

Canada's Historical Mineral Production

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HISTORICAL BACKGROUND

Minerals have been used in what is now Canada for several millenia. Canada's Aboriginal inhabitants used various minerals to produce tools, weapons and decorative objects, including pebbles and cobbles for tools and weapons, and clay, flint, chert, pipestone, soapstone (for lamps, pots and carving), native copper, gold and silver. Some of these mineral commodities were traded among the Aboriginal peoples over distances of hundreds or even thousands of kilometres.

The early European settlers in Canada produced a limited number of mineral commodities for local use, chiefly building stone, brick clay, sand, gravel, and lime for plaster. Coal was discovered on Cape Breton Island by the French in 1672. The British Navy first obtained coal there in 1711. In New Brunswick, coal was first mined by settlers in 1782. Coal was discovered in what is now Alberta in 1800 and, on Vancouver Island, coal deposits were discovered in 1835 and 1850.

Iron ore was found along the St. