, Mines and Petroleum Resources, and two federal agencies: Energy, Mines and Resources and Statistics Canada. Producers of metals, industrial minerals, structural materials and coal are required by both provincial and federal statute to submit information on their operations, in duplicate, on forms prepared by the above agencies.

Most of the information gleaned from each mine is confidential and, thus, is published in summary form for each sector and for the industry. Data on employment and gross output at each major mine in the province are, however, available in this publication.

Other information is collected from a variety of sources, including custom smelter reports, to assist in editing survey responses and to ensure uniform reporting procedures are followed. In addition, the Mineral Statistics Section monitors industry publi-

cations in order to provide checks on survey responses and to update survey contact databases.

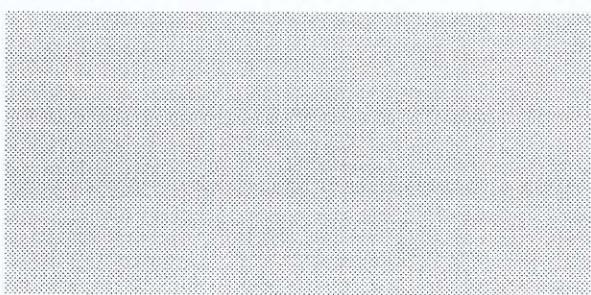
Who is Surveyed

Producers in each industry group are surveyed annually from a mailing list jointly maintained by the three surveying agencies. Statistics are gathered in accordance with recognized national and international standards and procedures. Major mines producing metal, coal, industrial minerals and structural materials are surveyed monthly, as well as annually. Much of the information requested on monthly surveys is not again requested on the annual forms.

Why Statistics Are Gathered

Statistics are gathered and published:

- To provide a consistent public record of mineral production and valuation in British Columbia.
- As an independent source of economic statistics for the province.
- As a basis for mineral policy development and decisionmaking.
- To assist in evaluating the effectiveness of provincial and federal mineral development initiatives.



Comparability of Numbers

In some cases, actual final totals released by the Ministry on behalf of the Province of British Columbia may vary slightly from comparable data published by federal agencies. This is due to agreed-upon differences in methodology in attributing production to the location of origin, in methods of determining valuation and in the pricing of mineral commodities.

Peat, classified as a fuel by Statistics Canada, is not included in B.C. statistics of mineral production, since it is considered neither a fuel nor a mineral, but a quarry material under the provincial Land Act.

Changes in Publication Format

Information on provincial mineral output has been provided in a number of publications over the years. Historically, the *Reports of the Minister of Mines* (otherwise known as the *Ministry Annual Reports*) contain statistics and information on mining operations for each year. Data series are available from 1874, though much of the earliest information has undergone changes in methodology, or is not available on a year-by-year basis. From 1980 through 1984, mineral statistics were released in *Mineral Resources Division - Summary of Operations*. Information for 1985 was published in *B.C. Mineral Statistics - Annual Summary Tables*. While this current release presents largely the same categories of information presented for 1985, some changes in process and format have been made. The main changes are summarized below.

- The production of tables has been computerized to reduce costs and publication preparation time.
- Tables have been revised to improve legibility and to establish a consistent format wherever possible. The new format balances public information needs with the confidentiality concerns of respondents.
- Exploration statistics will be available under separate cover (*B.C. Mineral Statistics - Exploration and Development Expenditures*).
- Mineral output by mining division will also be available under separate cover as a statistical release. (*B.C. Mineral Statistics - Output By Mining Division*).

Methods Of Computing Production

Metals

Average Prices

The prices used in the valuation of current and past production of gold, silver, copper, lead, and zinc are shown in Table 7-A.

For antimony and bismuth, the average producer price is used. For nickel, the price used is the Canadian price set by Inco Limited. The value per tonne of the iron ore used in making pig iron at Kimberley is an arbitrary figure, being the average of several ores of comparable grade at their points of export from British Columbia.

Gross and Net Content

The gross content of a metal in ore, concentrate, or bullion is the amount of the metal calculated from an assay of the material. The gross metal contents are the sum of individual metal assay contents. The net contents are the gross contents less smelter and refinery losses.

In past years, different methods have been used to calculate net contents, particularly in the case of one metal contained in the concentrate of another. The method established in 1963, and used until 1974, is outlined in the following table. For example, the

net content of silver in copper concentrates is 98 percent of the gross content; of cadmium in zinc concentrates 70 percent of the gross content, etc. Commencing in 1974, the quantities represent the actual net quantities of metals paid for.

Value of Production

Prior to 1925, gold and copper values were calculated by using their true average prices. For copper, the smelter loss was also taken into account. The value of other metals was calculated from the gross metal content of ores or concentrates by using a metal price which was an arbitrary percentage of the average price. The percentages used were as follows: silver, 95 percent; lead, 90 percent; and zinc, 85 percent.

From 1925 through 1973, these values were calculated by using the true average price and the net metal contents in accordance with the procedures adopted by Statistics Canada and the Ministry of Energy, Mines and Petroleum Resources.

Prior to 1974, for gold, silver, copper, lead, zinc, antimony, bismuth, cadmium, iron concentrate and nickel, the value of production was calculated from the assay content of the ore, concentrate, or bullion less appropriate smelter losses, and an average price per unit of weight. Since 1974, the values represent the settlement values received by the producers for each metal.

Since 1974, the total quantity and value of metal production include the quantities paid for to the mines, and the smelter and refinery production that can be attributed to the mines but is not paid for.

For indium, iron concentrate, mercury, molybdenum, rhenium and tin, the value of production is the dollar amount received by the shippers.

Methods of Calculating Contents (1963 - 1974)					
Lead Conc. Per Cent	Zinc Conc. Per Cent	Copper Conc. Per Cent	Copper-nickel Conc. Per Cent	Copper Matte Per Cent	
Silver	98	98	98	-	-
Copper Less 26lb/ton	-	Less 10lb/ton	85	Less 10lb/ton	
Lead	98	50	-	-	50
Zinc	50	90	-	-	-
Cadmium	-	70	-	-	-
Nickel	-	-	-	88	-

Methods Of Computing Production (Cont'd)

Industrial Minerals And Structural Materials

The values of production of industrial minerals and structural materials are approximately the dollar amounts received at the point of origin.

Coal

The value of production of coal is calculated using the weighted average of prices F.O.B. (Free on board) minesite, for all coal originating at each B.C. mine. Transportation, port and handling costs are normally excluded from these values. Historic average prices are given in Table 7-A.

Petroleum And Natural Gas

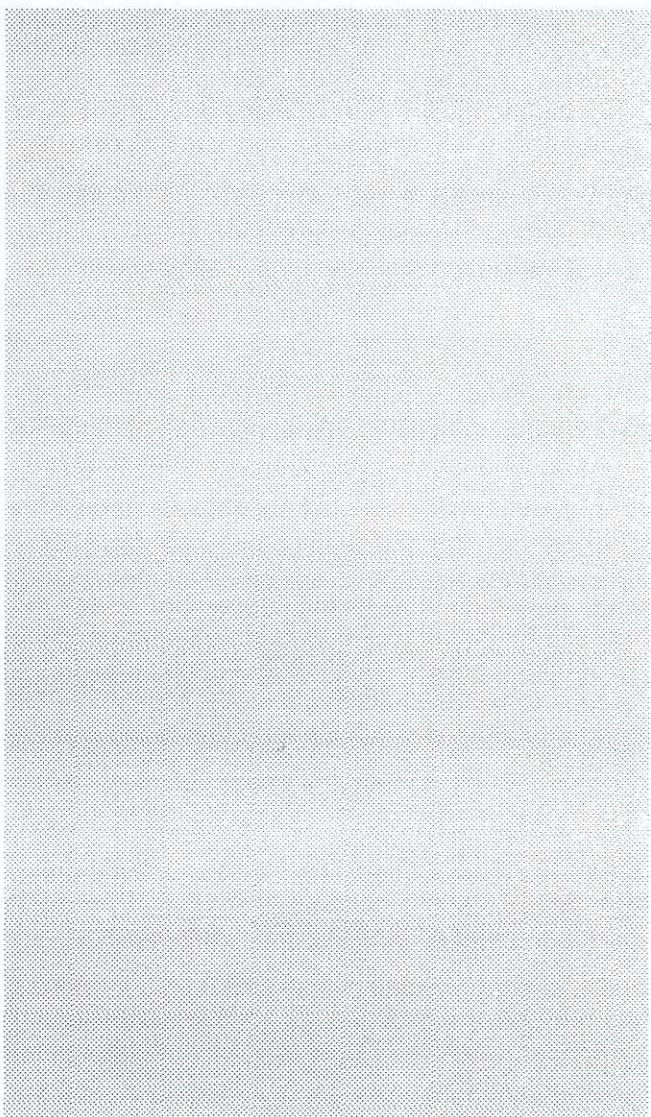
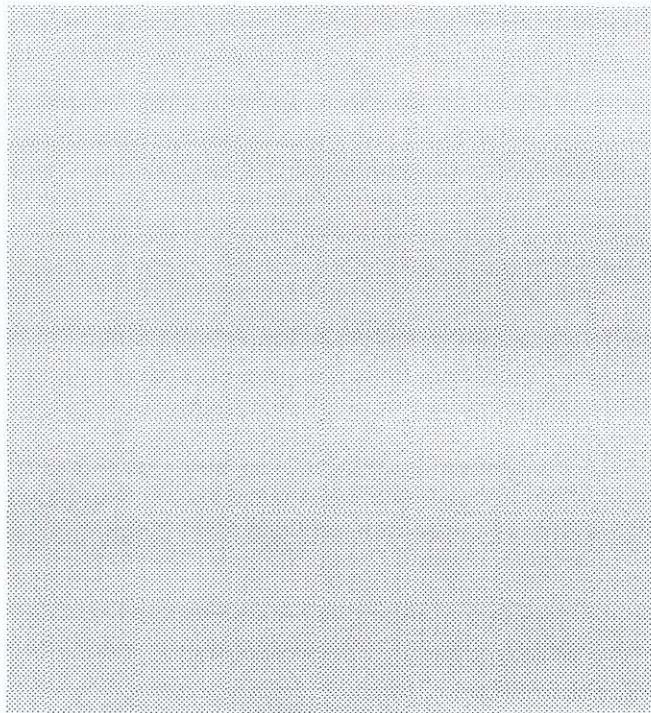
The values of production of natural gas, natural gas liquid by-products, and petroleum including condensate/pentanes plus, are the amounts received for the products at the wellhead.

Additional Notes

All values are in Canadian funds.

Metric weights are used throughout. Metric conversion factors are:

- 1 tonne (t or metric ton) $\times 0.90718474 =$
1 short ton (st or ton)
- 1 kilogram (kg) $\times 0.45359237 =$ 1 pound (lb)
- 1 gram (g) $\times 31.1034768 =$ 1 troy ounce (oz)



Annual Highlights of the Mining Industry

These highlights provide information on major events affecting provincial mineral output during each year. They are included to assist the reader in accounting for variations in mine and industry output from year to year. They should not be considered as a complete or official record of important events in B.C. mining.

Highlights - 1986

The underground coal mining operation in B.C., Balmer North, closed in February 1986 due to exhaustion of economic reserves.

A labour dispute closed Westar's Balmer and Greenhills coal operations from June 10 to October 9, 1986. Some of the lost sales were made up by other B.C. coal producers.

Byron Creek Collieries completed construction of a \$50 million heavy-media washplant and coal dryer and a \$5 million maintenance and warehouse facility. Byron Creek also began shipping weak coking coal to the Japanese steel industry in 1986.

The mill at the Erickson Gold Mine was destroyed by fire in January 1986. Some ore was processed at the Taurus mill from July through September. The new 270 tonne per day mill began operations in October 1986.

The Mosquito Creek gold mine operated intermittently during 1986. An exploration program failed to find new ore reserves sufficient to continue full operation.

In July, 1986, Cominco Ltd. (55 per cent) and Lornex (45 per cent) combined their respective assets in the Highland Valley to form the Highland Valley Copper operation. The amalgamation plans included a gradual move from the lower grade Lornex pit to the higher grade Valley deposit. This increased

total annual copper output, while molybdenum output capacity decreased due to the lower molybdenum grades of the Valley orebody. Over \$80 million in capital expenditures was spent on road, equipment and mine upgrading. Note that production and operating statistics are reported for Lornex and Valley Copper for January through June, and for the combined Highland Valley Copper operations from July through to December 1986.

Newmont negotiated an agreement under the Critical Industries Commission to continue operations at their Similkameen mine near Princeton. The agreement between the mine, B.C. Hydro, the union and the provincial government featured electricity rate discounts and wage reductions.

The Endako Mine operated under capacity in 1986, resuming full production in August. The molybdenum roasting plant operated at virtually full capacity of 30 000 tonnes per day, through processing custom ores from other mines. Although the mine had been closed since June 1982, it continued to sell product from inventories. Production resumed after Endako secured power and labour cost reductions through the Critical Industry Commission.

At the Gibraltar mine, construction of the \$13 million copper leaching plant was completed in October 1986. The plant is capable of producing 4 500 tonnes of copper cathode annually through leaching of low grade dumps.

The Sullivan mine was closed during July and August 1986.

The Island Copper mine completed \$4 million in mine improvements, allowing mill capacity to increase by 2 700 tpd, and the annual output capacity of contained copper to increase by 2 million kilograms.

Annual Highlights (Continued)

The Blackdome gold mine commenced production in May 1986.

The Craigmont mine ceased production in 1982, but continues to ship iron magnetite from stockpiles.

The Cassiar asbestos mine closed July 1 through September 30, 1986 to reduce inventories.

Highlights - 1987

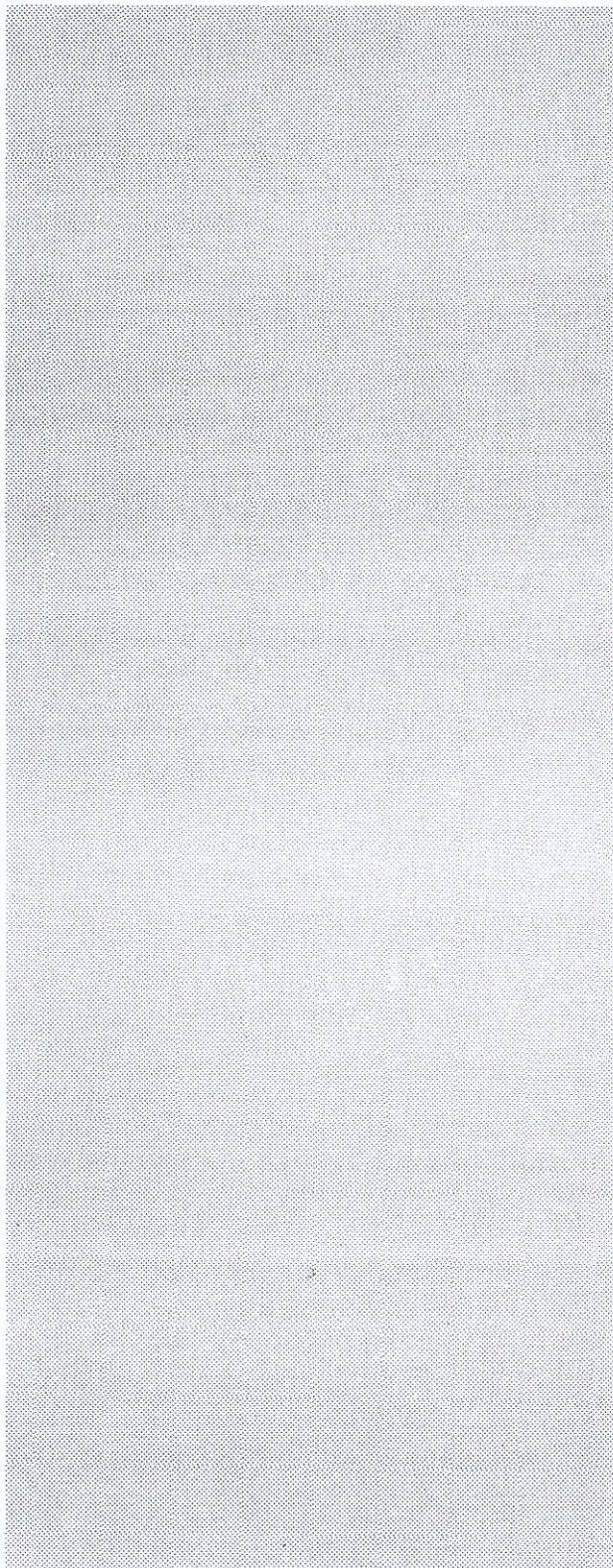
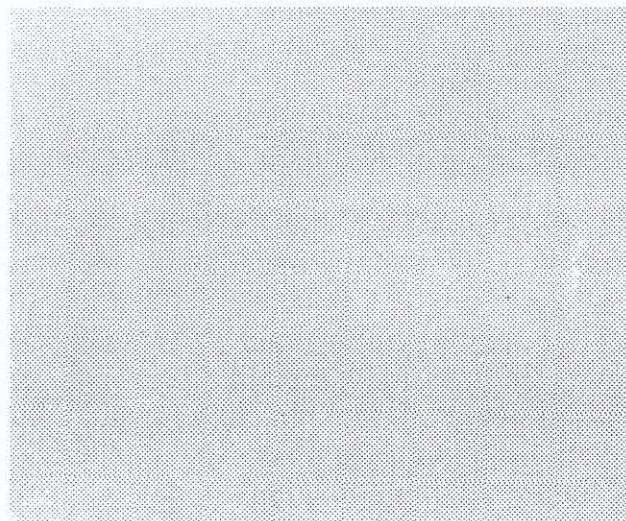
The Bullmoose coal mine stockpiled most of its thermal coal, which was produced as a by-product of its metallurgical production. Limited tonnages were sold to Korea on a spot basis or used at the minesite.

The Equity Silver mill capacity increased from 6 800 tpd in 1986 to 9 891 tpd in 1987.

Westmin continued to increase the capacity of its mill at the Myra Falls Operations. Capacity rose to 3 500 tonnes per day from 3 000 tonnes per day in 1986.

The Nickel Plate mine began operations in April 1987.

Cominco's Sullivan and Trail operations were affected by a strike which lasted from May 9 until August 29, 1987.



Notes On Products

Antimony - Antimony metal was produced at the Trail smelter from 1939 to 1944; since 1944 it has been marketed alloyed with lead. Antimony is a by-product of silver-lead ores. In 1907, the first recorded antimonial ore mined in British Columbia was shipped from the Slocan area to England. Since then other out-of-province shipments have originated in the Bridge River, North Lardeau, Slocan, Spillimacheen, and Stuart Lake areas.

Arsenious Oxide - Arsenious oxide was recovered from arsenical gold ores from Hedley between 1917 and 1931, and in 1942, and from the Victoria property on Rocher Deboule Mountain in 1928. No production has been recorded since 1942.

Asbestos - British Columbia has produced asbestos since 1952 when the Cassiar mine was opened. All British Columbia production consists of chrysotile from the Cassiar mine near the Yukon boundary. This deposit is noted for its high percentage of valuable long fibre and for the low iron content of the fibre. The original claims were located at Cassiar in 1950, and the first fibre was shipped two years later. The fibre is milled at Cassiar and now most is shipped by truck to Stewart. From 1953 to 1961 the fibre was valued at the shipping point in North Vancouver, but beginning in 1962 it has been valued at the mine, and values for the preceding years have been recalculated on that basis.

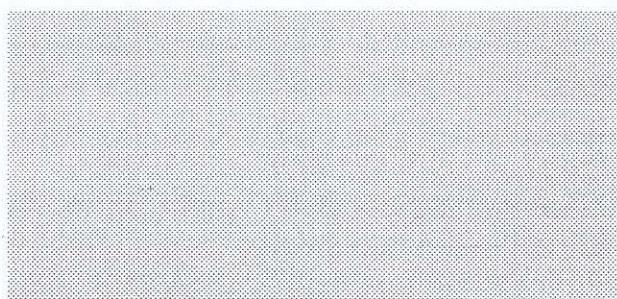
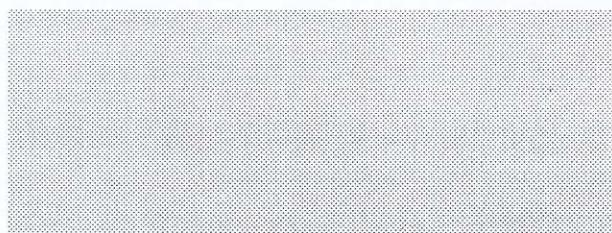
Barite - Barite production began in 1940, and has been produced continuously from several operations in the upper Columbia River valley. Some barite has been mined from lode deposits and the rest recovered from the mill-tailings ponds of the former Silver Giant and Mineral King silver-lead-zinc mines.

Bentonite - Small amounts of bentonite were produced between 1926 and 1944 from deposits in the coal measures near Princeton. There has been no production since 1944.

Bismuth - Since 1929, the Trail smelter has produced bismuth. It is a by-product of lead refining and thus the production cannot be assigned to specific properties or mining divisions.

Brick - See Clay and Shale Products.

Cadmium - Cadmium has been recovered as a by-product at the Trail zinc refinery since 1928. It occurs in variable amounts in the sphalerite of most British Columbia silver-lead-zinc ores.



Notes on Products (Cont'd)

Cement - Cement is manufactured from carefully proportioned mixtures of limestone, gypsum, and other mineral materials. It has been produced in British Columbia since 1905. Present producers are Genstar (formerly Inland Cement Ltd.), with a plant on Tilbury Island, and Canada Cement Lafarge Ltd. which has plants on Lulu Island and in Kamloops.

Chromite - Two shipments of chromite are on record, 608 tonnes from Cascade in 1918 and 114 tonnes from Scottie Creek in 1929.

Clay and Shale Products - These include brick, blocks, tile, pipe, pottery, lightweight aggregate, and pozzolan manufactured from British Columbia clays and shales. Common red-burning clays and shales are widespread in the province, but better grade clays are rare. The first recorded production was of bricks at Craigflower in 1853. Since then, plants have operated in most towns and cities for short periods. Local surface clay is used at Haney to make common red brick, tile, and flower pots. Shale and fireclay from Abbotsford Mountain are used to make firebrick, facebrick, sewer pipe, flue lining, and special fireclay shapes in plants at Kildgard, Abbotsford, and South Vancouver. Several hobby and art potteries and a sanitary-ware plant are in operation, but these use mainly imported raw materials and their production is not included in the tables.

Coal - Coal is almost as closely associated with British Columbia's early history as is placer gold. Coal was discovered at Squash on Vancouver Island in 1835 and at Nanaimo in 1850. The yearly value of coal production passed that of placer gold in 1883 and contributed a major part of the total mineral wealth for the next 30 years.

First production by mining divisions: Cariboo, 1942; Fort Steele, 1898; Kamloops, 1893; Liard, 1923; Nanaimo, 1836; Nicola, 1907; Omineca,

1918; Osoyoos, 1926; Similkameen, 1909; and Skeena, 1912.

The Nanaimo and Comox fields produced virtually all of the coal until production started from the Crowsnest field in 1898. The Crowsnest field contains coking coal and prospered in the early years of smelting and railroad building. Mining started in the Nicola-Princeton Coalfield in 1907, at Telkwa in 1918, and in the Peace River area in 1923. The Nanaimo field was exhausted in 1953 when the last large mines closed, and only small operations on remnants were left. The colliery at Merritt closed in 1945 and at Coalmont in 1940. The closing of the large mine at Tsable River in 1966, and the last small one, near Wellington in 1968, marked the end of continuous production from the important Vancouver Island deposits. Recent exploration indicates the possibility of renewed coal mining on the Island. Small amounts were shipped from Wolf Mountain in 1984 and 1985. Brinco Coal began reporting shipments of unwashed coal from its Quinsam mine at Campbell Lake on Vancouver Island in 1988.

Undeveloped fields include basins in the foothills of the Rocky Mountains south of the Peace River, the Groundhog basin in north-central British Columbia, the Hat Creek basin west of Ashcroft, and the Sage Creek basin southeast of Fernie.

The enormous requirements for coking coal in Japan created intense exploration in various areas of British Columbia beginning in 1968. The signing of large contracts with the Japanese resulted in preparations for production at several deposits in the East Kootenays. The first shipments to Japan via special port facilities at North Vancouver and Roberts Bank began in 1970. Production from the Northeast Coalfields began in 1983 with shipments being made through the port of Prince Rupert.

All the coal produced, including that used in making coke, is shown as primary mine production. Quantity from 1836 to 1909 is gross mine output and includes material lost in picking and washing. From 1910, the quantity is the amount sold and used. This includes sales to retail and wholesale dealers, industrial users, company employees, coal used under company boilers (including steam locomotives) and coal used in making coke.

Cobalt - In 1928, a recovery of 785 kilograms of cobalt was made from a shipment of arsenical gold ore from the Victoria mine on Rocher Deboule Mountain. From 1971 to 1973, cobalt was shipped from the Pride of Emory mine at Hope.

Coke - Coke is made from special types of coal. Being a manufactured product, its value does not contribute to the total mineral production as shown in Table 1-A. However, any coal used in making coke is recorded in the tables.

Copper - From 1935 to 1978, there were no copper smelters operating in British Columbia and most copper concentrates were shipped to Japanese, eastern Canadian, and American smelters. From 1978 to 1983, Afton Mines Ltd. produced blister copper from its own concentrates. Most of the smelting in British Columbia in early years was done on ore shipped directly from the mines without concentration, but modern practice is to concentrate the ore first. Small amounts of gold and silver are commonly present and add value to the ore. Copper in 1987 was the leading metal produced in British Columbia, with a value of \$842 million.

Ore was first smelted in British Columbia in 1896 at Nelson (from the Silver King mine) and Trail (from Rossland mines). Four and five years later, smelters at Grand Forks (from the Phoenix mine) and Greenwood (from the Mother Lode mine) began production. Later, small smelters were built in the Boundary district and on Vancouver and Texada Islands, and in 1914 the Anyox smelter was blown in. Copper smelting ceased in the Boundary district in 1919, at Trail in 1929, and at Anyox in 1935. British Columbia copper concentrates were then smelted mainly at Tacoma, and since 1961 have gone chiefly to Japan.

Most of the production has come from southern British Columbia - from Britannia, Copper Mountain, Greenwood, Highland Valley, Merritt, Nelson, Rossland, Texada Island, Vancouver Island, Anyox and Tulsequah. During the 1960's, explora-

tion for copper became intense, interest being especially directed toward finding very large, low-grade deposits suitable for open-pit mining. The activity resulted in the establishment of operating mines at Merritt (Craigmont) in 1961, in the Highland Valley (Bethlehem) in 1962, on Babine Lake (Granisle) in 1966, near Peachland (Brenda) in 1970, near Stewart (Granduc), near Port Hardy (Island Copper) in 1971, near Babine Lake (Bell), at McLeese Lake (Gibraltar), in the Highland Valley (Lornex) and near Princeton (Ingerbelle) in 1972, and near Kamloops (Afton) in 1977. The Highland Valley Copper mine amalgamated the Lornex and Valley Copper operations in mid-1986. See Table 11-A for a complete list of copper producers currently in production.

Some of these mines have produced molybdenum as a byproduct, for example, Bethlehem, Brenda, Highmont, Lornex, Gibraltar, and Island Copper. Copper was also produced as a by-product of iron mining at Tasu Sound, Queen Charlotte Islands (Wesfrob), and is still being produced with ores containing zinc, gold, silver, lead, and cadmium, at Buttle Lake (Lynx and Myra, Westmin Resources).

Diatomite - Relatively large deposits of diatomite are found near the Fraser River in the Quesnel area, and small deposits are widespread throughout the province. Small amounts of diatomite have been shipped from Quesnel intermittently since 1928. A plant to process the material also operated in Quesnel.

Dimension Stone - Dimensional stone for building purposes is quarried when required from a granite deposit on Nelson Island and an andesite deposit on Haddington Island. Other stone close to local markets is quarried periodically or as needed for special building projects.

Notes on Products (Cont'd)

Fluorite (Fluorspar) - Between 1918 and 1929, fluorite was mined at the Rock Candy mine north of Grand Forks for use in the Trail lead refinery. From 1958 to 1968, small quantities were produced as a by-product at the Oliver silica quarry.

Flux - Silica and limestone are added to smelter furnaces as flux to combine with impurities in the ore and form a slag which separates from the valuable metal. In the past, silica was shipped from Grand Forks, Oliver, and the Sheep Creek area. Today, silica from near Kamloops and limestone, chiefly from Texada Island, are produced for flux. Quantities have been recorded since 1911.

Gold, Lode - Gold has played an important part in mining in the province. The first discovery of lode gold was on Moresby Island in 1852, when some gold was recovered from a small quartz vein. The first stamp mill was built in the Cariboo in 1876, and it seems certain that some arrastras (primitive grinding mills) were built even earlier. These and other early attempts were short-lived, and the successful milling of gold ores did not begin until about 1890 in the southern part of the province. By 1890, the value of gold production was second only to that of coal. At the start of World War II, gold mining values peaked at more than \$22 million. After the war, output dwindled until developments in the 1970's. In the early years, lode gold came mostly from the camps of Rossland, Nelson, McKinney, Fairview, Hedley, and also from the copper and other ores of the Boundary district. A somewhat later major producer was the Premier mine at Stewart. In the 1930's, the price of gold increased and the value of production soared, new discoveries were made and old mines were revived. In 1971, the Bralorne mine at Bridge River closed.

Most of the lode gold presently produced is as a by-product of copper, copper-zinc-silver, and other base metal mining. Because of the volume of this production, the amount of gold produced is still at a fairly high level, and with the significant rise in the price of gold in the 1970's the value of produc-

tion exceeded the peaks reached during the era of gold mines in the 1930's. With the new high prices for gold, interest has re-awakened in vein bulk gold properties with new primary gold producers opening in the past several years. See Table 11-A for a complete list of current producers.

Gold, Placer - The early explorations and settlement of the province followed rapidly on the discovery of gold-bearing placer creeks throughout the country. The first placer miners came in 1858 to mine the lower Fraser River bars upstream from Yale.

The year of greatest placer gold production was 1863, shortly after the discovery of placer gold in the Cariboo. Another peak year in 1875 marked the discovery of placer gold in creeks in the Cassiar. A minor peak year was occasioned by the discovery of placer gold in the Granite Creek area of the Tulameen in 1885. A much higher level of production ensued after 1899, when the Atlin placers substantially increased output. Other important placer gold camps were established at Goldstream, Fort Steel, Rock Creek, Omineca River, and Quesnel River. The last important strike was made on Cedar Creek in 1921; coarse gold was found on Squaw Creek in 1927, and on Wheaton Creek in 1932.

Mining in the old placer camps revived during the 1930's under the stimulus of an increase in the price of fine gold from \$20.67 per ounce to \$35 per ounce in U.S. funds. After World War II, placer mining declined under conditions of steadily rising costs and a fixed price for gold but is showing signs of revival in response to a freely floating gold price since 1972. From 1858 to 1987, more than 165 million grams valued at nearly \$142 million has been recorded.

A substantial part of the production, including much of the gold recovered from the Fraser River upstream from Yale (in the present New Westminster, Kamloops, and Lillooet Mining Divisions) and much of the early Cariboo production, was mined before the original organization of the Department of Mines in 1874. Consequently, the amounts recorded are based on early estimates

Notes on Products (Cont'd)

and cannot be accurately assigned to individual mining divisions.

The first year of production for major placer-producing mining divisions was: Atlin, 1898; Cariboo, 1859; Liard, 1873; Lillooet, 1858; Omineca, 1869.

Granules - Rock chips used for bird grits, exposed aggregate, roofing, stucco, dash, terrazzo, etc., have been produced since 1930.

Gypsum and Gyspite - Production of gypsum and gyspite has been recorded since 1911. Between 1925 and 1956, more than 907 000 tonnes were shipped from Falkland and some was quarried near Cranbrook and Windemere. Since 1956, nearly all production has come from Windemere.

Hydromagnesite - Small shipments of hydromagnesite were made from Atlin between 1904 and 1916 and from Clinton in 1921.

Indium - Production of indium as a by-product of zinc refining at the Trail smelter began in 1942. Production figures have not been disclosed since 1958.

Iron - Iron ore was produced in small quantities as early as 1885, commonly under special circumstances or as test shipments. Steady production started in 1951 with shipments of magnetite concentrates to Japan from Vancouver and Texada Islands. Most of the known iron-ore deposits are magnetite, and occur in the coastal area. On average they are low in grade and need to be concentrated. Producing mines have operated on Texada Islands, at Benson Lake and Zeballos on Vancouver Island, and at Tasu and Jedway on Moresby Island.

At Texada Island, copper was a by-product of iron mining and, in the Coast Copper mine at Benson Lake, iron was a by-product of copper mining. The latest operation, and to date the largest, was the Tasu mine, operating from the end of 1967 to 1983. Copper was also produced as a by-product from this mine.

From January 1961 to August 1972, calcined iron sulphide from the tailings of the Sullivan mine was used for making pig iron at Kimberley. This was the first manufacture of pig iron in British Columbia. The iron occurs as pyrrhotite and pyrite in the lead-zinc ore of the Sullivan mine. In the process of milling, the lead and zinc minerals are separated from the waste rock. Over the years, a stockpile has been built containing a reserve of about 18 million tonnes of iron ore. The sulphur was removed in making pig iron and was converted to sulphuric acid, which was used in making fertilizer. A plant built at Kimberley converted the pig iron to steel, and a fabricating plant was acquired in Vancouver. The iron smelter at Kimberley closed in August 1972.

Iron Oxide - Iron oxide, ochre, and bog iron were mined as early as 1918 from several occurrences, but mainly from limonite deposits north of Squamish. None has been produced since 1950.

Jade (Nephrite) - Production of jade (nephrite) has been recorded only since 1959 despite there being several years of significant production prior to that date. The jade is recovered from bedrock occurrences on Mount Ogden and near Dease lake and as alluvial boulders from the Fraser River; the Bridge River and its tributaries, Marshall, Hell, and Cadwallader Creeks; O'Ne-ell, Ogden, Kwanika, and Wheaton Creeks.

Notes on Products (Cont'd)

Lead - Lead was the most valuable single commodity for many years. Lead and zinc usually occur together in nature, although not necessarily in equal amounts in a single deposit.

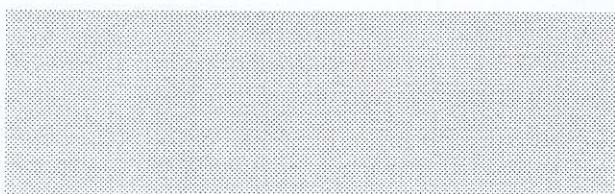
Lead was first produced in 1887, and the total production to 1987 amounts to approximately 8.6 million tonnes.

Zinc is the more abundant metal, but lead ore usually is more valuable than zinc ore because it contains more silver as a by-product. Most of the concentrated ore is smelted and the metal refined at Trail.

Almost all of British Columbia's lead comes from the southeastern part of the province. The Sullivan mine at Kimberley produced about 90 percent of the province's lead in 1987. This is one of the largest mines in the world and supports the great metallurgical works at Trail. Other mines have operated at Pend-d'Oreille River, North Kootenay Lake, Slocan, in southwestern British Columbia, and on Vancouver Island. In northwestern British Columbia, lesser amounts have come from Tulsequah, the Premier mine, and several small mines in the general region of Hazelton.

A small amount of high-grade lead ore is shipped directly to the smelter, but most of the ore is concentrated by flotation and the zinc content is separated. Generally, all output from the Sullivan mine goes to the Trail Smelter. In 1958, revisions were made in some yearly totals for lead to adjust them for recovery of lead from slag treated at the Trail smelter.

Limestone - Besides being used for flux and granules (where it is recorded separately), limestone is used in agriculture, in cement manufacture, in the pulp and paper industry, and for making lime. It has been produced since 1886.



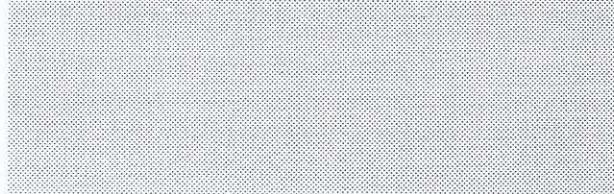
Magnesite - The Baymag mine at Mt. Brusilof near Radium began mining high purity natural magnesite in mid-1982, while first shipments were recorded in 1983. The ore is processed into caustic calcined magnesia and various magnesium oxide products at the company's plant in Exshaw, Alberta. Baymag's two main markets are the pulp and paper industry and the animal feed market. Fused magnesium oxide is also sold as a refractory agent.

Magnesium - In 1941 and 1942, Cominco Ltd. produced magnesium from magnesite mined from a large deposit at Marysville.

Magnesium Sulphate - Magnesium sulphate was recovered in minor amounts at various times between 1915 and 1942 from small alkali lakes near Basque, Clinton and Osoyoos.

Manganese - From 1918 to 1920, manganese ore was shipped from a bog deposit near Kaslo and from Hill 60 near Cowichan Lake. In 1956 a test shipment was made from Olalla.

Mercury - Mercury was first produced near Savona in 1895. Since then small amounts have been recovered from the same area and from the Bridge River district. The main production to date was between 1940 and 1944 from the Pinchi Lake and Takla mines near Fort St. James. In 1968 the Pinchi Lake mine re-opened and continued in operation until 1975 when market conditions forced its closure.



Mica - No sheet mica has been produced commercially in British Columbia. Between 1932 and 1961, small amounts of mica schist for grinding were mined near Alberda, Armstrong, Oliver, Prince Rupert, and Sicamous.

Molybdenum - Molybdenum ore in small amounts was produced from high-grade deposits between 1914 and 1918. Recently, mining of large low-grade molybdenum and copper-molybdenum deposits has increased production to the point that molybdenum now ranks fourth in importance in annual value of metals produced in British Columbia.

Natro-alunite - In 1912 and 1913, 363 tonnes of natro-alunite was mined from a small low-grade deposit at Kyuquot Sound. There has been no subsequent production.

Nickel - One mine, the Pride of Emory near Hope, shipped nickel ore in 1936 and 1937 and began continuous production in 1958. From 1960 to 1974, nickel concentrates were shipped to Alberta for smelting. The mine closed in August 1974.

Niobium - Niobium was produced from placer deposits on Vowell and Malloy Creeks in the Bugaboo area in 1956. A test shipment of 8,187 tonnes of gravel was shipped by St. Eugene Mining Corporation Limited to Quebec Metallurgical Industries. The placer contained a variety of minerals, including pyrochlore and uraninite. Recovery from the test shipment was as follows: 104.39 kilograms of niobium and 146.29 kilograms of uranium and thorium.

Palladium - Palladium was recovered in the years 1928, 1929, and 1930 as a by-product of the Trail refinery and is presumed to have originated in copper concentrates shipped to the smelter from the Copper Mountain mine.

Perlite - In 1953, a test shipment of 1 009 tonnes was made from a quarry on Francois Lake. Small shipments were made in 1983 and 1984. Aurum Mines produced perlite from 1983 through 1986 from its mine 60 kilometers northwest of Clinton.

Phosphate Rock - Between 1927 and 1933, Cominco Ltd. produced 3 485 tonnes of phosphate rock for test purposes, but the grade proved to be too low for commercial production.

Platinum - Platinum has been produced intermittently from placer streams in small amounts since 1887, mostly from the Tulameen and Similkameen Rivers. Placer platinum has also been recovered from Pine, Thibert, McConnell, Rainbow, Tranquille, Rock and Government Creeks; from the Quesnel, Fraser, Cottonwood, Peace and Coquihalla Rivers; and from beach placers on Graham Island. Some platinum recovered between 1928 and 1930 as a by-product at the Trail refinery is presumed to have originated in copper concentrates shipped to the smelter from the Copper Mountain mine. Small amounts were contained in placer gold in 1979.

Rhenium - Rhenium occurs in significant quantities only with molybdenite associated with porphyry copper deposits. It was first produced in 1972 by the Island Copper mine and is extracted as rhenium oxide from fumes produced during roasting of the molybdenite concentrate.

Notes on Products (Cont'd)

Rock - Production of rubble, riprap, and crushed rock has been recorded since 1909.

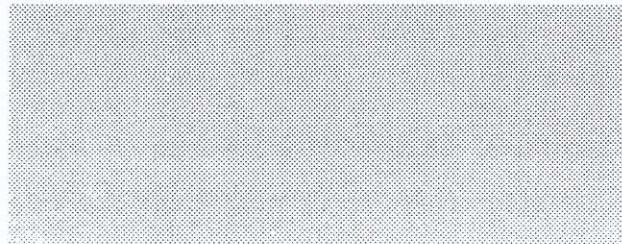
Sand and gravel - Sand and gravel is used as aggregate in concrete work. The output varies from year to year according to the level of activity in the construction industry.

Selenium - The only recorded production of selenium, 332 kilograms, was in 1931 from the refining of blister copper from the Anyox smelter.

Silver - Silver is recovered from silver ores or as a by-product of other ores. Most of it is refined in Trail, and some is exported in concentrated ores of copper, lead, and zinc to American and Japanese smelters. Silver bullion was produced by the Torbit mine from 1949 to 1959.

Some silver is associated with galena, while other is recovered from gold and copper ores, and although the silver in such ores is usually no more than a fraction of an ounce per ton, even that amount is important in a large tonnage operation.

Production of silver began in 1887 from silver-copper and silver-lead ores in the Kootenays and has continued in that area to the present. A considerable amount of the silver is a by-product of lead-zinc ores and nearly all is refined at Trail, although some is exported with concentrates to foreign smelters. Silver in 1987 was mined at the Sullivan, Equity Silver, Myra Falls Operations, Highland Valley Copper, Island Copper, Afton, and Silvana mines. Table 11-A details current silver production.



Sodium Antimonate - In 1982, Equity Silver produced 70 214 kilograms of sodium antimonate.

Sodium Carbonate - Sodium carbonate was recovered between 1921 and 1949 from alkali lakes in the Clinton area and around Kamloops. There has been no further production.

Sodium Sulphate - In 1983 and 1984, Equity Silver was the sole producer of sodium sulphate.

Stone (see Dimension Stone) - Cut stone for building purposes is prepared from rock produced at quarries in various parts of the province when required. Two of the most productive quarries have operated on Haddington and Nelson Islands.

Sulphur - Production of sulphur has been recorded since 1916. From 1916 - 1927, the amounts include the sulphur content of pyrite shipped. From 1928, the amounts include the estimated sulphur content of pyrite shipped, plus the sulphur contained in sulphuric acid made from waste smelter gases. The sulphur content of pyrrhotite roasted at the Kimberley fertilizer plant has been included since 1953. Elemental sulphur has been recovered from the Westcoast Transmission Co. Ltd. plant at Taylor since 1958 and the Fort Nelson plant of Petrosul International Ltd. since 1978.

Talc - Between 1916 and 1936, talc was quarried at Leech River and at Anderson Lake to make dust for asphalt roofing. There has been no production since 1936.



Thorium - See niobium

Tin - Tin, as cassiterite, is a by-product of the Sullivan mine, where it has been produced since 1941. Tin is also normally produced in a lead-tin alloy at the Trail smelter.

Tungsten - Tungsten, largely as scheelite concentrates, was produced from 1937 to 1958, first from the Columbia Tungsten (Hardscrabble) mine in the Cariboo in 1937 and, during World War II, from the Red Rose mine near Hazelton and the Emerald mine near Salmo. The Red Rose closed in 1954 and the Emerald in 1958. Small amounts of scheelite have been produced from the Bridge River, Revelstoke, and other areas when demand was high. In 1970, production began from the Invincible mine near Salmo - it closed in 1973.

A very small amount of wolframite came from Boulder Creek near Atlin.

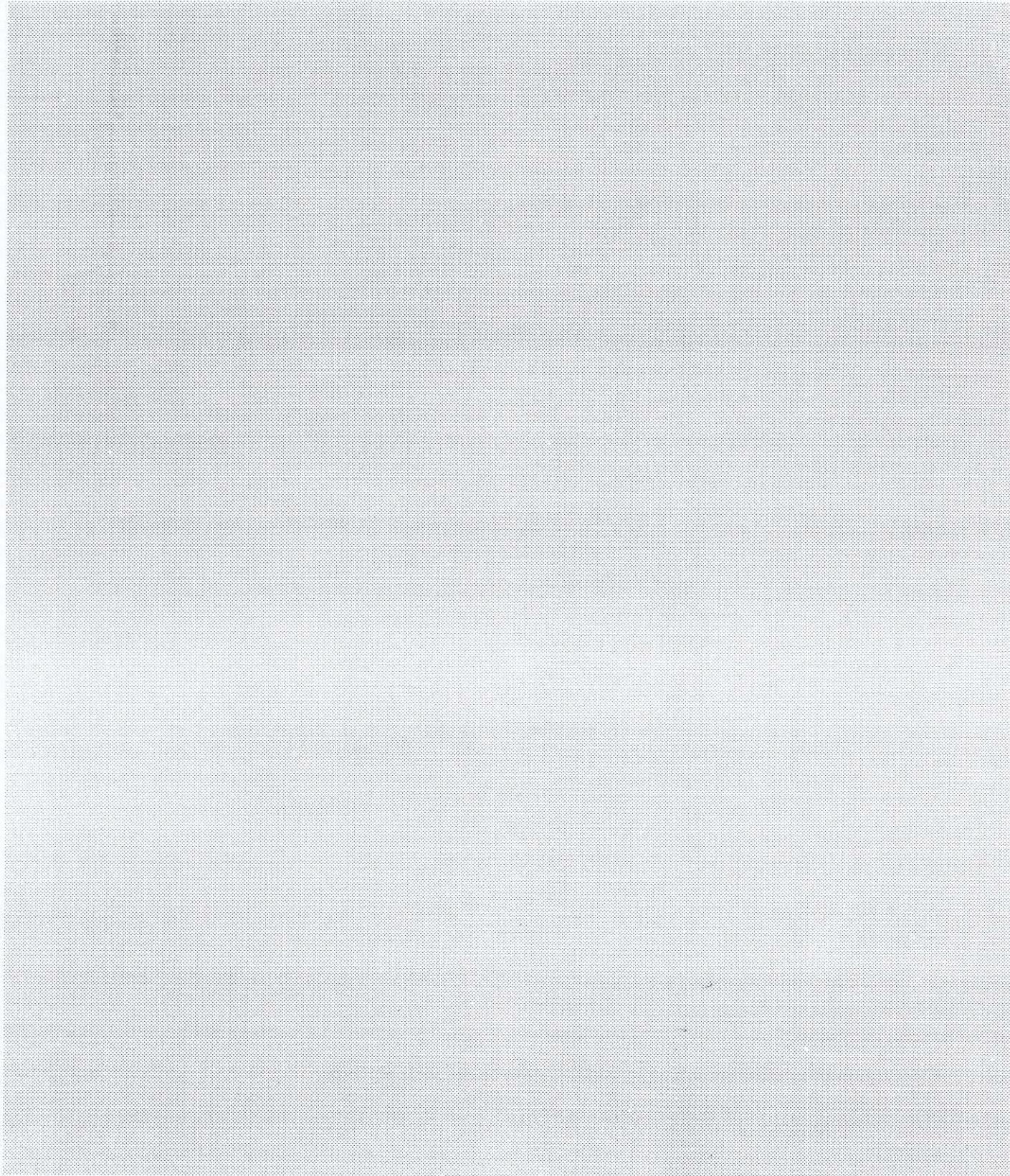
Uranium - See Niobium.

Volcanic Ash - The only recorded production of volcanic ash is 27 tonnes from the Cariboo Mining Division in 1954.

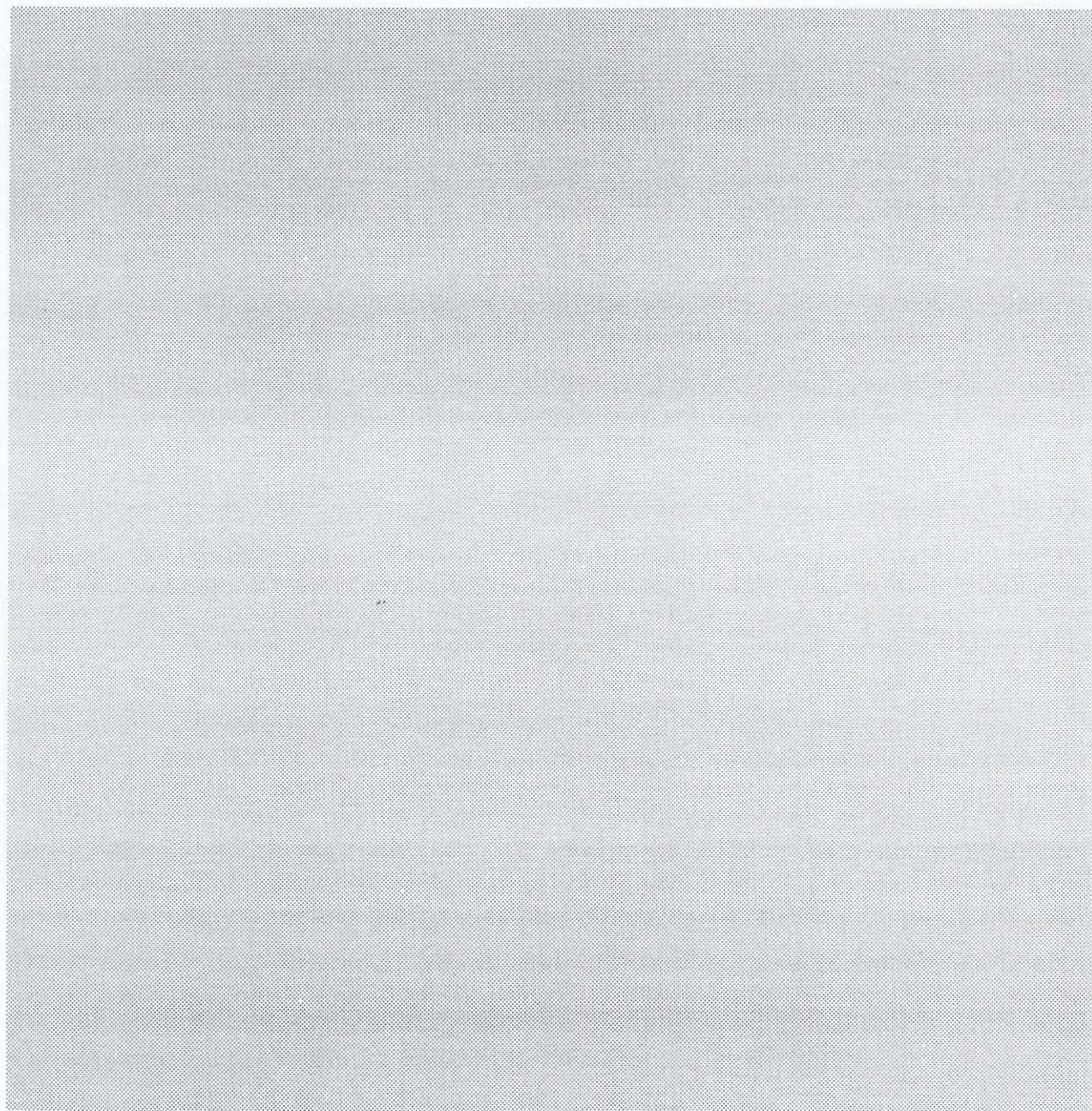
Zinc - Zinc was first produced in 1905. For many years, lead was the most valuable single metal, but in 1950 the annual value of production of zinc surpassed that of lead. In 1966, the total value of copper production exceeded that of zinc. In 1977 the production of zinc was exceeded by that of copper, molybdenum, asbestos, coal, crude oil, and natural gas. Zinc is invariably associated with lead. Most ores are mined for their combined values in zinc, lead, and silver, and rarely for their zinc content alone. Some zinc ores contain a valuable amount of gold, and zinc is associated with copper at the Westmin HW mine. Modern practice is to concentrate and separate the zinc mineral (sphalerite) from the lead mineral (galena). Most of the zinc concentrates go to the zinc-recovery plant at Trail, are roasted, then converted electronically to refined metal. Some concentrates are shipped to American or Japanese smelters.

Over 80 percent of the zinc that has been mined in British Columbia has originated in southeastern British Columbia, at the Sullivan mine, and at mines near Ainsworth, Invermere, Moyie Lake, Riondel, Salmo, Slocan, and Spillimacheen. Other production has come from mines at Portland Canal and Callaghan Creek areas. The greatest overall zinc production is from the Sullivan mine, which has contributed about 72 percent of the total zinc production of the province.

Records for the period 1905 - 1908 show shipments totalling 17 096 tonnes of zinc ore and zinc concentrates of unstated zinc content. In 1918, revisions were made to some yearly totals for zinc to adjust for recovery of zinc from slag treated at the Trail smelter.



Annual Summary Tables - Historical Mineral Statistics To 1987



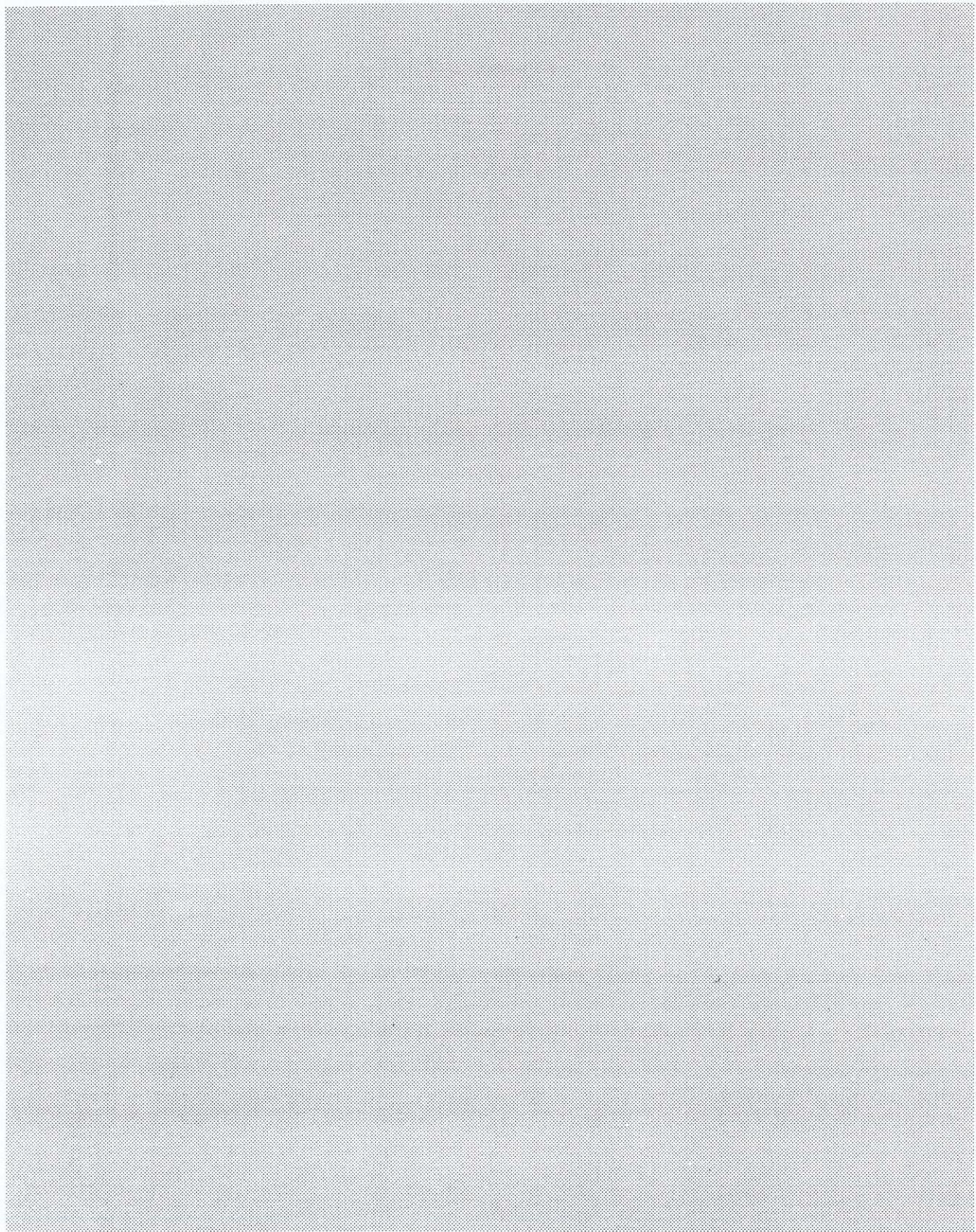


Table 1-A

Mineral Production — Total To-Date, 1986 and 1987

Products	Total Quantity to date	Total Value to Date	Quantity 1986	Value 1986	Quantity 1987	Value 1987
Metals						
Antimony	kg 29 800 901	\$ 41 707 165	488 465	\$ 2 992 825	374 171	\$ 1 208 572
Bismuth	kg 3 517 491	\$ 17 750 298	11 374	\$ 105 119	22 776	\$ 241 676
Cadmium	kg 22 061 359	\$ 93 785 675	304 468	\$ 1 163 981	200 792	\$ 1 166 802
Chromite	t 722	\$ 32 295	—	—	—	—
Cobalt	kg 114 484	\$ 376 661	—	—	—	—
Copper	kg 6 606 944 651	\$ 9 667 754 010	332 215 028	\$ 629 479 111	355 897 693	\$ 842 341 196
Gold—						
-placer	g 165 870 892	\$ 141 988 683	166 483	\$ 2 734 949	456 460	\$ 8 791 021
-lode fine	g 641 472 028	\$ 1 907 554 961	9 225 036	\$ 152 300 944	11 644 700	\$ 230 310 373
Iron concentrates	t 36 693 780	\$ 431 710 043	50 546	\$ 2 217 168	58 070	\$ 2 220 950
Lead	kg 8 642 291 136	\$ 2 092 351 640	91 784 242	\$ 38 183 405	69 911 213	\$ 49 828 244
Magnesium	kg 92 819	\$ 88 184	—	—	—	—
Manganese	t 1 564	\$ 32 668	—	—	—	—
Mercury	kg 6 094 387	\$ 49 218 263	—	—	—	—
Molybdenum	kg 265 387 749	\$ 2 324 061 145	11 573 619	\$ 92 781 106	14 138 543	\$ 121 687 917
Nickel	kg 23 337 783	\$ 51 698 754	—	—	—	—
Palladium	g 23 296	\$ 30 462	—	—	—	—
Platinum	g 44 042	\$ 138 801	—	—	—	—
Selenium	kg 332	\$ 1 389	—	—	—	—
Silver	g 20 103 252 318	\$ 1 752 535 718	395 850 085	\$ 94 615 495	371 599 737	\$ 122 562 405
Tin	kg 10 592 241	\$ 42 576 901	57 438	\$ 621 801	5 605	\$ 51 992
Tungsten(WO ₃)	kg 9 194 732	\$ 49 182 366	—	—	—	—
Zinc	kg 8 269 490 714	\$ 2 665 202 361	137 582 872	\$ 138 022 893	100 718 749	\$ 109 368 709
Others	—	\$ 47 541 953	—	\$ 1 447 894	—	\$ 1 813 744
Totals	—	\$ 21 377 320 396	—	\$ 1 156 666 691	—	\$ 1 491 593 601¹
Industrial Minerals						
Arsenious oxide	kg 9 987 789	\$ 273 201	—	—	—	—
Asbestos	t 2 309 809	\$ 1 014 995 961	78 348	\$ 39 662 680	97 848	\$ 46 938 025
Bentonite	t 718	\$ 16 858	—	—	—	—
Diatomite	t 45 076	\$ 1 955 518	2 500	\$ 132 000	—	—
Fluorspar	t 47 180	\$ 795 950	—	—	—	—
Fluxes	t 4 162 353	\$ 11 572 186	54	\$ 9 700	—	—
Granules	t 1 093 495	\$ 28 250 974	120 760	\$ 2 351 334	134 786	\$ 2 313 225
Gypsum and gypsite	t 12 555 816	\$ 76 757 974	527 167	\$ 5 460 671	587 701	\$ 6 231 926
Hydromagnesite	t 2 044	\$ 27 536	—	—	—	—
Iron oxide and ochre	t 16 427	\$ 155 050	—	—	—	—
Jade	kg 3 440 754	\$ 13 243 736	217 081	\$ 1 089 534	178 702	\$ 984 495
Magnesite	t 521 338	\$ 9 844 365	124 441	\$ 2 153 037	141 394	\$ 3 088 139
Magnesium sulphate	t 12 603	\$ 254 352	—	—	—	—
Mica	kg 5 815 954	\$ 185 818	—	—	—	—
Natrol-alunite	t 473	\$ 9 398	—	—	—	—
Perlite	t 7 109	\$ 112 120	2 400	\$ 72 000	—	—
Phosphate rock	t 3 485	\$ 16 894	—	—	—	—
Pumice	t 2 041	\$ 51 824	—	—	—	—
Sodium antimonate	t 4 490	\$ 2 293 156	—	—	—	—
Sodium carbonate	t 9 518	\$ 118 983	—	—	—	—
Sodium sulphate	t 5 932	\$ 493 953	—	—	—	—
Sulphur	t 12 867 777	\$ 463 064 762	501 459	\$ 82 613 624	505 831	\$ 64 885 085
Talc	t 1 638	\$ 34 871	—	—	—	—
Volcanic ash	t 27	\$ 300	—	—	—	—
Others	—	\$ 26 505 745	—	\$ 849 446	—	\$ 787 903
Totals	52 913 846	\$ 1 651 031 485	1 574 210	\$ 134 394 026	—	\$ 125 228 798

Table 1-A (Cont'd)

Mineral Production — Total To-Date, 1986 and 1987

Products	Total Quantity to date	Total Value to Date	Quantity	Value	Quantity	Value
			1986	1986	1987	1987
Structural Materials						
Cement	28 641 765	1 183 738 988	1 077 218	75 584 058	1 312 074	88 181 547
Clay products	—	206 747 568	—	10 212 928	—	8 376 402
Lime and limestone	—	183 400 915	1 502 836	9 221 437	2 063 286	12 389 935
Rubble, rip-rap, crushed rock t	—	259 704 443	3 180 714	14 314 516	3 590 641	18 230 984
Sand and gravel	—	1 444 625 696	42 887 795	105 281 747	49 259 996	131 316 297
Building stone	—	9 581 057	347	49 000	391	51 212
Not assigned	—	5 972 171	—	—	—	—
Totals	—	3 293 770 838	—	214 663 686	—	258 546 377
Coal						
Coal — Sold and used						
- Metallurgical	—	—	16 690 177	828 539 190	18 019 842	801 967 324
- Thermal	—	—	4 161 795	105 875 059	4 567 010	90 554 635
- Total	332 326 979	8 757 707 802	20 851 972	934 414 249 ²	22 586 852	892 521 959
Totals — Solid Minerals	—	35 079 830 521	—	2 440 138 652	—	2 767 890 735
Petroleum and Natural Gas						
Crude oil	66 827 100	3 865 892 425	2 019 450	230 217 300	2 083 471	302 284 499
Natural gas to pipeline . ^{10^3} m ³	202 028 519	6 628 992 069	7 957 692	486 294 558	9 826 219	372 511 962
Others ³	—	459 436 334	—	61 403 256	—	57 098 230
Totals	—	10 954 320 828	—	777 915 114	—	731 894 691
Grand Totals	—	46 034 151 349	—	3 218 053 766	—	3 499 785 426

¹ Final value revises Ministry release 1989:1 value of \$1 490 385 029

² Final value revises Ministry release 1988:1 value of \$934 504 287

³ Others include Liquid Petroleum Gases (LPG's), and Pentanes.

Table 2-A

Total Value Of Mineral Production 1836 - 1987

Year	Metals	Industrial Minerals	Structural Materials	Coal	Petroleum And Natural Gas	Total
	\$	\$	\$	\$	\$	\$
1836-86.....	52 880 750	—	43 650	10 758 565	—	63 682 965
1887.....	729 381	—	22 168	1 240 080	—	1 991 629
1888.....	745 794	—	46 432	1 467 903	—	2 260 129
1889.....	685 512	—	77 517	1 739 490	—	2 502 519
1890.....	572 884	—	75 201	2 034 420	—	2 682 505
1891.....	447 136	—	79 475	3 087 291	—	3 613 902
1892.....	511 075	—	129 234	2 479 005	—	3 119 314
1893.....	659 969	—	—	2 934 882	—	3 594 851
1894.....	1 191 728	—	—	3 038 859	—	4 230 587
1895.....	2 834 629	—	—	2 824 687	—	5 659 316
1896.....	4 973 769	—	726 323	2 693 961	—	8 394 053
1897.....	7 575 262	—	150 000	2 734 522	—	10 459 784
1898.....	7 176 870	—	150 000	3 582 595	—	10 909 465
1899.....	8 107 509	—	200 000	4 126 830	—	12 434 339
1900.....	11 360 546	—	250 000	4 744 530	—	16 355 076
1901.....	14 258 455	—	400 000	5 016 398	—	19 674 853
1902.....	12 163 561	—	450 000	4 832 257	—	17 445 818
1903.....	12 640 083	—	525 000	4 332 297	—	17 497 380
1904.....	13 424 755	2 400	575 000	4 953 024	—	18 955 179
1905.....	16 289 165	—	660 800	5 511 861	—	22 461 826
1906.....	18 449 602	—	982 900	5 548 044	—	24 980 546
1907.....	17 101 305	—	1 149 400	7 637 713	—	25 888 418
1908.....	15 277 991	—	1 200 000	7 356 866	—	23 834 857
1909.....	14 668 141	—	1 270 559	8 574 884	—	24 513 584
1910.....	13 768 731	—	1 500 000	11 108 335	—	26 377 066
1911.....	11 880 062	46 345	3 500 917	8 071 747	—	23 499 071
1912.....	18 218 266	17 500	3 436 222	10 786 812	—	32 458 800
1913.....	17 701 432	46 446	3 249 605	9 107 460	—	30 104 943
1914.....	15 790 727	51 810	2 794 107	7 745 847	—	26 382 491
1915.....	20 765 212	133 114	1 509 235	7 114 178	—	29 521 739
1916.....	32 092 648	150 718	1 247 912	8 900 675	—	42 391 953
1917.....	27 299 934	174 107	1 097 900	8 484 343	—	37 056 284
1918.....	27 957 302	281 131	783 280	12 833 994	—	41 855 707
1919.....	20 258 217	289 426	980 790	11 975 671	—	33 504 104
1920.....	19 687 532	508 601	1 962 824	13 450 169	—	35 609 126
1921.....	13 160 417	330 503	1 808 392	12 836 013	—	28 135 325
1922.....	19 605 401	251 922	2 469 967	12 880 060	—	35 207 350
1923.....	25 769 215	140 409	2 742 388	12 678 548	—	41 330 560
1924.....	35 959 566	116 932	2 764 013	9 911 935	—	48 752 446
1925.....	46 480 742	101 319	2 766 838	12 168 905	—	61 517 804
1926.....	51 857 792	223 748	3 335 885	11 650 180	—	67 067 605
1927.....	45 134 289	437 729	2 879 160	12 269 135	—	60 720 313
1928.....	48 640 158	544 192	3 409 142	12 633 510	—	65 227 002
1929.....	52 805 345	807 502	3 820 732	11 256 260	—	68 689 839
1930.....	41 785 380	457 225	4 085 105	9 435 650	—	55 763 360
1931.....	23 530 469	480 319	3 538 519	7 684 155	—	35 233 462
1932.....	20 129 869	447 495	1 705 708	6 523 644	—	28 806 716
1933.....	25 777 723	460 683	1 025 586	5 375 171	—	32 639 163
1934.....	35 177 224	486 554	1 018 719	5 725 133	—	42 407 630
1935.....	42 006 618	543 583	1 238 718	5 048 864	—	48 837 783

Table 2 -A (Cont'd)

Total Value Of Mineral Production

1836 - 1987

Year	Metals	Industrial Minerals	Structural Materials	Coal	Petroleum And Natural Gas	Total
	\$	\$	\$	\$	\$	\$
1936.....	45 889 944	724 362	1 796 677	5 722 502	—	54 133 485
1937.....	65 224 245	976 171	2 098 339	6 139 920	—	74 438 675
1938.....	55 959 713	916 841	1 974 976	5 565 069	—	64 416 599
1939.....	56 216 049	1 381 720	1 832 464	6 280 956	—	65 711 189
1940.....	64 332 166	1 073 023	2 534 840	7 088 265	—	75 028 294
1941.....	68 807 630	1 253 561	2 845 262	7 660 000	—	80 566 453
1942.....	63 626 140	1 434 382	3 173 635	8 237 172	—	76 471 329
1943.....	55 005 394	1 378 337	3 025 255	7 742 030	—	67 151 016
1944.....	42 095 013	1 419 248	3 010 088	8 217 966	—	54 742 315
1945.....	50 673 592	1 497 720	3 401 229	6 454 360	—	62 026 901
1946.....	58 834 747	1 783 010	5 199 563	6 732 470	—	72 549 790
1947.....	95 729 867	2 275 972	5 896 803	8 680 440	—	112 583 082
1948.....	124 091 753	2 358 877	8 968 222	9 765 395	—	145 184 247
1949.....	110 219 917	2 500 799	9 955 790	10 549 924	—	133 226 430
1950.....	117 166 836	2 462 340	10 246 939	10 119 303	—	139 995 418
1951.....	153 598 411	2 493 840	10 606 048	10 169 617	—	176 867 916
1952.....	147 857 523	2 181 464	11 596 961	9 729 739	—	171 365 687
1953.....	126 755 705	3 002 673	13 555 038	9 528 279	—	152 841 695
1954.....	123 834 286	5 504 114	14 395 174	9 154 544	6 545	152 894 663
1955.....	142 609 505	6 939 490	15 299 254	8 986 501	18 610	173 853 360
1956.....	149 441 246	9 172 792	20 883 631	9 346 518	319 465	189 163 652
1957.....	125 353 920	11 474 050	25 626 939	7 340 339	1 197 581	170 992 829
1958.....	104 251 112	9 958 768	19 999 576	5 937 860	4 806 233	144 953 549
1959.....	105 076 530	12 110 286	19 025 209	5 472 064	5 967 128	147 651 217
1960.....	130 304 373	13 762 102	18 829 989	5 242 223	9 226 646	177 365 333
1961.....	128 565 774	12 948 308	19 878 921	6 802 134	11 612 184	179 807 321
1962.....	159 627 293	14 304 214	21 366 265	6 133 986	27 939 726	229 371 484
1963.....	172 852 866	16 510 898	23 882 190	6 237 997	36 379 636	255 863 587
1964.....	180 926 329	16 989 469	26 428 939	6 327 678	36 466 753	267 139 168
1965.....	177 101 733	20 409 649	32 325 714	6 713 590	44 101 662	280 652 348
1966.....	208 664 003	22 865 324	43 780 272	6 196 219	54 274 187	335 780 005
1967.....	235 865 318	29 364 065	44 011 488	7 045 341	67 096 286	383 382 498
1968.....	250 912 026	26 056 782	45 189 476	7 588 989	75 281 215	405 028 488
1969.....	294 881 114	20 492 943	55 441 528	6 817 155	86 756 009	464 388 749
1970.....	309 981 470	22 020 359	46 104 071	19 559 669	90 974 467	488 640 036
1971.....	301 059 951	21 909 767	59 940 333	45 801 936	99 251 158	527 963 145
1972.....	372 032 770	25 764 120	66 745 698	66 030 210	105 644 978	636 217 776
1973.....	795 617 596	27 969 664	73 720 831	87 976 105	124 104 445	1 109 388 641
1974.....	764 599 451	33 676 214	78 088 393	154 593 643	233 275 505	1 264 233 206
1975.....	586 650 344	48 667 602	90 928 011	317 111 744	320 719 474	1 364 077 175
1976.....	646 750 403	52 917 142	100 938 648	298 683 679	420 973 564	1 520 263 436
1977.....	714 036 707	79 185 099	115 650 992	328 846 883	550 439 856	1 788 159 537
1978.....	819 778 518	59 471 631	142 105 285	381 895 241	568 931 051	1 972 181 726
1979.....	1 350 776 761	83 100 984	187 671 941	439 280 152	896 377 125	2 957 206 963
1980.....	1 429 002 180	115 926 007	242 325 657	461 492 857	828 302 626	3 077 049 327
1981.....	1 246 682 535	122 464 842	200 786 279	554 271 292	884 516 084	3 008 721 032
1982.....	1 057 488 380	95 644 218	164 156 644	566 878 240	912 902 555	2 797 070 037
1983.....	1 106 015 862	89 496 434	208 401 528	555 789 196	899 351 279	2 859 054 299
1984.....	1 036 900 793	114 669 521	192 253 455	1 007 519 670	997 750 056	3 349 093 495
1985.....	1 005 450 954	111 016 020	232 824 792	1 028 317 201	1 049 546 934	3 427 155 901
1986.....	1 156 666 691	134 394 026	214 663 686	934 414 249	777 915 114	3 218 053 766
1987.....	1 491 593 601	125 228 798	258 546 377	892 521 959	731 894 691	3 499 785 426

Table 3-A

Mineral Production 1976 — 1978

	1976		1977		1978	
	Quantity	Value	Quantity	Value	Quantity	Value
Metals						
Antimony	kg	447 001	\$ 1 636 871	596 207	\$ 2 519 739	459 521
Bismuth	kg	20 261	226 462	18 540	187 612	28 172
Cadmium	kg	356 422	1 530 800	320 711	1 720 051	253 803
Copper	kg	263 618 197	378 984 941	275 224 115	384 736 661	273 692 676
Gold-placer	g	26 064	115 613	46 170	289 075	36 515
Gold-lode fine	g	5 393 477	21 761 502	5 906 336	31 301 931	6 542 332
Iron concentrates	t	1 255 277	14 760 526	445 317	7 362 345	615 569
Lead	kg	85 407 582	32 796 533	78 172 646	42 316 293	81 064 539
Molybdenum	kg	14 088 686	94 109 138	15 521 970	142 057 947	13 055 203
Platinum	g	—	—	—	—	—
Silver	g	239 720 882	32 532 836	241 503 007	37 934 098	227 271 890
Tin	kg	102 262	712 912	187 478	1 912 300	261 863
Tungsten(WO ₃)	kg	—	—	—	—	—
Zinc	kg	106 498 987	65 499 108	103 780 228	61 301 001	95 618 111
Others	—	—	2 083 161	—	397 654	—
Total Metals	—	—	646 750 403	—	714 036 707	—
Industrial Minerals						
Asbestos	t	90 443	40 727 296	97 033	69 729 205	68 266
Diatomite	t	2 737	182 159	1 239	49 595	2 184
Fluxes (quartz, limestone)	t	11 378	33 263	28 624	95 461	22 475
Granules (quartz, limestone, granite)	t	31 476	1 219 884	29 551	1 238 485	26 849
Gypsum and gypsite	t	556 134	4 434 471	653 126	2 357 488	733 080
Jade	kg	483 796	1 535 030	266 621	825 523	488 759
Sulphur	t	231 704	4 296 189	248 892	3 871 660	322 181
Others	—	—	488 850	—	1 017 682	—
Total Industrial Minerals	—	—	52 917 142	—	79 185 099	—
Structural Materials						
Cement	t	846 548	34 973 746	909 522	42 705 320	1 020 065
Clay products	—	—	6 995 917	—	4 909 799	—
Lime and limestone	t	2 173 831	5 610 063	2 231 166	5 861 614	2 512 867
Rubble, rip-rap, crushed rock ..	t	2 485 215	5 205 973	2 464 503	7 309 536	2 841 920
Sand and gravel	t	36 073 618	48 138 635	53 994 528	54 809 121	38 353 326
Building stone	t	657	14 314	4 535	55 602	405
Total Structural Materials	—	—	100 938 648	—	115 650 992	—
Coal						
Coal - sold and used	t	7 537 695	298 683 679	8 424 181	328 846 883	9 463 920
Total Solid Minerals	—	—	1 099 289 872	—	1 237 719 681	—
Petroleum and Natural Gas						
Crude oil	m ³	2 367 450	116 595 050	2 200 303	132 859 085	2 004 699
Field concentrates	m ³	18 309	901 711	24 465	1 477 248	25 386
Plant condensates	m ³	167 576	7 198 957	180 267	9 751 058	155 503
Natural gas delivered to pipeline	10 ³ m ³	8 799 508	287 997 059	8 895 663	396 601 354	8 003 029
Butane	m ³	109 781	4 591 832	111 357	5 358 167	106 580
Propane	m ³	88 195	3 688 955	91 297	4 392 944	85 732
Total Petroleum and Natural Gas	—	—	420 973 564	—	550 439 856	—
Grand Totals	—	—	1 520 263 436	—	1 788 159 537	—
	—	—	—	—	—	1 972 181 456

Table 4-A

Mineral Production 1979 — 1981

	1979		1980		1981		
	Quantity	Value	Quantity	Value	Quantity	Value	
		\$		\$		\$	
Metals							
Antimony	kg	177 046	\$ 916 081	78 654	\$ 416 080	68 323	\$ 360 745
Bismuth	kg	33 809	173 667	23 501	136 306	47 300	102 641
Cadmium	kg	239 096	1 417 506	92 360	560 679	101 962	371 077
Copper	kg	272 163 001	\$ 656 359 923	264 674 830	\$ 670 623 616	290 088 241	\$ 611 282 050
Gold-placer	g	214 106	2 649 918	280 104	6 213 376	291 705	4 540 289
lode fine	g	8 062 810	101 481 156	7 197 312	163 930 073	7 468 769	131 542 422
Iron concentrates	t	668 026	13 008 475	653 324	13 670 233	602 272	14 274 498
Lead	kg	84 451 905	88 100 363	76 709 447	66 096 223	84 854 093	61 529 276
Molybdenum	kg	10 766 497	321 228 104	11 209 501	288 934 398	12 933 244	198 240 391
Platinum	g	280	3 793	—	—	—	—
Silver	g	214 117 518	\$ 94 700 656	203 801 811	\$ 156 548 306	403 754 797	\$ 152 420 716
Tin	kg	240 984	3 818 948	139 517	2 438 881	150 341	2 198 138
Tungsten(WO ₃)	kg	—	—	—	—	—	—
Zinc	kg	88 418 642	\$ 61 890 891	67 481 328	\$ 49 363 417	79 214 552	\$ 67 026 535
Others	—	—	5 027 280	—	10 070 592	—	2 793 757
Total Metals	—	—	\$ 1 350 776 761	—	\$ 1 429 002 180	—	\$ 1 246 682 535
Industrial Minerals							
Asbestos	t	94 286	\$ 65 520 069	100 089	\$ 81 688 936	90 914	\$ 76 770 285
Diatomite	t	1 452	33 025	3 615	138 273	3 600	155 232
Fluxes(quartz, limestone)	t	27 741	129 035	43 986	93 135	48 313	509 678
Granules(quartz, limestone, granite)	t	30 074	1 458 987	31 393	1 694 947	28 297	1 756 810
Gypsum and gypsumite	t	718 557	3 782 628	751 067	5 387 949	684 924	5 804 770
Jade	kg	258 505	1 325 777	449 156	1 580 241	59 208	133 598
Sulphur	t	383 724	9 616 390	359 413	21 712 359	507 566	33 337 562
Others	—	—	1 235 073	—	3 630 167	—	3 996 907
Total Industrial Minerals	—	—	\$ 83 100 984	—	\$ 115 926 007	—	\$ 122 464 842
Structural Materials							
Cement	t	1 550 596	\$ 89 185 273	1 351 320	\$ 90 881 086	955 922	\$ 82 372 375
Clay products	—	—	11 744 194	—	10 387 121	—	10 292 772
Lime and limestone	t	2 880 138	8 037 476	3 129 762	9 945 044	2 659 406	9 400 205
Rubble, rip-rap, crushed rock ..	t	2 488 389	6 766 665	7 019 167	32 436 456	3 168 991	11 105 388
Sand and gravel	t	46 241 983	71 918 633	45 278 202	98 666 100	42 361 930	87 603 864
Building stone	t	2 194	19 700	91	9 850	383	11 875
Total Structural Materials	—	—	\$ 187 671 941	—	\$ 242 325 657	—	\$ 200 786 479
Coal							
Coal - sold and used	t	10 570 370	\$ 439 280 152	10 823 530	\$ 461 492 857	11 752 621	\$ 554 271 292
Total Solid Minerals	—	—	\$ 2 060 829 838	—	\$ 2 248 746 701	—	\$ 2 124 205 148
Petroleum and Natural Gas							
Crude oil	m ³	2 139 963	\$ 168 928 671	2 002 128	\$ 189 561 479	2 035 953	\$ 236 170 548
Field concentrates	m ³	32 549	2 569 418	36 885	3 489 431	27 871	3 233 036
Plant condensates	m ³	184 398	13 396 500	133 601	11 641 991	124 946	13 284 259
Natural gas delivered to pipeline	10 ³ m ³	11 392 641	\$ 699 508 127	8 931 833	\$ 612 545 107	8 062 681	\$ 616 795 096
Butane	m ³	112 683	7 122 711	89 556	6 491 914	84 635	9 953 076
Propane	m ³	84 864	4 851 698	75 507	4 572 704	64 118	5 080 069
Total Petroleum and Natural Gas	—	—	\$ 896 377 125	—	\$ 828 302 626	—	\$ 884 516 084
Grand Totals	—	—	\$ 2 957 206 963	—	\$ 3 077 049 327	—	\$ 3 008 721 232

Table 5-A

Mineral Production 1982 — 1984

	1982		1983		1984	
	Quantity	Value	Quantity	Value	Quantity	Value
Metals						
Antimony	kg	213 519	\$ 1 161 543	263 724	\$ 1 432 021	354 375
Bismuth	kg	27 305	83 007	47 427	215 319	9 547
Cadmium	kg	147 656	286 265	138 171	423 843	114 420
Copper	kg	279 873 599	495 009 799	282 864 697	561 111 733	280 070 497
Gold-placer	g	175 607	2 467 470	287 783	4 317 204	430 864
lode fine	g	7 511 908	115 802 480	7 693 571	126 555 114	6 813 576
Iron concentrates	t	774 951	19 630 010	496 823	13 078 465	198 464
Lead	kg	83 746 551	43 035 587	112 941 984	48 778 436	85 147 484
Molybdenum	kg	14 747 888	154 990 970	10 778 825	87 584 823	12 164 806
Platinum	g	—	—	—	—	—
Silver	g	499 565 577	158 260 320	402 325 338	180 372 129	363 378 002
Tin	kg	115 261	1 568 666	136 347	1 985 213	208 554
Tungsten(WO ₃)	kg	104 730	1 114 350	—	—	—
Zinc	kg	75 182 699	63 571 545	95 286 818	79 634 214	95 334 645
Others	—	—	506 368	—	527 348	—
Total Metals	—	1 057 488 380	—	1 106 015 862	—	1 036 900 793
Industrial Minerals						
Asbestos	t	76 084	57 032 422	81 653	53 395 853	92 123
Diatomite	t	137	6 850	1 955	158 260	4 100
Fluxes(quartz, limestone)	t	53 801	1 018 576	54 076	1 166 314	16 652
Granules(quartz, limestone, granite)	t	20 962	1 400 812	51 919	1 056 863	13 293
Gypsum and gypsumite	t	415 458	5 468 093	459 815	4 917 144	411 829
Jade	kg	78 681	320 861	96 268	577 172	123 969
Sulphur	t	423 892	29 115 860	483 733	24 862 954	508 917
Others	—	—	1 280 744	—	3 361 874	—
Total Industrial Minerals	—	95 644 218	—	89 496 434	—	114 669 521
Structural Materials						
Cement	t	749 571	69 265 713	853 064	71 080 982	939 354
Clay products	—	—	5 853 261	—	7 335 946	—
Lime and limestone	t	2 575 441	10 465 577	2 711 559	12 126 785	2 772 103
Rubble, rip-rap, crushed rock ..	t	2 652 976	12 898 647	3 371 759	17 910 535	4 068 127
Sand and gravel	t	26 702 329	65 648 899	39 560 774	99 919 233	29 395 820
Building stone	t	145	24 547	181	28 047	170
Total Structural Materials	—	164 156 644	—	208 401 528	—	192 253 455
Coal						
Coal - Sold and Used	t	10 645 742	566 878 240	11 480 298	555 789 196	20 739 725
Total Solid Minerals	—	—	1 884 167 482	—	1 959 703 020	—
Petroleum and Natural Gas						
Crude Oil	m ³	2 078 258	333 892 930	2 078 771	402 075 887	2 094 156
Field Concentrates	m ³	20 771	3 337 069	17 636	3 411 155	14 102
Plant Condensates	m ³	135 185	19 765 399	113 984	20 225 321	131 441
Natural gas delivered to pipeline	10 ³ m ³	7 188 561	542 664 470	6 899 911	455 187 128	7 769 368
Butane	m ³	89 443	9 436 236	80 291	12 897 946	81 972
Propane	m ³	68 783	3 806 451	62 494	5 553 842	59 687
Total Petroleum and Natural Gas	—	—	912 902 555	—	899 351 279	—
Grand Totals	—	—	2 797 070 037	—	2 859 054 299	—
	—	—	3 349 093 495	—	—	—

Table 6-A

Mineral Production 1985 — 1987

	1985		1986		1987	
	Quantity	Value	Quantity	Value	Quantity	Value
Metals						
Antimony	kg	643 001	\$ 3 871 509	488 465	\$ 2 992 825	374 171
Bismuth	kg	33 201	580 021	11 374	105 119	22 776
Cadmium	kg	239 849	872 571	304 468	1 163 981	200 792
Copper	kg	301 648 642	\$ 579 674 070	332 215 028	\$ 629 479 111	355 897 693
Gold-placer	g	387 077	5 403 595	166 483	2 734 949	456 460
Gold-lode fine	g	6 381 599	89 094 237	9 225 036	152 300 944	11 644 700
Iron concentrates	t	87 571	3 819 609	50 546	2 217 168	58 070
Lead	kg	116 811 328	42 337 760	91 784 242	38 183 405	69 911 213
Molybdenum	kg	6 624 127	63 218 087	11 573 619	92 781 106	14 138 543
Platinum	g	—	—	—	—	—
Silver	g	378 172 924	\$ 100 951 341	395 850 085	\$ 94 615 495	371 599 737
Tin	kg	119 592	1 719 173	57 438	621 801	5 605
Tungsten(WO ₃)	kg	—	—	—	—	—
Zinc	kg	108 072 664	\$ 112 725 885	137 582 872	\$ 138 022 893	100 718 749
Others	—	—	1 183 096	—	1 447 894	—
Total Metals	—	—	\$ 1 005 450 954	—	\$ 1 156 666 691	—
Industrial Minerals						
Asbestos	t	89 350	\$ 56 715 028	78 348	\$ 39 662 680	97 848
Diatomite	t	2 632	144 961	2 500	132 000	—
Fluxes(quartz, limestone)	t	8 216	180 551	54	9 700	—
Granules(quartz, limestone, granite)	t	61 451	1 738 421	120 760	2 351 334	134 786
Gypsum and gypsumite	t	479 730	5 004 759	527 167	5 460 671	587 701
Jade	kg	98 931	706 010	217 081	1 089 534	178 702
Sulphur	t	500 979	42 907 957	501 459	82 613 624	505 831
Others	—	—	3 618 333	—	3 074 483	—
Total Industrial Minerals	—	—	\$ 111 016 020	—	\$ 134 394 026	—
Structural Materials						
Cement	t	988 498	\$ 74 531 197	1 077 218	\$ 75 584 058	1 312 074
Clay products	—	—	9 390 548	—	10 212 928	—
Lime and limestone	t	1 428 238	7 935 203	1 502 836	9 221 437	2 063 286
Rubble, rip-rap, crushed rock .t	t	5 344 247	23 932 969	3 180 714	14 314 516	3 590 641
Sand and gravel	t	49 007 121	117 014 859	42 887 795	105 281 747	49 259 996
Building stone	t	112	20 016	347	49 000	391
Total Structural Materials	—	—	\$ 232 824 792	—	\$ 214 663 686	—
Coal						
Coal - Sold and Used	t	22 612 810	\$ 1 028 317 201	20 851 972	\$ 934 414 249	22 586 852
Total Solid Minerals	—	—	\$ 2 377 608 967	—	\$ 2 440 138 652	—
Petroleum and Natural Gas						
Crude oil	m ³	1 958 195	\$ 427 610 933	2 019 450	\$ 230 217 300	2 083 471
Natural gas delivered to pipeline	10 ³ m ³	8 321 541	\$ 575 184 893	7 957 692	\$ 486 294 558	9 826 219
Others ¹	—	—	46 751 108	—	61 403 256	—
Total Petroleum and Natural Gas	—	—	\$ 1 049 546 934	—	\$ 777 915 114	—
Grand Totals	—	—	\$ 3 427 155 901	—	\$ 3 218 053 766	—
¹ Others include Liquid Petroleum Gases (LPG's) and Pentanes						

Table 7-A

¹
**Prices Used In Valuing Production Of Gold, Silver,
 Copper, Lead, Zinc and Coal**

	Gold (Fine) \$/g	Silver (Fine) \$/g	Copper \$/kg	Lead \$/kg	Zinc \$/kg	Molybdenum \$/kg	Coal \$/t
1901	\$0.66	\$0.02 N.Y.	\$0.36 N.Y.	\$0.06 N.Y.	—	—	\$2.92
1902	"	\$0.02 "	\$0.26 "	\$0.08 "	—	—	\$2.90
1903	"	\$0.02 "	\$0.29 "	\$0.08 "	—	—	\$2.94
1904	"	\$0.02 "	\$0.28 "	\$0.09 "	—	—	\$2.89
1905	"	\$0.02 "	\$0.34 "	\$0.09 "	—	—	\$2.98
1906	"	\$0.02 "	\$0.43 "	\$0.11 "	—	—	\$2.88
1907	"	\$0.02 "	\$0.44 "	\$0.11 "	—	—	\$3.38
1908	"	\$0.02 "	\$0.29 "	\$0.08 "	—	—	\$3.43
1909	"	\$0.02 "	\$0.29 "	\$0.09 "	—	—	\$3.52
1910	"	\$0.02 "	\$0.28 "	\$0.09 "	\$0.10 E.St.L.	—	\$3.69
1911	"	\$0.02 "	\$0.27 "	\$0.09 "	\$0.11 "	—	\$3.51
1912	"	\$0.02 "	\$0.36 "	\$0.09 "	\$0.13 "	—	\$3.70
1913	"	\$0.02 "	\$0.34 "	\$0.09 "	\$0.11 "	—	\$3.74
1914	"	\$0.02 "	\$0.30 "	\$0.08 "	\$0.10 "	—	\$3.69
1915	"	\$0.02 "	\$0.38 "	\$0.09 "	\$0.25 "	—	\$3.78
1916	"	\$0.02 "	\$0.60 "	\$0.14 "	\$0.24 "	—	\$3.80
1917	"	\$0.02 "	\$0.60 "	\$0.17 "	\$0.17 "	—	\$3.84
1918	"	\$0.03 "	\$0.54 "	\$0.15 "	\$0.15 "	—	\$5.50
1919	"	\$0.03 "	\$0.41 "	\$0.11 "	\$0.14 "	—	\$5.42
1920	"	\$0.03 "	\$0.39 "	\$0.16 "	\$0.14 "	—	\$5.20
1921	"	\$0.02 "	\$0.28 "	\$0.09 "	\$0.09 "	—	\$5.30
1922	"	\$0.02 "	\$0.30 "	\$0.11 "	\$0.11 "	—	\$5.20
1923	"	\$0.02 "	\$0.32 "	\$0.14 "	\$0.12 "	—	\$5.30
1924	"	\$0.02 "	\$0.29 "	\$0.16 "	\$0.12 "	—	\$5.39
1925	"	\$0.02 "	\$0.31 "	\$0.17 Lond.	\$0.17 Lond.	—	\$5.28
1926	"	\$0.02 "	\$0.30 "	\$0.15 "	\$0.16 "	—	\$5.34
1927	"	\$0.02 "	\$0.29 "	\$0.12 "	\$0.14 "	—	\$5.30
1928	"	\$0.02 "	\$0.32 "	\$0.10 "	\$0.12 "	—	\$5.19
1929	"	\$0.02 "	\$0.40 "	\$0.11 "	\$0.12 "	—	\$5.22
1930	"	\$0.01 "	\$0.29 "	\$0.09 "	\$0.08 "	—	\$5.21
1931	"	\$0.01 "	\$0.18 "	\$0.06 "	\$0.06 "	—	\$4.80
1932	\$0.75	\$0.01 "	\$0.14 Lond.	\$0.05 "	\$0.05 "	—	\$4.45
1933	\$0.92	\$0.01 "	\$0.16 "	\$0.05 "	\$0.07 "	—	\$4.30
1934	\$1.11	\$0.02 "	\$0.16 "	\$0.05 "	\$0.07 "	—	\$4.41
1935	\$1.13	\$0.02 "	\$0.17 "	\$0.07 "	\$0.07 "	—	\$4.35
1936	\$1.13	\$0.01 "	\$0.21 "	\$0.09 "	\$0.07 "	—	\$4.66
1937	\$1.12	\$0.01 "	\$0.29 "	\$0.11 "	\$0.11 "	—	\$4.68
1938	\$1.13	\$0.01 "	\$0.22 "	\$0.07 "	\$0.07 "	—	\$4.42
1939	\$1.16	\$0.01 "	\$0.22 "	\$0.07 "	\$0.07 "	—	\$4.43
1940	\$1.24	\$0.01 "	\$0.22 "	\$0.07 "	\$0.08 "	—	\$4.70
1941	\$1.24	\$0.01 "	\$0.22 "	\$0.07 "	\$0.08 "	—	\$4.57
1942	\$1.24	\$0.01 "	\$0.22 "	\$0.07 "	\$0.08 "	—	\$4.55
1943	\$1.24	\$0.01 "	\$0.26 "	\$0.08 "	\$0.09 "	—	\$4.60
1944	\$1.24	\$0.01 "	\$0.27 "	\$0.10 "	\$0.10 "	—	\$4.68
1945	\$1.24	\$0.02 "	\$0.28 "	\$0.11 "	\$0.14 "	—	\$4.67
1946	\$1.18	\$0.03 "	\$0.28 "	\$0.15 "	\$0.17 "	—	\$5.16
1947	\$1.13	\$0.02 "	\$0.45 "	\$0.30 "	\$0.25 "	—	\$5.64
1948	\$1.13	\$0.02 Mont.	\$0.49 U.S.	\$0.40 "	\$0.31 "	—	\$6.71
1949	\$1.16	\$0.02 U.S.	\$0.44 "	\$0.35 U.S.	\$0.29 U.S.	—	\$7.18
1950	\$1.22	\$0.03 "	\$0.52 "	\$0.32 "	\$0.33 "	—	\$7.09

Table 7-A (Cont'd)

Prices¹ Used In Valuing Production Of Gold, Silver, Copper, Lead, Zinc and Coal

	Gold (Fine) \$/g	Silver (Fine) \$/g	Copper \$/kg	Lead \$/kg	Zinc \$/kg	Molybdenum \$/kg	Coal \$/t
1951.....	\$1.18	\$0.03 "	\$0.61 "	\$0.41 "	\$0.44 "	—	\$7.12
1952.....	\$1.10	\$0.03 "	\$0.69 "	\$0.36 "	\$0.35 "	—	\$7.65
1953.....	\$1.11	\$0.03 "	\$0.67 "	\$0.29 "	\$0.24 "	—	\$7.58
1954.....	\$1.10	\$0.03 "	\$0.64 "	\$0.30 "	\$0.23 "	—	\$7.72
1955.....	\$1.11	\$0.03 "	\$0.84 "	\$0.33 "	\$0.27 "	—	\$7.43
1956.....	\$1.11	\$0.03 "	\$0.88 "	\$0.35 "	\$0.29 "	—	\$7.26
1957.....	\$1.08	\$0.03 "	\$0.57 "	\$0.31 "	\$0.25 "	—	\$7.45
1958.....	\$1.09	\$0.03 "	\$0.52 "	\$0.26 "	\$0.22 "	—	\$8.21
1959.....	\$1.08	\$0.03 "	\$0.61 "	\$0.26 "	\$0.24 "	—	\$8.74
1960.....	\$1.09	\$0.03 "	\$0.64 "	\$0.26 "	\$0.28 "	\$3.87	\$7.32
1961.....	\$1.14	\$0.03 "	\$0.62 "	\$0.24 "	\$0.26 "	—	\$8.16
1962.....	\$1.20	\$0.04 "	\$0.67 "	\$0.23 "	\$0.27 "	—	\$8.19
1963.....	\$1.21	\$0.04 "	\$0.68 "	\$0.27 "	\$0.29 "	—	\$8.08
1964.....	\$1.21	\$0.04 "	\$0.74 "	\$0.32 "	\$0.32 "	\$3.67	\$7.65
1965.....	\$1.21	\$0.04 "	\$0.85 "	\$0.38 "	\$0.35 "	\$3.75	\$7.75
1966.....	\$1.21	\$0.04 "	\$1.18 "	\$0.36 "	\$0.34 "	\$3.56	\$8.02
1967.....	\$0.21	\$0.05 "	\$1.13 "	\$0.33 "	\$0.33 "	\$3.92	\$8.54
1968.....	\$1.21	\$0.07 "	\$1.20 "	\$0.32 "	\$0.31 "	\$3.62	\$8.72
1969.....	\$1.21	\$0.06 "	\$1.47 "	\$0.35 "	\$0.35 "	\$3.98	\$8.82
1970.....	\$1.18	\$0.06 "	\$1.29 ²	\$0.36 U.S.	\$0.35	\$3.71	\$8.16
1971.....	\$1.14	\$0.05 "	\$1.03 ²	\$0.31 "	\$0.36 "	\$3.72	\$11.06
1972.....	\$1.85	\$0.05 "	\$0.99 ²	\$0.33 "	\$0.39 "	\$3.40	\$12.08
1973.....	\$3.13	\$0.08 "	\$1.84 ²	\$0.36 "	\$0.46 "	\$3.76	\$12.71
1974.....	\$5.35 ²	\$0.16 ²	\$1.88 ²	\$0.42 ²	\$0.77 ²	\$4.41	\$19.93
1975.....	\$5.20 ²	\$0.16 ²	\$1.28 ²	\$0.35 ²	\$0.81 ²	\$5.47	\$35.53
1976.....	\$4.04 ²	\$0.14 ²	\$1.44 ²	\$0.38 ²	\$0.62 ²	\$6.68	\$39.63
1977.....	\$5.30 ²	\$0.16 ²	\$1.40 ²	\$0.54 ²	\$0.59 ²	\$9.15	\$39.04
1978.....	\$7.33 ²	\$0.20 ²	\$1.58 ²	\$0.64 ²	\$0.54 ²	\$12.85	\$40.35
1979.....	\$12.58 ²	\$0.44 ²	\$2.41 ²	\$1.04 ²	\$0.70 ²	\$29.84	\$41.56
1980.....	\$22.78 ²	\$0.77 ²	\$2.53 ²	\$0.86 ²	\$0.73 ²	\$25.85	\$42.64
1981.....	\$17.61 ²	\$0.38 ²	\$2.11 ²	\$0.73 ²	\$0.85 ²	\$15.33	\$47.16
1982.....	\$15.42 ²	\$0.32 ²	\$1.77 ²	\$0.51 ²	\$0.85 ²	\$10.51	\$53.25
1983.....	\$16.45 ²	\$0.45 ²	\$1.98 ²	\$0.43 ²	\$0.84 ²	\$8.13	\$48.41
1984.....	\$16.40 ²	\$0.33 ²	\$1.85 ²	\$0.45 ²	\$1.21 ²	\$9.36	\$48.58
1985.....	\$13.96 ²	\$0.27 ²	\$1.92 ²	\$0.36 ²	\$1.04 ²	\$9.54	\$45.47
1986.....	\$16.51 ²	\$0.24 ²	\$1.89 ²	\$0.42 ²	\$1.00 ²	\$8.02	\$44.81
1987.....	\$19.76 ²	\$0.33 ²	\$2.37 ²	\$0.71	\$1.09 ²	\$8.61	\$39.52

¹ Prior to 1974, the average Canadian Mint buying price was used for fine gold. From 1974 onwards, the price is that received by the producer. The price of placer gold was first established arbitrarily at \$0.55 per gram. From 1931 through 1962, it increased according to the price of fine gold. From 1962 to 1984, placer gold price was the average price received. Prior to 1949, prices used for silver, copper, lead and zinc were average prices at the markets indicated converted to Canadian funds. (Mont.=Montreal, Lon.=London, E.St. L.=East St. Louis, U.S.=United States) From 1949 to 1969, prices used were New York for silver and lead, East St. Louis Prime Western for zinc and U.S. Export Refinery for copper.

² The average price received by B.C. producers has been used since 1970 for copper and since 1974 for gold, silver, lead, zinc and molybdenum.

The price for coal is the average of the F.O.B. minehead value of all types of coal sold from B.C. producers.

Table 8-A

Production Of Gold And Silver 1858-1987

YEAR	GOLD (PLACER)		GOLD (FINE)		GOLD (TOTAL)		SILVER	
	Quantity g	Value \$	Quantity g	Value \$	Quantity g	Value \$	Quantity g	Value \$
1858-1890	100 978 533	55 192 163	—	—	100 978 533	55 192 163	6 876 531	214 152
1891-1900	11 703 748	6 397 183	19 682 165	12 858 353	31 385 913	19 255 536	700 977 829	13 561 194
1901-1910	15 787 261	8 628 660	72 224 836	47 998 179	88 012 097	56 626 839	971 114 910	16 973 507
1911-1920	8 656 275	4 731 100	63 112 995	41 942 862	71 769 270	46 673 962	994 340 920	22 572 682
1921	426 733	233 200	4 222 699	2 804 197	4 649 432	3 037 397	83 150 418	1 591 201
1922	674 624	368 800	6 153 915	4 089 684	6 828 539	4 458 484	220 872 076	4 554 781
1923	768 555	420 000	5 575 057	3 704 994	6 343 612	4 124 994	187 643 964	3 718 129
1924	769 799	420 750	7 704 711	5 120 535	8 474 510	5 541 285	259 454 010	5 292 184
1925	512 453	280 092	6 522 890	4 335 069	7 035 343	4 615 161	238 088 613	5 286 818
1926	650 426	355 503	6 264 984	4 163 859	6 915 410	4 519 362	334 312 337	6 675 606
1927	285 868	156 247	5 536 365	3 679 601	5 822 233	3 835 848	325 654 164	5 902 043
1928	262 012	143 208	5 619 130	3 734 609	5 881 142	3 877 817	330 536 775	6 182 461
1929	217 192	118 711	4 516 871	3 002 020	4 734 063	3 120 731	309 791 230	5 278 194
1930	278 527	152 235	5 002 482	3 324 975	5 281 009	3 477 210	352 342 964	4 322 185
1931	534 225	291 992	4 545 175	3 020 837	5 079 400	3 312 829	234 867 945	2 254 979
1932	634 501	395 542	5 649 891	4 263 389	6 284 392	4 658 931	222 406 822	2 264 729
1933	744 233	562 787	6 954 289	6 394 645	7 698 522	6 957 432	218 397 615	2 656 526
1934	783 205	714 431	9 244 309	10 253 953	10 027 514	10 968 384	267 920 527	4 088 280
1935	961 985	895 058	11 363 263	12 856 419	12 325 248	13 751 477	288 323 068	6 005 996
1936	1 349 528	1 249 940	12 583 590	14 172 367	13 933 118	15 422 307	296 944 198	4 308 330
1937	1 684 321	1 558 245	14 331 671	16 122 767	16 015 992	17 681 012	351 630 830	5 073 962
1938	1 796 478	1 671 015	17 340 607	19 613 624	19 137 085	21 284 639	337 827 661	4 722 288
1939	1 547 250	1 478 492	18 267 912	21 226 957	19 815 162	22 705 449	336 577 786	4 381 365
1940	1 215 101	1 236 928	18 149 347	22 461 516	19 364 448	23 698 444	383 436 042	4 715 315
1941	1 361 534	1 385 962	17 760 622	21 984 501	19 122 156	23 370 463	378 700 797	4 658 545
1942	1 023 413	1 041 772	13 825 843	17 113 943	14 849 256	18 155 715	301 011 133	4 080 775
1943	454 104	462 270	6 979 607	8 639 516	7 433 711	9 101 786	265 193 820	3 858 496
1944	355 601	361 977	5 804 815	7 185 332	6 160 416	7 547 309	177 453 003	2 453 293
1945	391 556	398 591	5 454 626	6 751 860	5 846 182	7 150 451	191 510 720	2 893 934
1946	489 219	475 361	3 658 086	4 322 241	4 147 305	4 797 602	197 994 264	5 324 959
1947	216 757	200 585	7 566 800	8 514 870	7 783 557	8 715 455	177 550 262	4 110 092
1948	632 386	585 200	8 902 612	10 018 050	9 534 998	10 603 250	209 016 328	5 040 101
1949	556 308	529 524	8 969 981	10 382 256	9 526 289	10 911 780	237 559 178	5 671 082
1950	595 125	598 717	8 832 723	10 805 553	9 427 848	11 404 270	295 772 610	7 667 950
1951	736 861	717 911	8 126 405	9 627 947	8 863 266	10 345 858	255 632 882	7 770 983
1952	545 982	494 756	7 955 805	8 765 889	8 501 787	9 260 645	274 042 530	7 326 803
1953	443 062	403 230	7 886 228	8 727 294	8 329 290	9 130 524	260 606 407	7 019 272
1954	270 098	238 967	8 036 642	8 803 279	8 306 740	9 042 246	305 630 613	8 154 145
1955	238 436	217 614	7 541 762	8 370 306	7 780 198	8 587 920	245 811 643	6 942 995
1956	120 213	109 450	5 963 782	6 603 628	6 083 995	6 713 078	261 423 017	7 511 866
1957	91 318	80 990	6 948 504	7 495 170	7 039 822	7 576 160	252 847 111	7 077 166
1958	175 732	157 871	6 044 992	6 604 149	6 220 724	6 762 020	218 998 027	6 086 854
1959	235 450	208 973	5 385 360	5 812 511	5 620 810	6 021 484	192 779 535	5 421 417
1960	119 653	107 418	6 394 155	6 979 441	6 513 808	7 086 859	231 612 937	6 600 183
1961	106 248	99 884	4 970 913	5 667 253	5 077 161	5 767 137	229 353 429	6 909 140
1962	103 106	96 697	4 940 712	5 942 101	5 043 818	6 038 798	192 521 474	7 181 907
1963	143 696	135 411	4 820 312	5 850 458	4 964 008	5 985 869	199 764 616	8 861 050
1964	57 292	55 191	4 307 361	5 227 884	4 364 653	5 283 075	163 901 675	7 348 938
1965	26 935	25 053	3 642 908	4 419 089	3 669 843	4 444 142	154 646 729	6 929 793
1966	47 743	44 632	3 717 057	4 506 646	3 764 800	4 551 278	172 594 622	7 729 939
1967	27 713	25 632	3 923 861	4 763 688	3 951 574	4 789 320	192 239 525	10 328 695
1968	20 839	19 571	3 853 537	4 672 242	3 874 376	4 691 813	221 791 325	16 475 795
1969	12 410	11 720	3 654 012	4 427 506	3 666 422	4 439 226	179 169 889	11 100 491

Table 8-A (Cont'd)

Production Of Gold And Silver

1858 - 1987

YEAR	GOLD (PLACER)		GOLD (FINE)		GOLD (TOTAL)		SILVER	
	Quantity g	Value \$	Quantity g	Value \$	Quantity g	Value \$	Quantity g	Value \$
1970....	15 272	14 185	3 135 462	3 685 476	3 150 734	3 699 661	202 521 462	12 041 181
1971....	5 505	4 647	2 668 046	3 031 844	2 673 551	3 036 491	238 670 301	11 968 046
1972....	21 492	26 905	3 782 871	6 995 448	3 804 363	7 022 353	215 420 498	11 519 660
1973....	119 156	311 524	5 784 723	18 117 268	5 903 879	18 428 792	236 987 318	19 552 997
1974....	45 162	232 512	5 001 082	26 749 083	5 046 244	26 981 595	181 695 950	28 440 365
1975....	43 744	232 204	4 819 241	25 082 494	4 862 985	25 314 698	196 305 885	30 545 947
1976....	26 064	115 613	5 393 477	21 761 502	5 419 541	21 877 115	239 720 882	32 532 836
1977....	46 170	289 075	5 906 336	31 301 931	5 952 506	31 591 006	241 503 007	37 934 098
1978....	36 515	295 001	6 542 332	47 951 880	6 578 847	48 246 881	227 271 890	45 071 509
1979....	214 106	2 649 918	8 062 810	101 481 156	8 276 916	104 131 074	214 117 518	94 700 656
1980....	280 104	6 213 376	7 197 312	163 930 073	7 477 416	170 143 449	203 801 811	156 548 306
1981....	291 705	4 540 289	7 468 769	131 542 422	7 760 474	136 082 711	403 754 797	152 420 716
1982....	175 607	2 467 470	7 511 908	115 802 480	7 687 515	118 269 950	499 565 577	158 260 320
1983....	287 783	4 317 204	7 693 571	126 555 114	7 981 354	130 872 318	402 325 338	180 372 129
1984....	430 864	6 405 983	6 813 576	111 731 223	7 244 440	118 137 206	363 378 002	121 364 145
1985....	387 077	5 403 595	6 381 599	89 094 237	6 768 676	94 497 832	378 172 924	100 951 341
1986....	166 483	2 734 949	9 225 036	152 300 944	9 391 519	155 035 893	395 850 085	94 615 495
1987....	456 460	8 791 021	11 644 700	230 310 373	12 101 160	239 101 394	371 599 737	122 562 405
Totals	165 870 892	141 988 683	641 472 028	1 907 554 962	807 342 920	2 049 543 645	20 103 282 318	1 752 535 718

Table 9-A

Production Of Copper, Lead And Zinc 1858 - 1987

YEAR	COPPER		LEAD		ZINC		
	Quantity	Value	Quantity	Value	Quantity	Value	
	kg	\$	kg	\$	kg	\$	
1858-1890			473 729	45 527	—	—	
1891-1900	16 064 375	4 365 210	93 002 804	7 581 619	—	—	
1901-1910	172 344 737	56 384 783	184 989 089	17 033 102	5 753 423	894 169	
1911-1920	231 326 501	100 770 459	191 859 042	21 991 616	118 086 182	19 303 993	
1921	17 706 790	4 879 624	18 779 664	1 693 354	22 416 133	1 952 065	
1922	14 678 125	4 329 754	30 593 731	3 480 306	25 921 103	2 777 322	
1923	26 181 346	8 323 266	43 845 439	6 321 770	26 464 465	3 278 903	
1924	29 413 222	8 442 870	77 284 697	12 415 917	35 893 017	4 266 741	
1925	32 797 475	10 153 269	107 908 698	18 670 329	44 568 438	7 754 450	
1926	40 523 625	12 324 421	119 305 027	17 757 535	64 807 554	10 586 610	
1927	40 461 530	11 525 011	128 364 347	14 874 292	65 872 809	8 996 135	
1928	44 410 233	14 265 242	138 408 812	13 961 412	82 445 946	9 984 613	
1929	46 626 180	18 612 850	139 705 336	15 555 189	78 061 406	9 268 792	
1930	41 894 588	11 990 466	145 966 952	12 638 198	113 614 910	9 017 005	
1931	29 090 879	5 365 690	118 796 232	7 097 812	91 657 703	5 160 911	
1932	22 955 299	3 228 892	114 308 115	5 326 432	87 143 752	4 621 641	
1933	19 572 164	3 216 701	123 235 512	6 497 719	88 887 198	6 291 416	
1934	22 521 530	3 683 662	157 562 183	8 461 859	113 013 038	7 584 199	
1935	17 884 241	3 073 428	156 156 723	10 785 930	116 227 650	7 940 860	
1936	9 830 071	2 053 828	171 444 146	14 790 028	115 475 574	8 439 373	
1937	20 891 260	6 023 411	190 107 902	21 417 049	132 081 905	14 274 245	
1938	29 832 572	6 558 575	187 323 227	13 810 024	135 395 388	9 172 822	
1939	33 227 590	7 392 862	171 794 338	12 002 390	126 283 585	8 544 375	
1940	35 371 049	7 865 085	211 758 089	15 695 467	141 529 456	10 643 026	
1941	30 134 516	6 700 693	207 218 262	15 358 976	166 861 962	12 548 031	
1942	22 723 823	5 052 856	230 060 714	17 052 054	175 646 590	13 208 636	
1943	19 190 263	4 971 132	199 196 604	16 485 902	152 474 485	13 446 018	
1944	16 465 584	4 356 070	132 866 893	13 181 530	126 126 765	11 956 725	
1945	11 726 375	3 244 472	152 849 156	16 848 823	133 714 538	18 984 581	
1946	7 938 069	2 240 070	156 879 853	23 345 731	124 406 109	21 420 484	
1947	18 952 769	8 519 741	142 306 192	42 887 313	114 761 068	28 412 593	
1948	19 515 886	9 616 174	145 165 821	57 734 770	122 610 001	37 654 211	
1949	24 882 500	10 956 550	120 373 215	41 929 866	130 736 145	38 181 214	
1950	19 147 001	9 889 458	128 830 683	41 052 905	131 697 238	43 769 392	
1951	19 617 612	11 980 155	124 037 181	50 316 015	153 091 761	67 164 754	
1952	19 053 280	13 054 893	129 250 197	45 936 692	169 130 882	59 189 656	
1953	22 235 441	14 869 544	135 004 129	39 481 244	173 407 848	40 810 618	
1954	22 747 578	14 599 693	150 807 088	45 482 505	151 555 559	34 805 755	
1955	20 065 928	16 932 549	137 241 656	45 161 245	194 680 177	52 048 909	
1956	19 667 923	17 251 872	128 691 681	44 702 619	201 327 284	58 934 801	
1957	14 237 029	8 170 465	127 732 462	39 568 086	203 787 462	50 206 681	
1958	5 741 837	2 964 529	133 615 439	34 627 075	195 952 146	43 234 839	
1959	7 363 374	4 497 991	130 372 360	33 542 306	182 498 693	44 169 198	
1960	14 997 694	9 583 724	151 321 570	38 661 912	182 977 897	50 656 726	
1961	14 375 361	8 965 149	174 307 617	42 313 569	175 970 780	43 370 891	
1962	49 431 850	33 209 215	152 080 806	34 537 454	187 528 084	51 356 376	
1963	53 635 704	36 238 007	142 869 197	37 834 714	182 734 698	53 069 163	
1964	52 414 456	38 609 136	121 896 644	39 402 293	181 797 313	58 648 561	
1965	38 644 540	32 696 081	113 480 794	43 149 171	141 179 547	48 666 933	
1966	47 990 080	56 438 255	95 929 798	34 436 934	138 401 395	47 666 540	
1967	78 352 932	88 135 172	94 406 546	31 432 079	119 217 472	39 248 539	
1968	73 024 968	87 284 148	105 063 971	32 782 257	135 803 151	43 550 181	
1969	75 937 956	111 592 416	95 286 815	33 693 539	134 565 199	46 639 024	

Table 9-A (Cont'd)

Production Of Copper, Lead And Zinc 1858 - 1987

Year	COPPER		LEAD		ZINC		
	Quantity	Value	Quantity	Value	Quantity	Value	
	kg	\$	kg	\$	kg	\$	
1970.....	96 329 694	124 657 958	97 448 607	35 096 021	125 005 208	44 111 055	
1971.....	127 286 040	131 037 918	112 865 575	34 711 408	138 549 629	49 745 789	
1972.....	211 832 288	209 403 822	88 109 663	28 896 566	121 719 968	47 172 894	
1973.....	317 603 055	582 803 251	84 890 924	30 477 936	137 380 768	62 564 751	
1974.....	287 547 048	541 644 913	55 252 692	23 333 016	77 733 732	59 582 753	
1975.....	258 497 599	331 693 850	70 603 483	24 450 158	99 668 230	80 572 872	
1976.....	263 618 197	378 984 941	85 407 582	32 796 533	106 498 987	65 499 108	
1977.....	275 224 115	384 736 661	78 172 646	42 316 293	103 780 228	61 301 001	
1978.....	273 692 676	431 694 395	81 064 539	51 640 564	95 618 111	52 048 701	
1979.....	272 163 001	656 359 923	84 451 905	88 100 363	88 418 642	61 890 891	
1980.....	264 674 830	670 623 616	76 709 447	66 096 223	67 481 328	49 363 417	
1981.....	290 088 241	611 282 050	84 854 093	61 529 276	79 214 552	67 026 535	
1982.....	279 873 599	495 009 799	83 746 551	43 035 587	75 182 699	63 571 545	
1983.....	282 864 697	561 111 733	112 941 984	48 778 436	95 286 818	79 634 214	
1984.....	280 070 497	517 765 234	85 147 484	37 899 396	95 334 645	115 225 652	
1985.....	301 648 642	579 674 070	116 811 328	42 337 760	108 072 664	112 725 885	
1986.....	332 215 028	629 479 111	91 784 242	38 183 405	137 582 872	138 022 893	
1987.....	355 897 693	842 341 196	69 911 213	49 828 244	100 718 749	109 368 709	
Totals	6 606 944 651	9 667 754 010	8 642 291 136	2 092 351 640	8 269 490 714	2 663 202 361	

Table 10-A

Production Of Molybdenum And Iron Concentrates

1858 - 1987

Year	MOLYBDENUM		IRON		
	Quantity kg	Value \$	Quantity t	Value \$	
1858-1890	—	—	27 097	70 879	
1891-1900	—	—	11 820	45 602	
1901-1910	—	—	17 738	68 436	
1911-1920	11 946	36 698	3 358	18 510	
1921	—	—	916	5 050	
1922	—	—	1 089	3 600	
1923	—	—	220	1 337	
1924	—	—	—	—	
1925	—	—	—	—	
1926	—	—	—	—	
1927	—	—	—	—	
1928	—	—	18	—	
1929	—	—	—	—	
1930	—	—	—	—	
1931	—	—	—	—	
1932	—	—	—	—	
1933	—	—	—	—	
1934	—	—	—	—	
1935	—	—	—	—	
1936	—	—	—	—	
1937	—	—	—	—	
1938	—	—	—	—	
1939	—	—	—	—	
1940	—	—	—	—	
1941	—	—	—	—	
1942	—	—	—	—	
1943	—	—	—	—	
1944	—	—	—	—	
1945	—	—	—	—	
1946	—	—	—	—	
1947	—	—	—	—	
1948	—	—	616	3 735	
1949	—	—	4 964	27 579	
1950	—	—	—	—	
1951	—	—	102 997	790 000	
1952	—	—	816 898	5 474 924	
1953	—	—	899 240	6 763 105	
1954	—	—	486 018	3 733 891	
1955	—	—	554 223	3 228 756	
1956	—	—	335 616	2 190 847	
1957	—	—	324 174	2 200 637	
1958	—	—	571 769	4 193 442	
1959	—	—	770 421	6 363 848	
1960	2 456	9 500	1 052 651	10 292 847	
1961	—	—	1 211 147	12 082 540	
1962	—	—	1 627 342	18 326 911	
1963	—	—	1 869 009	20 746 424	
1964	12 812	47 063	1 816 684	20 419 487	
1965	3 306 274	12 405 344	1 964 410	21 498 581	
1966	7 754 088	27 606 061	1 952 074	20 778 934	
1967	7 945 782	31 183 064	1 954 468	20 820 765	
1968	8 980 988	32 552 722	1 900 311	21 437 569	
1969	12 064 350	47 999 442	1 882 266	19 787 845	

Table 10-A (Cont'd)

Production Of Molybdenum And Iron Concentrates 1858 - 1987

Year	MOLYBDENUM		IRON		
	Quantity kg	Value \$	Quantity t	Value \$	
1970.....	14 186 706	52 561 796	1 704 650	17 391 883	
1971.....	9 926 694	36 954 846	1 750 738	18 153 612	
1972.....	12 719 391	43 260 349	1 139 698	11 642 379	
1973.....	13 785 264	51 851 509	1 420 160	12 906 063	
1974.....	13 789 825	60 791 552	1 306 930	12 742 227	
1975.....	13 026 627	71 201 391	1 305 840	15 273 878	
1976.....	14 088 686	94 109 138	1 255 277	14 760 526	
1977.....	15 521 970	142 057 947	445 317	7 362 345	
1978.....	13 055 203	167 714 272	615 569	11 597 462	
1979.....	10 766 497	321 228 104	668 026	13 008 475	
1980.....	11 179 501	288 934 398	653 324	13 670 233	
1981.....	12 933 224	198 240 391	602 272	14 274 498	
1982.....	14 747 888	154 990 970	774 951	19 630 010	
1983.....	10 778 825	87 584 823	496 823	13 078 465	
1984.....	12 164 806	113 803 442	198 464	6 584 179	
1985.....	6 624 127	63 218 087	87 571	3 819 609	
1986.....	11 573 619	92 781 106	50 546	2 217 168	
1987.....	14 138 543	121 687 917	58 070	2 220 950	
TOTALS	265 086 092	2 314 811 932	36 693 780	431 710 043	

Table 11-A (86)

Metal Production - Major Mines 1986

Mine	Ore Shipped or Treated (t)	Product Shipped	G r o s s M e t a l C o n t e n t					
			Gold (g)	Silver (g)	Copper (kg)	Lead (kg)	Zinc (kg)	Moly. (kg)
<i>Alberni Mining Division</i>								
Myra Falls Operations	1 066 664	Copper concentrates 90 161 t; Zinc concentrates 100 814 t	1 704 588	43 637 121	24 728 110	4 490 731	56 849 571	—
<i>Cariboo Mining Division</i>								
Gibraltar	12 182 335	Copper concentrates 98 367 t; Molybdc oxide 1 472 t	49 050	7 042 574	37 617 000	—	—	792 057
Mosquito Creek	4 285	Gold Bullion	74 875	1 786	—	—	—	—
<i>Clinton Mining Division</i>								
Blackdome	33 308	Flotation Concentrates 221 t Refinery Slag 16 t	927 101	2 451 161	—	—	—	—
<i>Fort Steele Mining Division</i>								
Sullivan	1 859 100	Lead concentrates 127 600 t; Zinc concentrates 176 200 t; Tin Concentrates 171 t	—	81 753 684	—	91 776 934	88 044 392	—
<i>Greenwood Mining Division</i>								
Beaverdell	34 119	Lead concentrates 372 t; Zinc concentrates 168 t; Jig concentrates 166 t	3 763	10 544 545	1 266	103 535	135 806	—
<i>Kamloops Mining Division</i>								
Afton	2 693 784	Copper concentrates 52 495 t	1 814 266	9 797 689	21 853 185	—	—	—
Highland Valley Copper	20 617 460	Copper concentrates 175 326 t; Molybdenite concentrates 3 372 t	61 429	21 402 209	73 345 365	—	—	2 043 572
Lornex	15 943 000	Copper concentrates 156 671 t; Molybdenite concentrates 3 651 t	—	12 813 296	47 829 875	—	—	2 009 903
Valley	4 929 403	Copper concentrates 45 487 t	53 932	7 600 609	21 197 320	—	—	—

Table 11-A (86) (Cont'd)

Metal Production - Major Mines 1986

Mine	Ore Shipped or Treated (t)	Product Shipped	G r o s s M e t a l C o n t e n t					
			Gold (g)	Silver (g)	Copper (kg)	Lead (kg)	Zinc (kg)	Moly. (kg)
<i>Liard Mining Division</i>								
Erickson	24 645	Gold concentrates	720 926	243 700	—	—	—	—
Taurus	37 145 ¹	Gold bullion	121 380	—	—	—	—	—
<i>Nanaimo Mining Division</i>								
Island Copper	17 123 000	Copper concentrates 219 180 t; Molybdenite concentrates 4 266 t	1 681 106	13 605 641	55 730 718	—	—	1 950 817
<i>Nicola Mining Division</i>								
Craigmont	— ²	Iron concentrates 35 821 t	—	—	—	—	—	—
<i>Omineca Mining Division</i>								
Bell	5 333 126	Copper concentrates 77 181 t	745 426	3 793 100	21 433 848	—	—	—
Endako	3 154 192	Molybdenite Concentrates 232 t Molybdic oxide 518 t; Ferro-molybdenum 65 t; Ammonium Di-molybdate 447 t	—	—	—	—	—	826 027 ³
Equity Silver	2 958 700	Copper-silver-gold concentrates 44 164 t	1 271 386	165 280 641	7 426 937	—	—	—
<i>Osoyoos Mining Division</i>								
Brenda	10 203 918	Copper concentrates 61 068 t; Molybdenite concentrates 7 865 t	131 085	9 151 163	16 996 076	—	—	4 361 280
<i>Similkameen Mining Division</i>								
Similkameen	6 876 042	Copper concentrates 75 037 t	419 679	12 006 533	23 664 723	—	—	—
<i>Slocan Mining Division</i>								
Silvana	21 929	Lead concentrates 2 821; Zinc concentrates 2 611 t	—	14 865 629	—	2 103 701	1 508 152	—

¹ Does not include 10 692 of custom ores² No milling in 1986³ Includes 410 804 kg from own ores

Table 11-A (87)

Metal Production - Major Mines 1987

Mine	Ore Shipped or Treated (t)	Product Shipped	G r o s s M e t a l C o n t e n t					
			Gold (g)	Silver (g)	Copper (kg)	Lead (kg)	Zinc (kg)	Moly. (kg)
<i>Alberni Mining Division</i>								
Myra Falls Operations	1 089 796	Copper concentrates 100 246 t; Zinc concentrates 86 508 t	1 322 033	31 757 428	25 145 000	3 371 000	47 581 000	—
<i>Cariboo Mining Division</i>								
Gibraltar	12 575 334	Copper concentrates 101 587 t; Copper cathode 3 972 t; Molybdic oxide 408 t	26 936	3 972 132	35 428 740	—	—	449 478
Mosquito Creek	4 672	Gold bullion	53 755	18 590	—	—	—	—
<i>Clinton Mining Division</i>								
Blackdome	74 001	Flotation concentrate 422 t; Refinery Slag 54 t	1 451 421	3 929 689	—	—	—	—
<i>Fort Steele Mining Division</i>								
Sullivan	1 686 600	Lead concentrates 98 048 t; Zinc concentrates 130 919 t	—	70 836 084	—	68 549 627	64 586 155	—
<i>Greenwood Mining Division</i>								
Beaverdell	36 352	Lead concentrates 420 t; Zinc concentrates 196 t; Jig concentrates 200 t	9 331	10 831 506	1 572	132 444	152 257	—
<i>Kamloops Mining Division</i>								
Afton	2 861 570	Copper concentrates 50 214 t	1 496 295	8 391 625	19 805 639	—	—	—
Highland Valley Copper	41 999 458	Copper concentrates 396 755 t; Molybdenite concentrates 4 741 t	296 416	46 366 979	161 897 636	—	—	4 726 702
<i>Liard Mining Division</i>								
Erickson	86 346	Gold concentrates 2 193 t	1 143 026	523 190	—	—	—	—
Taurus	37 552	Flotation 566 t; Cathodes 440 t; Jig not reported	91 519	—	—	—	—	—

Table 11-A (87) (Cont'd)

Metal Production- Major Mines 1987

Property or Mine	Ore Shipped or Treated (t)	Product Shipped	G r o s s M e t a l C o n t e n t					
			Gold (g)	Silver (g)	Copper (kg)	Lead (kg)	Zinc (kg)	Moly. (kg)
<i>Nanaimo Mining Division</i>								
Island Copper	18 837 431	Copper concentrates 222 193 t; Molybdenite concentrates 3 194 t	1 401 616	12 896 064	56 964 532	—	—	1 503 310
<i>Nicola Mining Division</i>								
Craigmont	— ¹	Iron concentrates 32 300 t	—	—	—	—	—	—
<i>Omineca Mining Division</i>								
Bell	5 409 541	Copper concentrates 88 910 t	892 514	3 856 147	23 396 427	—	—	—
Endako	4 716 500	Molybdenite Concentrates 219 t; Molybdic oxide 3 409 t; Ferro-molybdenum 277 t; Ammonium Di-molybdate 195 t; Molybdenum sulphide 109 t	—	—	—	—	—	4 209 218 ²
Equity Silver	3 610 050	Copper-silver-gold concentrates 40 076 t; Gold concentrates 1 216 t	1 221 310	156 079 319	6 014 368	—	—	—
<i>Osoyoos Mining Division</i>								
Brenda	10 291 405	Copper concentrates 62 578 t; Molybdenite concentrates 6 597 t	134 837	8 963 675	17 725 664	—	—	4 361 280
Nickel Plate	481 454	Gold bullion	1 512 428	832 389	—	—	—	—
<i>Similkameen Mining Division</i>								
Similkameen	6 974 560	Copper concentrates 75 039 t	448 668	12 352 964	23 803 935	—	—	—
<i>Slocan Mining Division</i>								
Silvana	25 653	Lead concentrates 3 003 t; Zinc concentrates 2 614 t	—	15 320 111	—	2 340 634	1 406 769	—

¹ No milling in 1987² 3 758 487 kg from own ores

Table 12-A

Production of Coal, 1836 - 1987

YEAR	QUANTITY ¹	VALUE	YEAR	QUANTITY ¹	VALUE
1836-59	37 985	149 548	1900	1 615 688	4 744 530
1860	14 475	56 988	1901	1 718 692	5 016 398
1861	13 995	55 096	1902	1 667 960	4 832 257
1862	18 409	72 472	1903	1 473 933	4 332 297
1863	21 687	85 380	1904	1 712 739	4 953 024
1864	29 091	115 528	1905	1 855 121	5 511 861
1865	33 345	131 276	1906	1 929 540	5 548 044
1866	25 518	100 460	1907	2 255 214	7 637 713
1867	31 740	124 956	1908	2 143 225	7 356 866
1868	44 711	176 020	1909	2 439 109	8 574 884
1869	36 376	143 208			
1870	30 322	119 372	1910	3 007 074	11 108 335
1871	50 310	164 612	1911	2 305 778	8 071 747
1872	50 310	164 612	1912	2 913 778	10 786 812
1873	50 311	164 612	1913	2 461 665	9 197 460
1874	82 856	244 641	1914	2 029 400	7 745 847
1875	111 912	330 435	1915	1 883 851	7 114 178
1876	141 425	417 576	1916	2 343 671	8 900 675
1877	156 525	462 156	1917	2 209 982	8 484 343
1878	173 587	522 538	1918	2 336 238	12 833 994
1879	245 172	723 903	1919	2 207 659	11 975 671
1880	271 889	802 785	1920	2 587 763	13 450 169
1881	232 020	685 171	1921	2 422 455	12 836 013
1882	286 666	846 417	1922	2 473 692	12 880 060
1883	216 721	639 897	1923	2 391 998	12 678 548
1884	400 391	1 182 210	1924	1 839 619	9 911 935
1885	371 461	1 096 788	1925	2 305 337	12 168 905
1886	331 875	979 908	1926	2 182 760	11 650 180
1887	419 992	1 240 080	1927	2 316 408	12 269 135
1888	497 150	1 467 903	1928	2 431 794	12 633 510
1889	589 133	1 739 490	1929	2 154 607	11 256 260
1890	689 020	2 034 420	1930	1 809 364	9 435 650
1891	1 045 607	3 087 291	1931	1 601 600	7 684 155
1892	839 591	2 479 005	1932	1 464 759	6 523 644
1893	993 988	2 934 882	1933	1 249 347	5 375 171
1894	1 029 204	3 038 859	1934	1 297 306	5 725 133
1895	954 727	2 824 687	1935	1 159 721	5 048 864
1896	909 237	2 693 961	1936	1 226 780	5 722 502
1897	906 610	2 734 522	1937	1 312 003	6 139 920
1898	1 146 015	3 582 595	1938	1 259 626	5 565 069
1899	1 302 088	4 126 803	1939	1 416 184	6 280 956

¹ Quantity from 1836 to 1909 is gross mine output and includes material lost in picking and washing. For 1910 and subsequent years the quantity is that sold and used.

Table 12-A (Cont'd)

Production of Coal, 1836 - 1987

YEAR	QUANTITY ¹	VALUE	YEAR	QUANTITY ¹	VALUE
	t	\$		t	\$
1940	1 507 758	7 088 265	1970	2 398 635	19 559 669
1941	1 673 516	7 660 000	1971	4 141 496	45 801 936
1942	1 810 731	8 237 172	1972	5 466 846	66 030 210
1943	1 682 591	7 742 030	1973	6 924 733	87 976 105
1944	1 752 626	8 217 966	1974	7 757 440	154 593 643
1945	1 381 654	6 454 360	1975	8 924 816	317 111 744
1946	1 305 516	6 732 470	1976	7 537 695	298 683 679
1947	1 538 895	8 680 440	1977	8 424 181	328 846 883
1948	1 455 552	9 765 395	1978	9 463 920	381 895 241
1949	1 470 782	10 549 924	1979	10 570 370	439 280 152
1950	1 427 907	10 119 303	1980	10 823 530	461 492 857
1951	1 427 513	10 169 617	1981	11 752 621	554 271 292
1952	1 272 150	9 729 739	1982	10 645 742	566 878 240
1953	1 255 662	9 528 279	1983	11 480 298	555 789 196
1954	1 186 849	9 154 544	1984	20 739 725	1 007 519 670
1955	1 209 157	8 966 501	1985	22 612 810	1 028 317 201
1956	1 285 664	9 346 518	1986	20 836 863	934 414 249
1957	984 886	7 340 339	1987	22 586 852	892 521 959
1958	722 490	5 937 860	Totals	402 411 860	8 757 387 802
1959	625 964	5 472 064			330 311 970
1960	715 455	5 242 223			
1961	833 827	6 802 134			
1962	748 731	6 133 986			
1963	771 594	6 237 997			
1964	826 737	6 327 678			
1965	862 513	6 713 590			
1966	771 848	6 196 219			
1967	824 436	6 045 341			
1968	870 180	7 588 989			
1969	773 226	6 817 155			

¹ Quantity from 1836 to 1909 is gross mine output and includes material lost in picking and washing. For 1910 and subsequent years the quantity is that sold and used.

Table 13-A

Raw and Clean Coal Produced 1973 - 1987

Year	RAW COAL PRODUCED			CLEAN COAL PRODUCED		
	Metallurgical	Thermal	Total	Metallurgical	Thermal	Total
	t	t	t	t	t	t
1973	9 806 384	77 287	9 883 671	6 992 044	58 866	7 050 910
1974	9 503 578	658 697	10 162 275	7 133 053	607 337	7 740 390
1975	12 160 856	777 937	12 938 793	8 813 069	766 733	9 579 802
1976	9 405 065	724 935	10 130 000	6 785 282	713 087	7 498 369
1977	10 564 568	993 022	11 557 590	7 793 920	786 729	8 580 649
1978	11 093 352	1 285 863	12 379 215	8 034 021	1 059 027	9 093 048
1979	13 412 935	1 214 796	14 627 731	9 676 908	906 742	10 583 650
1980	12 901 844	1 261 669	14 163 513	9 098 175	1 058 050	10 156 225
1981	14 547 742	941 878	15 489 620	10 897 614	844 912	11 742 526
1982	13 814 671	3 329 186	17 143 857	9 392 743	2 285 967	11 678 710
1983	13 622 766	3 803 893	17 426 659	9 519 149	2 448 017	11 967 166
1984	24 880 222	6 102 218	30 982 440	16 235 856	4 445 512	20 681 368
1985	—	—	35 110 354	19 439 640	3 697 432	23 137 072
1986	—	—	33 164 116	16 783 646	2 303 864	19 087 510
1987	—	—	34 431 391	18 553 253	4 227 957	22 781 210

Table 14-A

Clean Coal Sold & Used 1973 - 1987

Year	METALLURGICAL			THERMAL		
	Quantity	Value	Average Price / t	Quantity	Value	Average Price / t
	t	\$	\$	t	\$	\$
1973	6 853 120	87 406 677	\$12.75	71 613	569 428	\$7.95
1974	7 261 404	149 025 665	\$20.52	496 036	5 567 978	\$11.22
1975	8 104 102	305 484 901	\$37.70	820 714	11 626 843	\$14.17
1976	6 824 493	283 753 979	\$41.58	713 202	14 929 700	\$20.93
1977	7 615 953	314 316 005	\$41.27	808 228	14 530 878	\$17.98
1978	8 530 370	361 254 854	\$42.35	933 550	20 640 387	\$22.11
1979	9 591 975	412 392 598	\$42.99	978 395	26 887 554	\$27.48
1980	9 654 317	423 128 068	\$43.83	1 169 213	38 364 789	\$32.81
1981	10 811 498	518 427 584	\$47.95	941 123	35 843 708	\$38.09
1982	8 399 674	487 004 686	\$57.98	2 246 068	79 873 554	\$35.56
1983	9 317 051	491 949 790	\$52.80	2 163 247	63 839 406	\$29.51
1984	16 302 413	895 175 302	\$54.91	4 437 312	112 344 368	\$25.32
1985	17 767 454	899 930 036	\$50.65	4 845 356	128 387 165	\$26.50
1986	16 690 177	828 539 190	\$49.64	4 146 686	105 875 059	\$25.53
1987	18 019 842	801 967 324	\$44.50	4 567 010	90 554 635	\$19.83

Table 15-A

**Clean Coal Sold & Used
1973 - 1987**

Year	TOTAL METALLURGICAL & THERMAL COAL		
	Quantity	Value	Average Price Per t
	t	\$	\$
1973	6 924 733	87 976 105	\$12.70
1974	7 757 440	154 593 643	\$19.93
1975	8 924 816	317 111 744	\$35.53
1976	7 537 695	298 683 679	\$39.63
1977	8 424 181	328 846 883	\$39.04
1978	9 463 920	381 895 241	\$40.35
1979	10 570 370	439 280 152	\$41.56
1980	10 823 530	461 492 857	\$42.64
1981	11 752 621	554 271 292	\$47.16
1982	10 645 742	566 878 240	\$53.25
1983	11 480 298	555 789 196	\$48.41
1984	20 739 725	1 007 519 670	\$48.58
1985	22 612 810	1 028 317 201	\$45.47
1986	20 836 863	934 414 249	\$44.84
1987	22 586 852	892 521 959	\$39.52

Table 16-A (86)

Coal Production By Mine 1986

Mine	RAW COAL PRODUCTION			Clean Coal Production	Coal Used Making Coke and Plant Use
	Surface	Underground	Total		
	t	t	t	t	t
<i>Fort Steele Mining Division</i>					
Byron Creek Collieries Ltd. Thermal	1 058 725	—	1 058 725	874 827	—
Crows Nest Resources ... Metallurgical	2 313 608	—	2 313 608	—	—
Thermal	—	—	—	—	—
Fording Coal Ltd. Metallurgical	7 445 692	—	7 445 692	4 627 363	—
Thermal	—	—	—	492 816	35 700
Westar Mining Ltd. (Balmer) Metallurgical	5 270 260	50 584	5 320 844	3 483 414	—
Thermal	—	—	—	79 946	—
Westar Mining Ltd.(Greenhills) Metallurgical	2 889 759	—	2 889 759	1 694 393	—
Thermal	—	—	—	741 220	—
Total - Fort Steele	18 978 044	50 584	19 028 628	11 993 979	35 700
<i>Liard Mining Division</i>					
Bullmoose Operating Corp. Metallurgical	2 950 000	—	2 950 000	1 777 054	—
Thermal	—	—	—	10 000	22 256
Quintette Coal Ltd. Metallurgical	11 185 488	—	11 185 488	5 201 422	22 666
Thermal	—	—	—	105 055	38 709
Total - Liard	14 135 488	—	14 135 488	7 093 531	83 631
TOTALS - 1986	33 113 532	50 584	33 164 116	16 783 646	22 666
Metallurgical	—	—	—	88%	19%
Per Cent of 1986 totals .	-	-	-		
Thermal	—	—	—	2 303 864	96 665
Per Cent of 1986 totals .	-	-	-	12%	81%
GRAND TOTALS . - 1986	33 113 532	50 584	33 164 116	19 087 510	119 331

Table 17-A (86)

Coal Sales By Mine 1986

	COAL SALES						
	Canada			U.S.A.	Japan	Others	Total
	B.C.	Other Prov.	Total				
Fort Steele Mining Division	t	t	t	t	t	t	t
Byron Creek Collieries Ltd. (Byron Creek) Thermal	35 181	550 480	585 661	—	118 578	227 837	932 076
Crows Nest Resources Ltd. (Line Creek) Metallurgical	—	—	—	—	704 742	301 204 833 604	1 005 946 833 604
Fording Coal Ltd. (Fording) Metallurgical	32 859	23 210	56 069	285 469	2 759 564	1 480 609 175 967	4 581 711 459 439
Thermal	104 756	—	104 756	—	178 716		
Westar Mining Ltd. (Balmer) Metallurgical	—	842	842	38	1 596 286	1 376 267 305 324	2 973 433 874 103
Thermal	—	11 089	11 089	28 809	528 881		
Westar Mining Ltd. (Greenhills) Metallurgical	—	—	—	9 023	528 497 726 686	1 233 781	1 771 301 726 686
Thermal	—	—	—	—	—	—	—
Total - Fort Steele	172 796	585 621	758 417	294 530	6 418 760	6 686 592	14 158 299
Liard Mining Division							
Bullmoose Operating Corp. (Bullmoose) Metallurgical	—	—	—	—	1 720 920	—	1 720 920
Thermal	—	—	—	—	—	—	—
Quintette Coal Ltd. (Quintette) Metallurgical	—	—	—	—	4 614 200	—	4 614 200
Thermal	—	—	—	—	224 113	—	224 113
Total - Liard	—	—	—	—	6 559 233	—	6 559 233
TOTALS - 1986							
Metallurgical	32 859	24 052	56 911	294 530	11 924 209	4 391 861	16 667 511
Per Cent of 1986 totals	19%	4%	8%	91%	92%	66%	80%
Thermal	139 937	561 569	701 506	28 809	1 050 288	2 269 418	4 050 021
Per Cent of 1986 totals	81%	96%	92%	9%	8%	34%	20%
GRAND TOTALS - 1986	172 796	585 621	758 417	323 339	12 974 497	6 661 279	20 717 532

Table 16-A (87)

Coal Production By Mine

1987

Mine	RAW COAL PRODUCTION			Clean Coal Production	Coal Used Making Coke and Plant Use
	Surface	Underground	Total		
	t	t	t	t	t
Fort Steele Mining Division					
Byron Creek Collieries Ltd.	1 126 889	—	1 126 889		
Metallurgical	—	—	—	177 454	—
Thermal	—	—	—	614 672	—
Crows Nest Resources ...	2 473 197	—	2 473 197		
Metallurgical	—	—	—	1 152 065	—
Thermal	—	—	—	567 815	—
Fording Coal Ltd.	7 396 721	—	7 396 721		
Metallurgical	—	—	—	5 081 895	
Thermal	—	—	—	837 617	45 042
Westar Mining Ltd. (Balmer)	7 821 423	—	7 821 423		
Metallurgical	—	—	—	3 734 298	20 470
Thermal	—	—	—	1 325 841	—
Westar Mining Ltd.(Greenhills)	4 287 514	—	4 287 514		
Metallurgical	—	—	—	2 255 121	—
Thermal	—	—	—	872 975	—
Total - Fort Steele	23 105 744	—	23 105 744	16 619 753	65 512
Liard Mining Division					
Bullmoose Operating Corp.	2 338 200	—	2 338 200		
Metallurgical	—	—	—	1 700 168	—
Thermal	—	—	—	—	—
Quintette Coal Ltd.	8 987 447	—	8 987 447		
Metallurgical	—	—	—	4 452 252	10 482
Thermal	—	—	—	9 037	40 028
Total - Liard	11 325 647	—	11 325 647	6 161 457	50 510
TOTALS - 1987	34 431 391	—	34 431 391		
Metallurgical	—	—	—	18 553 253	30 952
Per Cent of 1987 totals .	-	-	-	81%	27%
Thermal	—	—	—	4 227 957	85 070
Per Cent of 1987 totals -	-	-	-	19%	73%
GRAND TOTALS - 1987	34 431 391	—	34 431 391	22 781 210	116 022

Table 17-A (87)

Coal Sales By Mine

1987

	COAL SALES						
	Canada			U.S.A.	Japan	Others	Total
	B.C.	Other Prov.	Total				
Fort Steele Mining Division	t	t	t	t	t	t	t
Byron Creek Collieries Ltd. (Byron Creek)							
Metallurgical	—	580 423	580 423	—	162 589 32 016	—	162 589 612 439
Thermal	—	—	—	—	—	—	—
Crows Nest Resources Ltd. (Line Creek)							
Metallurgical	—	—	—	—	792 633	369 105 735 375	1 161 738 735 375
Thermal	—	—	—	—	—	—	—
Fording Coal Ltd. (Fording)							
Metallurgical	12 993	173 907	186 900	615 100	2 065 232 272 259	1 446 613 130 441	4 313 845 784 900
Thermal	114 804	267 396	382 200	—	—	—	—
Westar Mining Ltd. (Balmer)							
Metallurgical	430	595	1 025	19 564	1 904 138 835 911	1 877 562 285 277	3 802 289 1 364 903
Thermal	48 848	144 730	193 578	50 137	—	—	—
Westar Mining Ltd. (Greenhills)							
Metallurgical	—	—	—	—	314 937	1 810 466 984 323	2 125 403 984 323
Thermal	—	—	—	—	—	—	—
Total - Fort Steele	177 075	1 167 051	1 344 126	684 801	6 379 715	7 639 162	16 047 804
Liard Mining Division	—	—	—	—	—	—	—
Bullmoose Operating Corp. (Bullmoose)							
Metallurgical	—	—	—	—	—	—	—
Thermal	—	—	—	—	1 712 038	—	1 712 038
Quintette Coal Ltd. (Quintette)							
Metallurgical	—	—	—	—	—	—	—
Thermal	—	—	—	—	4 710 988	—	4 710 988
Total - Liard	—	—	—	—	—	—	—
TOTALS - 1987							
Metallurgical	13 423	174 502	187 925	634 664	11 662 555	5 503 746	17 988 890
Per Cent of 1987 totals	8%	15%	14%	93%	91%	72%	80%
Thermal	163 652	992 549	1 156 201	50 137	1 140 186	2 135 416	4 481 940
Per Cent of 1987 totals	92%	85%	86%	7%	9%	28%	20%
GRAND TOTALS - 1987....	177 075	1 167 051	1 344 126	684 801	12 802 741	7 639 162	22 470 830

Table 18-A (86)

Destination of Metallurgical Coal¹

Clean Coal Sold — 1986

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
B.C.	t	t	t	t	t	t	t
Other Canadian	—	—	—	—	32 859	—	—
- Total Domestic	—	—	842	—	23 210	—	—
	—	—	842	—	56 069	—	—
FOREIGN							
ASIA							
Hong Kong	—	—	—	—	—	—	—
Japan	1 720 920	4 614 200	1 596 286	—	2 759 564	528 497	704 742
Korea	—	—	380 619	—	503 163	780 014	153 357
Pakistan	—	—	189 831	—	—	38 500	—
Taiwan	—	—	51 910	—	295 786	201 068	—
-Total Asia	1 720 920	4 614 200	2 218 646	—	3 558 513	1 548 079	858 099
EUROPE							
Denmark	—	—	—	—	—	—	—
France	—	—	269 250	—	56 075	22 938	—
Netherlands	—	—	—	—	35 725	109 516	—
Portugal	—	—	—	—	69 727	—	—
Sweden	—	—	—	—	—	—	—
Turkey	—	—	—	—	—	—	—
U.K.	—	—	274 649	—	—	—	100 272
W. Germany	—	—	—	—	—	—	—
Other	—	—	—	—	—	60 810	—
-Total Europe	—	—	543 899	—	161 527	193 264	100 272
SOUTH AMERICA							
Brazil	—	—	152 746	—	371 853	20 935	47 575
Chile	—	—	57 262	—	120 199	—	—
-Total S. America	—	—	210 008	—	492 052	20 935	47 575
U.S.A.	—	—	38	—	285 469	9 023	—
Total Foreign	1 720 920	4 614 200	2 972 591	—	4 497 561	1 771 301	1 005 946
Other/Adjust.	—	—	—	—	28 081	—	—
Total All Sales	1 720 920	4 614 200	2 973 433	—	4 581 711	1 771 301	1 005 946

¹ Excludes coal used at plants and for making coke.

Table 19-A (86)

¹

Destination of Thermal Coal¹ Clean Coal Sold — 1986

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
B.C.	t	t	t	t	t	t	t
Other Canadian	—	—	—	35 181	104 756	—	—
- Total Domestic	—	—	11 089	550 480	—	—	—
FOREIGN							
ASIA							
Hong Kong	—	—	—	—	—	184 211	—
Japan	—	224 113	528 881	118 578	178 716	—	—
Korea	—	—	57 385	—	117 027	156 586	806 992
Pakistan	—	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—	—
-Total Asia	—	224 113	586 266	118 578	295 743	340 797	806 992
EUROPE							
Denmark	—	—	—	—	—	277 746	—
France	—	—	88 919	224 341	—	108 143	—
Netherlands	—	—	—	—	19 632	—	—
Portugal	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—
Turkey	—	—	—	—	—	—	—
U.K.	—	—	—	—	—	—	—
W. Germany	—	—	54 405	—	—	—	—
-Total Europe	—	—	143 324	224 341	19 632	385 889	—
SOUTH AMERICA							
Brazil	—	—	—	—	—	—	—
Chile	—	—	—	—	—	—	—
-Total S. America	—	—	—	—	—	—	—
U.S.A.	—	—	28 809	—	—	—	—
Total Foreign	—	224 113	758 399	342 919	315 375	726 686	806 992
Other/Adjust.	—	—	104 615	3 496	39 308	15 109	26 612
Total All Sales	—	224 113	874 103	932 076	459 439	741 795	833 604

¹ Excludes coal used at plants and for making coke.

Table 20-A (86)

Destination of B.C. Coal¹

Total Clean Coal Sold — 1986

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
	t	t	t	t	t	t	t
B.C.	—	—	—	35 181	137 615	—	—
Other Canadian	—	—	11 931	550 480	23 210	—	—
- Total Domestic	—	—	11 931	585 661	160 825	—	—
FOREIGN							
ASIA							
Hong Kong	—	—	—	—	—	184 211	—
Japan	1 720 920	4 838 313	2 125 167	118 578	2 938 280	528 497	704 742
Korea	—	—	438 004	—	620 190	936 600	960 349
Pakistan	—	—	189 831	—	—	38 500	—
Taiwan	—	—	51 910	—	295 786	201 068	—
-Total Asia	1 720 920	4 838 313	2 804 912	118 578	3 854 256	1 888 876	1 665 091
EUROPE							
Denmark	—	—	—	—	—	277 746	—
France	—	—	358 169	224 341	56 075	131 081	—
Netherlands	—	—	—	—	55 357	109 516	—
Portugal	—	—	—	—	69 727	—	—
Sweden	—	—	—	—	—	—	—
Turkey	—	—	—	—	—	—	—
U.K.	—	—	274 649	—	—	—	100 272
W. Germany	—	—	54 405	—	—	—	—
-Total Europe	—	—	687 223	224 341	181 159	579 153	100 272
SOUTH AMERICA							
Brazil	—	—	152 746	—	371 853	20 935	47 575
Chile	—	—	57 262	—	120 199	—	—
-Total S. America	—	—	210 008	—	492 052	20 935	47 575
U.S.A.	—	—	28 847	—	285 469	9 023	—
Total Foreign	1 720 920	4 838 313	3 730 990	342 919	4 812 936	2 497 987	1 812 938
Other/Adjust.	—	—	104 615	3 496	67 389	—	26 612
Total All Sales	1 720 920	4 838 313	3 847 536	932 076	5 041 150	2 513 096	1 839 550

¹ Excludes coal used at plants and for making coke.

Table 21-A (86)

Destination of All British Columbia Coal¹

By Region — 1986

	NORTHEAST COAL REGION		SOUTHEAST COAL REGION		TOTAL	
	Metallurgical	Thermal	Metallurgical	Thermal	Metallurgical	Thermal
.....	t	t	t	t	t	t
B.C.	—	—	32 859	139 937	32 859	139 937
Other Canadian	—	—	24 052	561 569	24 052	561 569
Total Domestic	—	—	56 911	701 506	56 911	701 506
FOREIGN						
ASIA						
Hong Kong	—	—	—	184 211	—	254 205
Japan	6 335 120	224 113	5 589 089	826 175	11 662 555	1 140 186
Korea	—	—	1 817 153	1 137 990	2 392 145	1 177 693
Pakistan	—	—	228 331	—	217 467	—
Taiwan	—	—	548 764	—	564 715	—
-Total Asia	6 335 120	224 113	8 183 337	2 148 376	14 836 882	2 572 084
EUROPE						
Denmark	—	—	—	277 746	—	301 819
France	—	—	348 263	421 403	370 028	229 448
Netherlands	—	—	145 241	19 632	257 568	20 000
Portugal	—	—	69 727	—	206 906	—
Sweden	—	—	—	—	53 822	—
Turkey	—	—	—	—	52 946	—
U.K.	—	—	374 921	—	334 086	—
W. Germany	—	—	60 810	54 405	—	113 517
-Total Europe	—	—	998 962	773 186	1 275 356	664 784
SOUTH AMERICA						
Brazil	—	—	593 109	—	752 107	37 750
Chile	—	—	177 461	—	153 426	—
-Total S. America	—	—	770 570	—	905 533	37 750
U.S.A.	—	—	294 530	28 809	761 777	50 137
Total Foreign	6 335 120	224 113	10 247 399	2 950 371	17 779 548	3 324 755
Other/Adjust.	—	—	28 081	189 140	21 417	984
Total All Sales	6 335 120	224 113	10 332 391	3 841 017	17 857 876	4 027 245

¹ Excludes coal used at plants and for making coke.

Table 18-A (87)

Destination of Metallurgical Coal¹

Clean Coal Sold — 1987

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
	t	t	t	t	t	t	t
B.C.	—	—	430	—	12 993	—	—
Other Canadian	—	—	595	—	173 907	—	—
Total	—	—	1 025	—	186 900	—	—
FOREIGN							
ASIA							
Hong Kong	—	—	—	—	—	—	—
Japan	1 712 038	4 710 988	1 904 138	162 589	2 065 232	314 937	792 633
Korea	—	—	641 989	—	554 433	1 077 598	118 125
Pakistan	—	—	217 467	—	—	—	—
Taiwan	—	—	—	—	287 263	277 452	—
-Total Asia	1 712 038	4 710 988	2 763 594	162 589	2 906 928	1 669 987	910 758
EUROPE							
Denmark	—	—	—	—	—	—	—
France	—	—	264 682	—	105 346	—	—
Netherlands	—	—	—	—	35 518	222 050	—
Portugal	—	—	—	—	131 832	75 074	—
Sweden	—	—	53 822	—	—	—	—
Turkey	—	—	—	—	—	52 946	—
U.K.	—	—	220 637	—	—	—	113 449
W. Germany	—	—	—	—	—	—	—
-Total Europe	—	—	539 141	—	167 350	455 416	113 449
SOUTH AMERICA							
Brazil	—	—	397 190	—	345 503	—	9 414
Chile	—	—	61 395	—	92 031	—	—
-Total S. America	—	—	458 585	—	437 534	—	9 414
U.S.A.	—	—	19 564	—	615 100	—	127 113
Total Foreign	1 712 038	4 710 988	3 780 884	162 589	4 126 912	2 125 403	1 160 734
Other/Adjust.	—	—	20 380	—	33	—	1 004
Total All Sales	1 712 038	4 710 988	3 802 289	162 589	4 313 845	2 125 403	1 161 738

¹Excludes coal used at plants and for making coke.

Table 19-A (87)

Destination of Thermal Coal¹

Clean Coal Sold — 1987

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
B.C.	t	t	t	t	t	t	t
Other Canadian	—	—	48 848	—	114 804	—	—
TOTAL	—	—	144 730	580 423	267 396	—	—
FOREIGN							
ASIA							
Hong Kong	—	—	—	—	—	254 205	—
Japan	—	—	835 911	32 016	272 259	—	—
Korea	—	—	86 705	—	110 437	246 156	734 395
Pakistan	—	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—	—
-Total Asia	—	—	922 616	32 016	382 696	500 361	734 395
EUROPE							
Denmark	—	—	—	—	—	301 819	—
France	—	—	119 993	—	—	109 455	—
Netherlands	—	—	—	—	20 000	—	—
Portugal	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—
Turkey	—	—	—	—	—	—	—
U.K.	—	—	—	—	—	—	—
W. Germany	—	—	56 579	—	—	56 938	—
-Total Europe	—	—	176 572	—	20 000	468 212	—
SOUTH AMERICA							
Brazil	—	—	22 000	—	—	15 750	—
Chile	—	—	—	—	—	—	—
-Total S. America	—	—	22 000	—	—	15 750	—
U.S.A.	—	—	50 137	—	—	—	—
Total Foreign	—	—	1 171 325	32 016	402 696	984 323	734 395
Other/Adjust.	—	—	—	—	4	—	980
Total All Sales	—	—	1 364 903	612 439	784 900	984 323	735 375

¹ Excludes coal used at plants and for making coke.

Table 20-A (87)

Destination of Coal¹

Total Clean Coal Sold — 1987

	Bullmoose	Quintette	Balmer	Byron Creek	Fording	Greenhills	Line Creek
	t	t	t	t	t	t	t
B.C.	—	—	49 278	—	127 797	—	—
Other Canadian	—	—	145 325	580 423	441 303	—	—
- Total Domestic	—	—	194 603	580 423	569 100	—	—
FOREIGN							
ASIA							
Hong Kong	1 712 038	4 710 988	2 740 049	194 605	2 337 491	254 205	—
Japan	—	—	728 694	—	664 870	314 937	792 633
Korea	—	—	217 467	—	—	1 323 754	852 520
Pakistan	—	—	—	—	287 263	277 452	—
Taiwan	—	—	—	—	3 289 624	2 170 348	1 645 153
-Total Asia	1 712 038	4 710 988	3 686 210	194 605	—	—	—
EUROPE							
Denmark	—	—	384 675	—	—	301 819	—
France	—	—	—	—	—	214 801	—
Netherlands	—	—	—	—	55 518	222 050	—
Portugal	—	—	53 822	—	131 832	75 074	—
Sweden	—	—	—	—	—	52 946	—
Turkey	—	—	220 637	—	—	—	113 449
U.K.	—	—	56 579	—	—	56 938	—
W. Germany	—	—	715 713	—	187 350	923 628	113 449
-Total Europe	—	—	—	—	—	—	—
SOUTH AMERICA							
Brazil	—	—	419 190	—	345 503	15 750	9 414
Chile	—	—	61 395	—	92 031	—	—
-Total S. America	—	—	480 585	—	437 534	15 750	9 414
U.S.A.	—	—	69 701	—	615 100	—	127 113
Total Foreign	1 712 038	4 710 988	4 952 209	194 605	4 529 608	3 109 726	1 895 129
Other/Adjust..	—	—	20 380	—	37	—	1 984
Total All Sales	1 712 038	4 710 988	5 167 192	775 028	5 098 745	3 109 726	1 897 113

¹ Excludes coal used at plants and for making coke.

Table 21-A (87)

Destination of All British Columbia Coal¹

By Region — 1987

	NORTHEAST COAL REGION		SOUTHEAST COAL REGION		TOTAL	
	Metallurgical	Thermal	Metallurgical	Thermal	Metallurgical	Thermal
B.C.	—	—	13 423	163 652	13 423	163 652
Other Canadian	—	—	174 502	992 549	174 502	992 549
Total Domestic	—	—	187 925	1 156 201	187 925	1 156 201
FOREIGN						
ASIA	—	—	—	—	—	—
Hong Kong	—	—	—	254 205	—	254 205
Japan	6 423 026	—	5 239 529	1 140 186	11 662 555	1 140 186
Korea	—	—	2 392 145	1 177 693	2 392 145	1 177 693
Pakistan	—	—	217 467	—	217 467	—
Taiwan	—	—	564 715	—	564 715	—
-Total Asia	6 423 026	—	8 413 856	2 572 084	14 836 882	2 572 084
EUROPE						
Denmark	—	—	—	301 819	—	301 819
France	—	—	370 028	229 448	370 028	229 448
Netherlands	—	—	257 568	20 000	257 568	20 000
Portugal	—	—	206 906	—	206 906	—
Sweden	—	—	53 822	—	53 822	—
Turkey	—	—	52 946	—	52 946	—
U.K.	—	—	334 086	—	334 086	—
W. Germany	—	—	—	113 517	—	113 517
-Total Europe	—	—	1 275 356	664 784	1 275 356	664 784
SOUTH AMERICA						
Brazil	—	—	752 107	37 750	752 107	37 750
Chile	—	—	153 426	—	153 426	—
-Total S. America	—	—	905 533	37 750	905 533	37 750
U.S.A.	—	—	761 777	50 137	761 777	50 137
Total Foreign	6 423 026	—	11 356 522	3 324 755	17 779 548	3 324 755
Other/Adjust.....	—	—	21 417	984	21 417	984
Total All Sales	6 423 026	—	11 565 864	4 481 940	17 988 890	4 481 940

¹ Excludes coal used at plants and for making coke.

Table 22-A

Employment in Placer and Metal Mining 1901 - 1987

Year	Placer Mining	Metal Mine Underground	Metal Mine Surface	Metal Concentrators	Metal Smelters ¹	Metal Mine Total
1901	—	2 736	1 212	—	—	3 948
1902	—	2 219	1 126	—	—	3 345
1903	—	1 662	1 088	—	—	2 750
1904	—	2 143	1 163	—	—	3 306
1905	—	2 470	1 240	—	—	3 710
1906	—	2 680	1 303	—	—	3 983
1907	—	2 704	1 239	—	—	3 943
1908	—	2 567	1 127	—	—	3 694
1909	—	2 184	1 070	—	—	3 254
1910	—	2 472	1 237	—	—	3 709
1911	—	2 435	1 159	—	—	3 594
1912	—	2 472	1 364	—	—	3 836
1913	—	2 773	1 505	—	—	4 278
1914	—	2 741	1 433	—	—	4 174
1915	—	2 709	1 435	—	—	4 144
1916	—	3 357	2 036	—	—	5 393
1917	—	3 290	2 198	—	—	5 488
1918	—	2 626	1 764	—	—	4 390
1919	—	2 513	1 746	—	—	4 259
1920	—	2 074	1 605	—	—	3 679
1921	—	1 355	975	—	—	2 330
1922	—	1 510	1 239	—	—	2 749
1923	—	2 102	1 516	—	—	3 618
1924	—	2 353	1 680	—	—	4 033
1925	—	2 298	2 840	—	—	5 138
1926	299	2 606	1 735	808	2 461	7 610
1927	415	2 671	1 916	854	2 842	8 283
1928	355	2 707	2 469	911	2 748	8 835
1929	341	2 926	2 052	966	2 948	8 892
1930	425	2 316	1 260	832	3 197	7 605
1931	688	1 463	834	581	3 157	6 035
1932	874	1 355	900	542	2 036	4 833
1933	1 134	1 786	1 335	531	2 436	6 088
1934	1 122	2 796	1 729	631	2 890	8 046
1935	1 291	2 740	1 497	907	2 771	7 915
1936	1 124	2 959	1 840	720	2 678	8 197
1937	1 371	3 603	1 818	1 168	3 027	9 616
1938	1 303	3 849	2 266	919	3 158	10 192
1939	1 252	3 905	2 050	996	3 187	10 138
1940	1 004	3 923	2 104	1 048	2 944	10 019
1941	939	3 901	1 823	1 025	3 072	9 821
1942	489	2 920	1 504	960	3 555	8 939
1943	212	2 394	1 699	891	2 835	7 819
1944	255	1 896	1 825	849	2 981	7 551
1945	209	1 933	1 750	822	2 834	7 339
1946	347	1 918	1 817	672	2 813	7 220
1947	360	3 024	2 238	960	3 461	9 683
1948	348	3 143	2 429	1 126	3 884	10 582
1949	303	3 034	2 724	1 203	3 763	10 724
1950	327	3 399	2 415	1 259	3 759	10 832
1951	205	3 785	3 695	1 307	4 044	12 831
1952	230	4 171	3 923	1 516	4 120	13 730
1953	132	3 145	2 589	1 371	3 901	11 006
1954	199	2 644	2 520	1 129	3 119	9 412
1955	103	2 564	2 553	1 091	3 304	9 512
1956	105	2 637	2 827	1 043	3 339	9 846
1957	67	2 393	2 447	838	3 328	9 006

Table 22-A (Cont'd)

Employment in Placer and Metal Mining 1901 - 1987

Year	Placer Mining	Metal Mine Underground	Metal Mine Surface	Metal Concentrators	Metal Smelters ¹	Metal Mine Total
1958	75	1 919	1 809	625	3 081	7 434
1959	99	1 937	1 761	618	3 008	7 324
1960	86	1 782	1 959	648	3 034	7 423
1961	74	1 785	1 582	626	3 118	7 111
1962	35	1 677	1 976	949	3 356	7 958
1963	43	1 713	2 012	850	3 239	7 814
1964	5	1 839	1 967	822	3 281	7 909
1965	2	1 752	2 019	965	3 529	8 265
1966	2	2 006	2 296	1 014	3 654	8 970
1967	—	1 928	2 532	992	3 435	8 887
1968	—	1 823	2 369	1 072	3 283	8 547
1969	7	1 794	2 470	1 099	3 468	8 831
1970	—	2 160	3 167	1 331	3 738	10 396
1971	—	2 073	3 058	1 513	3 481	10 125
1972	—	1 833	3 463	1 734	3 353	10 383
1973	—	1 704	4 005	2 394	3 390	11 493
1974	—	1 509	4 239	2 352	2 767	10 867
1975	—	1 100	3 619	1 983	3 733	10 435
1976	—	1 268	3 733	2 048	3 542	10 591
1977	—	1 208	3 768	2 224	3 590	10 790
1978	—	1 009	3 874	2 029	3 838	10 750
1979	—	898	3 615	2 084	4 273	10 870
1980	—	1 012	4 173	2 463	4 800	12 448
1981	—	1 280	5 292	2 986	4 843	14 401
1982	—	1 318	4 722	2 366	4 177	12 583
1983	—	1 176	3 788	1 846	3 606	10 416
1984	—	851	3 335	1 662	3 360	9 208
1985	—	807	2 743	1 454	3 098	8 102
1986	—	828	2 919	1 681	2 284	7 712
1987	—	722	3 170	1 654	2 834	8 380

¹ Employment figures for smelters are not surveyed directly, but are included to show more complete mineral industry employment statistics.

Table 23-A

Employment in the Coal Industry

1901 - 1987

Year	Coal Underground	Coal Surface	Coal Total	Year	Coal Underground	Coal Surface	Coal Total
1901	3 041	933	3 974	1950	1 745	516	2 261
1902	3 101	910	4 011	1951	1 462	463	1 925
1903	3 137	1 127	4 264	1952	1 280	401	1 681
1904	3 278	1 175	4 453	1953	1 154	396	1 550
1905	3 127	1 280	4 407	1954	1 076	358	1 434
1906	3 415	1 390	4 805	1955	1 100	378	1 478
1907	2 862	907	3 769	1956	968	398	1 366
1908	4 432	1 641	6 073	1957	1 020	360	1 380
1909	4 713	1 705	6 418	1958	826	260	1 086
				1959	765	291	1 056
1910	5 903	1 855	7 758				
1911	5 212	1 661	6 873	1960	894	288	1 182
1912	5 275	1 855	7 130	1961	705	237	942
1913	4 950	1 721	6 671	1962	548	228	776
1914	4 267	1 465	5 732	1963	501	247	748
1915	3 708	1 283	4 991	1964	446	267	713
1916	3 694	1 366	5 060	1965	405	244	649
1917	3 760	1 410	5 170	1966	347	267	614
1918	3 658	1 769	5 427	1967	260	197	457
1919	4 145	1 821	5 966	1968	195	358	553
				1969	245	455	700
1920	4 191	2 158	6 349				
1921	4 722	2 163	6 885	1970	242	1 033	1 275
1922	4 712	1 932	6 644	1971	444	1 013	1 457
1923	4 342	1 807	6 149	1972	214	1 771	1 985
1924	3 894	1 524	5 418	1973	265	1 951	2 216
1925	3 828	1 615	5 443	1974	267	2 255	2 522
1926	3 757	1 565	5 322	1975	299	2 464	2 763
1927	3 646	1 579	5 225	1976	327	2 300	2 627
1928	3 814	1 520	5 334	1977	312	2 556	2 868
1929	3 675	1 353	5 028	1978	377	2 606	2 983
				1979	413	2 931	3 344
1930	3 389	1 256	4 645				
1931	2 957	1 125	4 082	1980	354	3 258	3 612
1932	2 628	980	3 608	1981	343	3 277	3 620
1933	2 241	853	3 094	1982	347	4 305	4 652
1934	2 050	843	2 893	1983	258	3 991	4 249
1935	2 145	826	2 971	1984	218	5 563	5 781
1936	2 015	799	2 814	1985	76	5 745	5 821
1937	2 286	867	3 153	1986	8	5 202	5 210
1938	2 088	874	2 962	1987	—	5 144	5 144
1939	2 167	809	2 976				
1940	2 175	699	2 874				
1941	2 229	494	2 723				
1942	1 892	468	2 360				
1943	2 240	611	2 851				
1944	2 150	689	2 839				
1945	1 927	503	2 430				
1946	1 773	532	2 305				
1947	1 694	731	2 425				
1948	1 594	872	2 466				
1949	1 761	545	2 306				

Table 24-A

Employment in Non-Metals Mining

1901 - 1987

Year	STRUCTURAL MATERIALS		Industrial Materials	Year	STRUCTURAL MATERIALS		Industrial Materials
	Quarries and Pits	Plants			Quarries and Pits	Plants	
1901	—	—	—	1950	1 916	616	660
1902	—	—	—	1951	1 783	628	491
1903	—	—	—	1952	1 530	557	529
1904	—	—	—	1953	1 909	559	634
1905	—	—	—	1954	1 861	638	584
1906	—	—	—	1955	1 646	641	722
1907	—	—	—	1956	1 598	770	854
1908	—	—	—	1957	1 705	625	474
1909	—	—	—	1958	1 483	677	446
				1959	1 357	484	459
1910	—	—	—	1960	1 704	557	589
1911	—	—	—	1961	1 828	508	571
1912	—	—	—	1962	1 523	481	517
1913	—	—	—	1963	909	460	528
1914	—	—	—	1964	1 293	444	509
1915	—	—	—	1965	1 079	422	639
1916	—	—	—	1966	1 269	393	582
1917	—	—	—	1967	1 309	372	584
1918	—	—	—	1968	1 207	380	582
1919	—	—	—	1969	1 097	549	567
1920	—	—	—	1970	740	647	627
1921	—	—	—	1971	846	794	666
1922	—	—	—	1972	1 116	800	527
1923	—	—	—	1973	898	802	667
1924	—	—	—	1974	895	782	646
1925	—	—	—	1975	826	725	705
1926	493	324	124	1976	931	680	670
1927	647	138	122	1977	1 380	626	766
1928	412	368	120	1978	734	460	618
1929	492	544	268	1979	931	601	726
1930	843	344	170				
1931	460	526	380	1980	473	940	728
1932	536	329	344	1981	131	562	678
1933	376	269	408	1982	131	442	554
1934	377	187	360	1983	122	389	554
1935	536	270	754	1984	117	375	437
1936	931	288	825	1985	471	436	410
1937	724	327	938	1986	426	557	419
1938	900	295	369	1987	419	650	411
1939	652	311	561				
1940	827	334	647				
1941	766	413	422				
1942	842	378	262				
1943	673	326	567				
1944	690	351	628				
1945	921	335	586				
1946	827	555	679				
1947	977	585	869				
1948	1 591	656	754				
1949	2 120	542	626				

Table 25-A

Employment in the Solid Mineral Industry 1901 - 1987

Year	Total - Mineral Industry	Year	Total - Mineral Industry	Year	Total - Mineral Industry
1901	7 922	1930	14 032	1960	11 541
1902	7 356	1931	12 171	1961	11 034
1903	7 014	1932	10 524	1962	11 560
1904	7 759	1933	11 369	1963	10 952
1905	8 117	1934	12 985	1964	11 645
1906	8 788	1935	13 737	1965	12 283
1907	7 712	1936	14 179	1966	14 202
1908	9 767	1937	16 129	1967	13 380
1909	9 672	1938	16 021	1968	15 659
		1939	15 890	1969	16 437
1910	11 467				
1911	10 467	1940	15 705	1970	19 086
1912	10 966	1941	15 084	1971	18 423
1913	10 949	1942	13 270	1972	19 470
1914	9 906	1943	12 448	1973	19 922
1915	9 135	1944	12 314	1974	19 069
1916	10 453	1945	11 820	1975	18 903
1917	10 658	1946	11 933	1976	19 095
1918	9 817	1947	14 899	1977	20 457
1919	10 225	1948	16 397	1978	19 273
		1949	16 621	1979	20 668
1920	10 028	1950	16 612		
1921	9 215	1951	17 863	1980	24 363
1922	9 393	1952	18 257	1981	26 891
1923	9 767	1953	15 790	1982	25 450
1924	9 451	1954	14 128	1983	19 898
1925	10 581	1955	14 102	1984	21 034
1926	14 172	1956	14 539	1985	19 863
1927	14 830	1957	13 257	1986	17 974
1928	15 424	1958	11 201	1987	21 324
1929	15 565	1959	10 779		

Table 26-A (86)

Employment At Major B.C. Mines 1986

Name of Operator and Mine	Administrative	Mine Surface	Mine Underground	Mill -	Others -	Total Average Employment	Peak Employment
METAL MINES							
Afton	16	128	—	71	—	215	215
Beaverdell	6	5	15	7	—	33	33
Bell	20	67	—	145	—	232	232
Blackdome	15	—	20	15	47	97	97
Brenda	95	173	—	124	—	392	392
Craigmont	3	—	—	—	—	3	3
Endako	28	23	—	45	—	96	96
Equity Silver	49	94	—	172	—	315	315
Erickson	—	17	8	2	—	27	81
Gibraltar	85	66	—	187	3	341	341
Highland Valley Copper	55	343	—	246	—	643	1 286
Island Copper	130	449	—	166	—	745	745
Lornex	42	223	—	106	48	418	835
Mosquito Creek	1	1	3	1	—	6	15
Myra Falls Operations	126	127	266	54	—	573	573
Silvana	4	—	19	12	—	35	35
Similkameen	73	138	—	109	—	320	320
Sullivan	60	—	489	131	—	680	680
Taurus	2	—	8	16	—	26	26
Valley Copper	44	108	—	74	6	231	462
Total Metal Mines	854	1 962	828	1 681	103	5 428	6 782
Average Metal Mines	43	98	41	84	5	271	339
INDUSTRIAL MINERALS							
Cassiar	91	35	—	173	—	299	299

Peak Employment is calculated by totalling the number of people employed at the end of each month divided by the number of months the mine was in operation. This number gives the best measure of the normal operational workforce in a given year. Total Annual Average is the total number of people employed divided by 12 months. This figure is comparable to previously published annual statistics of direct employment in the mining industry, and is used to calculate the total employment figure for each industry.

Table 26-A (87)

Employment At Major B.C. Mines

1987

Name of Operator and Mine	Administrative	Mine Surface	Mine Underground	Mill -	Others -	Total Average Employment	Peak Employment
METAL MINES							
Afton	16	100	—	61	—	177	177
Beaverdell	7	5	17	8	—	37	37
Bell	20	68	—	146	—	234	234
Blackdome	10	—	33	28	42	113	113
Brenda	99	176	—	124	—	399	392
Endako	34	—	26	75	—	135	135
Equity Silver	40	93	—	162	—	295	295
Erickson	13	8	54	12	33	120	120
Gibraltar	70	61	—	162	7	300	300
Highland Valley Copper.....	114	724	—	393	172	1 403	1 403
Island Copper	114	389	—	153	—	656	656
Mosquito Creek	2	—	9	7	—	18	18
Myra Falls Operations	102	44	287	58	—	491	491
Nickel Plate	29	70	9	45	—	153	153
Silvana	4	6	21	11	—	42	42
Similkameen	65	179	—	83	—	327	327
Sullivan	35	216	254	109	—	614	866
Taurus	3	—	12	17	—	32	32
Total Metal Mines	777	2 139	722	1 654	254	5 546	5 791
Average Metal Mines	43	119	40	92	14	308	322
INDUSTRIAL MINERALS							
Cassiar - (Asbestos)	91	35	—	173	—	299	299

Peak Employment is calculated by totalling the number of people employed at the end of each month divided by the number of months the mine was in operation. This number gives the best measure of the normal operational workforce in a given year. Total Annual Average is the total number of people employed divided by 12 months. This figure is comparable to previously published annual statistics of direct employment in the mining industry, and is used to calculate the total employment figure for each industry.

Table 27-A (86)

Employment At Major B.C. Coal Mines 1986

Name of Operator and Mine	Adminis-trative	Mine Surface	Mine Underground	Mill -	Others -	Total Average Employment	Peak Employment
Balmer	137	912	8	168	—	1 225	1 225
Bullmoose	—	392	—	71	—	463	463
Byron Creek	56	108	—	22	—	186	186
Fording	103	926	—	109	—	1 138	1 138
Greenhills	11	425	—	75	—	511	511
Line Creek	108	179	—	182	—	469	469
Quintette	180	826	—	212	—	1 218	1 218
Total Coal Mines	595	3 768	8	839	—	5 210	5 210
Average Coal Mines	85	538	1	120	—	744	744

Peak Employment is calculated by totalling the number of people employed at the end of each month divided by the number of months the mine was in operation. This number gives the best measure of the normal operational workforce in a given year. Total Annual Average is the total number of people employed divided by 12 months. This figure is comparable to previously published annual statistics of direct employment in the mining industry, and is used to calculate the total employment figure for each industry.

Table 27-A (87)

Employment At Major B.C. Coal Mines 1987

Name of Operator and Mine	Administrative	Mine Surface	Mine Underground	Mill -	Others -	Total Average Employment	Peak Employment
Balmer	122	884	—	166	—	1 172	1 172
Bullmoose	9	329	—	67	—	405	405
Byron Creek	49	60	—	31	—	140	140
Fording	50	759	—	118	100	1 027	1 027
Greenhills	46	423	—	79	46	594	594
Line Creek	98	265	—	50	13	426	426
Quintette	172	982	—	226	—	1 380	1 380
Total Coal Mines	546	3 702	—	737	159	5 144	5 144
Average Coal Mine	78	529	—	105	23	735	735

Peak Employment is calculated by totalling the number of people employed at the end of each month divided by the number of months the mine was in operation. This number gives the best measure of the normal operational workforce in a given year. Total Annual Average is the total number of people employed divided by 12 months. This figure is comparable to previously published annual statistics of direct employment in the mining industry, and is used to calculate the total employment figure for each industry.

Table 28-A (86)

Operating Statistics - B.C. Metal Mines

1986

Name of Mine					
	Tonnes Mined	Tonnes Milled	Reported Rated Capacity (Tonnes Per Day)	Days Operating (Mine)	Days Operating (Mill)
Metal Mines					
Afton	3 650 651	2 693 784	7 711	365	365
Beaverdell	34 119	34 119	91	229	325
Bell	5 761 215	5 333 126	14 969	365	365
Blackdome	36 323	33 808	180	356	221
Brenda	10 322 720	10 203 918	21 773	340	340
Endako	1 468 800	1 466 000	27 500	144	146
Equity Silver	2 650 917	2 958 700	6 800	355	365
Erickson	29 397	24 645	250	312	80
Gibraltar	12 281 220	12 182 335	37 195	362	362
Highland Valley Copper ¹	20 700 452	20 617 460	116 000	187	187
Island Copper	17 457 049	17 484 419	45 000	354	365
Lornex ¹	15 864 000	15 943 000	87 000	181	181
Mosquito Creek	4 285	4 285	61	94	70
Myra Falls Operations ...	1 066 664	1 066 664	3 000	302	361
Silvana	23 381	21 929	100	365	365
Similkameen	6 922 042	6 876 042	19 504	358	365
Sullivan	1 275 590	1 859 100	7 208	228	264
Taurus	26 872	37 145	150	229	344
Valley Copper ¹	5 054 984	4 929 403	21 000	181	181
Total Metal Mines	104 630 681	103 769 882	415 492	5 327	5 252
Average Metal Mines	5 506 878	5 461 573	21 868	280	276

¹ Six months operation only. Lornex and Valley Copper amalgamated to form Highland Valley Copper in mid-1986.

Table 28-A (87)

Operating Statistics - B.C. Metal Mines

1987

Name of Mine					
	Tonnes Mined	Tonnes Milled	Reported Rated Capacity (Tonnes Per Day)	Days Operating (Mine)	Days Operating (Mill)
Metal Mines					
Afton	3 354 857	2 861 570	7 711	365	365
Beaverdell	36 352	36 352	107	251	355
Bell	5 388 921	5 409 541	17 000	365	365
Blackdome	74 001	74 001	181	365	365
Brenda	10 500 400	10 291 405	30 000	342	342
Endako	4 594 600	4 716 500	27 500	362	363
Equity Silver	4 841 950	3 610 050	9 891	355	365
Erickson	90 233	86 346	272	365	328
Gibraltar	12 589 849	12 575 334	36 300	364	364
Highland Valley Copper .	41 992 321	41 999 458	113 000	365	365
Island Copper	19 009 358	18 837 431	45 000	364	365
Mosquito Creek	4 672	4 672	91	210	106
Myra Falls Operations ..	1 089 796	1 089 805	3 500	365	365
Nickel Plate	436 684	333 814	2 449	355	275
Silvana	27 745	25 653	113	245	244
Similkameen	7 011 821	6 974 560	19 051	355	365
Sullivan	1 264 303	1 686 600	9 100	249	244
Taurus	25 322	37 522	150	305	200
Total Metal Mines	111 243 389	110 650 605	321 416	5 947	5 741
Average Metal Mines	5 854 915	5 823 716	16 917	313	302

Table 29-A (86)

Major Active Metal Mines 1986

MINE NAME	PREVIOUS OR OTHER NAME	LOCATION	OPERATOR
Afton		Kamloops	Afton Mines Ltd.
Beaverdell	Highland Bell	Beaverdell	Teck Corporation
Bell	Newman	Babine Lake	McLaren Forest Products Inc.
Blackdome		Clinton	Blackdome Mining Corp.
Brenda		Brenda Lake	Brenda Mines Ltd.
Craigmont ¹		Merritt	Craigmont Mines Ltd.
Endako		Endako	Placer Development Ltd.
Equity Silver	Sam Goosly	Houston	Equity Silver Mines Ltd.
Erickson		McDame Lake	Erickson Gold Mines Ltd.
Gibraltar		McLeese Lake	Gibraltar Mines Ltd.
Highland Valley Copper	Bethlehem, Lornex Valley Copper	Highland Valley	Highland Valley Copper
Island Copper		Rupert Inlet	Utah Mines Ltd.
Lornex ²		Highland Valley	Lornex Mining Corp.
Mosquito Creek		Wells	Mosquito Consolidated Gold Mines Ltd.
Myra Falls Operations	Lynx, Myra, Price	Buttle Lake	Westmin Resources Ltd.
Nickel Plate	Johnny Mountain	Penticton	Mascot Gold Mines Ltd.
Silvana	Silmonac, Minniehaha	New Denver	Dickenson Mines Ltd.
Similkameen	Ingerbelle	Princeton	Newmont Mines Ltd.
Sullivan		Kimberley	Cominco Ltd.
Taurus		Cassiar	Taurus Resources Ltd.
Valley Copper ²		Highland Valley	Cominco Ltd.

¹ Shipped from stockpile only² Amalgamated to form Highland Valley Copper in 1986

The names of mining operations may change in the intervening period before publication.
Names are as of the year reported.

Table 29-A (87)

Major Active Metal Mines 1987

MINE NAME	PREVIOUS OR OTHER NAME	LOCATION	OPERATOR
Afton		Kamloops	Afton Mines Ltd.
Beaverdell	Highland Bell	Beaverdell	Teck Corporation
Bell	Newman	Babine Lake	McLaren Forest Products Inc.
Blackdome		Clinton	Blackdome Mining Corp.
Brenda		Brenda Lake	Brenda Mines Ltd.
Craigmont ¹		Merritt	Craigmont Mines Ltd.
Endako		Endako	Placer Development Ltd.
Equity Silver	Sam Goosly	Houston	Equity Silver Mines Ltd.
Erickson		McDame Lake	Erickson Gold Mines Ltd.
Gibraltar		McLeese Lake	Gibraltar Mines Ltd.
Highland Valley Copper	Bethlehem, Lornex, Valley Copper	Highland Valley	Highland Valley Copper
Island Copper		Rupert Inlet	Utah Mines Ltd.
Mosquito Creek		Wells	Mosquito Consolidated Gold Mines Ltd.
Myra Falls Operations	Lynx, Myra, Price	Buttle Lake	Westmin Resources Ltd.
Nickel Plate	Johnny Mountain	Penticton	Mascot Gold Mines Ltd.
Silvana	Silmonac, Minniehaha	New Denver	Dickenson Mines Ltd.
Similkameen	Ingerbelle	Princeton	Newmont Mines Ltd.
Sullivan		Kimberley	Cominco Ltd.
Taurus		Cassiar	Taurus Resources Ltd.

¹ Shipped from stockpile only

The names of mining operations may change in the intervening period before publication.
Names are as of the year reported.

Table 30-A

Principal Items of Expenditures for Solid Mineral Production By Type

Class		Salaries and Wages	Fuel and Electricity	Process Supplies
		\$	\$	\$
1987				
Metal Mining		202 552 588	104 484 062	245 016 600
Coal		255 112 532	66 875 648	173 395 316
Industrial Minerals		17 243 082	9 247 212	8 781 570
Structural Materials		36 857 155	20 005 981	16 216 832
Totals				
1987		511 765 357	200 612 903	443 410 318
1986				
Metal Mining		202 435 041	89 505 903	195 806 900
Coal		237 163 565	71 716 600	174 785 485
Industrial Minerals		17 091 841	9 046 287	6 429 897
Structural Materials		33 299 531	19 906 111	14 298 570
Totals				
1986		489 989 978	190 174 901	391 320 852
1985		488 347 745	226 146 442	415 141 144
1984		519 594 670	234 176 167	290 623 113
1983		440 542 456	193 420 434	308 510 743
1982		476 705 747	195 477 056	364 539 992
1981		426 702 031	150 053 316	346 669 928
1980		341 924 292	110 011 602	267 065 783
1979		284 159 032	97 166 988	211 066 592
1978		243 090 646	84 785 126	189 133 090
1977		239 133 922	71 149 313	192 025 357
1976		199 241 901	59 220 204	170 075 616
1975		187 113 519	49 104 838	154 476 238
1974		202 459 898	42 381 258	140 002 685
1973		175 487 168	36 750 711	103 840 649
1972		152 040 626	31 115 621	77 092 955

Table 31-A (86)

Destination of Metals in British Columbia Ores and Concentrates 1986

COUNTRY	GOLD		SILVER		COPPER	
	g	\$	g	\$	kg	\$
Canadian Shipments	2 685 296	46 228 142	138 473 063	32 812 595	21 362 193	41 501 124
Foreign Shipments						
Adjustment	—	—	—	—	—	—
Australia	—	—	—	—	—	—
Belgium	—	—	—	—	—	—
Brazil (Prior Year Adj)	—	—	(89 454)	42 509	—	—
Chile	—	—	—	—	—	—
China	(373)	(3 152)	387 020	63 920	3 048 318	5 910 417
Europe	—	—	—	—	—	—
Germany	—	—	—	—	—	—
Germany (Prior Year Adj.)	—	—	(148 115)	7 639	—	—
Japan	5 750 529	92 255 702	242 514 967	57 957 644	261 740 105	491 350 044
Korea	184 136	3 388 380	5 448 270	1 340 739	15 386 294	29 102 030
Mexico	—	—	—	—	—	—
Other	340 334	5 773 410	7 063 631	1 829 069	23 921 893	49 377 391
Spain	48 801	917 490	1 046 741	264 359	1 054 000	1 653 305
Taiwan	183 508	3 206 606	1 115 764	287 881	5 702 226	10 584 800
U.K.	—	—	—	—	—	—
U.S.A.	32 804	520 997	4 234	1 022	—	—
Total Foreign	6 539 740	106 059 433	257 343 059	61 794 782	310 852 835	587 977 987
Placer	166 483	2 748 318	33 964	8 117	—	—
Totals	9 391 519	155 035 893	395 850 085	94 615 495	332 215 028	629 479 111

Table 32-A (86)

Destination of Metals in British Columbia Ores and Concentrates 1986

COUNTRY	LEAD		ZINC		MOLYBDENUM	
	kg	\$	kg	\$	kg	\$
Canadian Shipments	91 976 820	38 234 117	104 732 441	100 099 696	—	—
<i>Foreign Shipments</i>						
Adjustment	—	—	—	—	77 753	7 592 466
Australia	—	—	—	—	22 064	471 134
Belgium	—	—	—	—	94 229	789 874
Brazil (Prior Year Adj.)	(34 141)	27 906	—	—	—	—
Chile	—	—	—	—	598 721	4 356 693
China	—	—	—	—	—	—
Europe	—	—	—	—	5 415 409	39 150 474
Germany	—	—	—	—	1 045 903	7 234 703
Germany (Prior Year Adj.)	(158 438)	(78 618)	—	—	—	—
Japan	—	—	25 915 721	30 122 247	2 294 352	15 811 365
Korea	—	—	6 934 709	7 800 950	—	—
Mexico	—	—	—	—	—	—
Other	—	—	—	—	1 264 354	10 709 813
Spain	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—
U.K.	—	—	—	—	211 964	1 617 931
U.S.A.	—	—	—	—	548 869	5 046 653
-Total Foreign	—	—	32 850 430	37 923 197	11 573 619	92 781 106
Other/Adjust.	(192 578)	(50 712)	—	—	—	—
Total Shipments	91 784 242	38 183 405	137 582 871	138 022 893	11 573 619	92 781 106

Table 33-A (86)

Destination of Metals in British Columbia Ores and Concentrates 1986

COUNTRY	CADMIUM		IRON		TIN	
	kg	\$	t	\$	kg	\$
Canadian Shipments	304 468	1 163 981	50 546	2 217 168	—	—
<i>Foreign Shipments</i>						
Adjustment	—	—	—	—	—	—
Australia	—	—	—	—	—	—
Belgium	—	—	—	—	—	—
Brazil (Prior Year Adj.)	—	—	—	—	—	—
Chile	—	—	—	—	—	—
China	—	—	—	—	—	—
Europe	—	—	—	—	—	—
Germany	—	—	—	—	—	—
Germany (Prior Year Adj.)	—	—	—	—	—	—
Japan	—	—	—	—	—	—
Korea	—	—	—	—	—	—
Mexico	—	—	—	—	57 438	621 801
Other	—	—	—	—	—	—
Spain	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—
U.K.	—	—	—	—	—	—
U.S.A.	—	—	—	—	—	—
-Total Foreign	—	—	—	—	57 438	621 801
Totals	304 468	1 163 981	50 546	2 217 168	57 438	621 801

Table 34-A (86)

Destination of Metals in British Columbia Ores and Concentrates 1986

COUNTRY	TOTAL VALUE	COUNTRY	TOTAL VALUE
	\$		\$
Canadian Shipments	266 802 660	Foreign Shipments (Cont'd)	
<i>Foreign Shipments</i>		Japan	687 497 002
Adjustment	7 592 466	Korea	41 632 099
Australia	471 134	Mexico	621 801
Belgium	789 874	Other	67 689 683
Brazil (Prior Year Adj.)	70 415	Spain	2 835 154
Chile	4 356 693	Taiwan	14 079 287
China	5 971 185	U.K.	1 617 931
Europe	39 150 474	U.S.A.	5 568 672
Germany	7 234 703	Total Foreign	887 107 595
Germany(Prior Year Adj.)	(70 979)	Other (Placer)	2 756 435
		Totals	1 156 666 690

Table 31-A (87)

Destination of Metals in British Columbia Ore and Concentrates 1987

COUNTRY	GOLD		SILVER		COPPER	
	g	\$	g	\$	kg	\$
Canadian Shipments	4 304 703	86 910 249	113 329 569	35 056 124	7 941 108	20 325 375
<i>Foreign Shipments</i>						
Australia	—	—	—	—	—	—
Belgium	—	—	—	—	—	—
Brazil	—	—	1 088 622	347 270	3 389 242	8 168 073
Chile	—	—	—	—	—	—
China	4 790	93 357	17 615 610	5 619 380	25 844 741	62 285 826
England	—	—	—	—	—	—
Europe	—	—	—	—	—	—
Germany	496 698	9 300 951	85 381	28 394	—	—
Japan	4 919 469	97 459 137	220 788 164	76 022 776	252 150 816	603 726 160
Korea	—	—	3 212 865	1 087 742	12 162 545	30 157 190
Spain	—	—	4 133 776	1 318 675	14 170 807	34 151 645
Taiwan	289 542	5 282 667	4 198 751	1 220 947	19 200 075	39 325 377
U.S.A.	27 744	510 070	2 146	692	—	—
Other (not specified)	1 601 754	30 753 942	7 064 853	1 833 205	21 038 359	44 201 550
Total Foreign	7 339 997	143 400 124	258 190 168	87 479 081	347 956 585	822 015 821
Placer	456 460	8 791 021	80 000	27 200	—	—
Total Shipments	12 101 160	239 101 394	371 599 737	122 562 405	355 897 693	842 341 196

Table 32-A (87)

Destination of Metals in British Columbia Ore and Concentrates 1987

COUNTRY	LEAD		ZINC		MOLYBDENUM	
	kg	\$	kg	\$	kg	\$
Canadian Shipments	69 911 213	49 828 244	70 436 749	75 916 702	1 416 212	14 591 123
<i>Foreign Shipments</i>						
Australia	—	—	—	—	16 823	318 635
Belgium	—	—	—	—	424 124	3 154 024
Brazil	—	—	—	—	—	—
Chile	—	—	—	—	417 285	3 072 010
China	—	—	—	—	—	—
England	—	—	—	—	211 303	1 595 667
Europe	—	—	—	—	6 272 122	51 120 687
Germany	—	—	—	—	450 598	3 235 498
Japan	—	—	—	—	3 727 683	33 259 941
Korea	—	—	—	—	—	—
Spain	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—
U.S.A.	—	—	30 282 000	33 452 007	1 475 695	14 428 035
Other (not specified)	—	—	—	—	176 176	1 523 289
Total Foreign	—	—	30 282 000	33 452 007	12 722 331	107 096 794
Other/Adj.	—	—	—	—	(449 478)	(4 610 992)
Total Shipments	69 911 213	49 828 244	100 718 749	109 368 709	14 138 543	121 687 917

Table 33-A (87)

Destination of Metals in British Columbia Ore and Concentrates 1987

COUNTRY	CADMIUM		IRON		TIN	
	kg	\$	t	\$	kg	\$
Canadian Shipments	200 792	1 166 802	58 070	2 220 950	—	—
<i>Foreign Shipments</i>						
Australia	—	—	—	—	—	—
Belgium	—	—	—	—	—	—
Brazil	—	—	—	—	—	—
Chile	—	—	—	—	—	—
China	—	—	—	—	—	—
Germany	—	—	—	—	—	—
Japan	—	—	—	—	—	—
Korea	—	—	—	—	—	—
Mexico	—	—	—	—	5 605	51 992
Taiwan	—	—	—	—	—	—
U.K.	—	—	—	—	—	—
U.S.A.	—	—	—	—	—	—
Europe	—	—	—	—	—	—
Other (not specified)	—	—	—	—	—	—
Total Foreign	—	—	—	—	5 605	51 992
Total Shipments	200 792	1 166 802	58 070	2 220 950	5 605	51 992

Destination of Metals in British Columbia Ore and Concentrates 1987

COUNTRY	TOTAL VALUE	COUNTRY	TOTAL VALUE
	\$		\$
Canadian Shipments	288 925 476	Foreign Shipments (Cont'd)	
<i>Foreign Shipments</i>		Germany	12 564 843
Australia	318 635	Japan	810 468 014
Belgium	3 154 024	Korea	31 244 932
Brazil	8 515 343	Mexico	51 992
Chile	3 072 010	Spain	35 470 320
China	67 998 563	Taiwan	45 828 991
England	1 595 667	U.S.A.	15 292 882
Europe	51 120 687	Other (not specified)	111 763 993
		Other/Adj.	(4 610 992)
		Placer	8 818 221
		Total Foreign	1 202 668 125

Queen's Printer for British Columbia©
Victoria, 1989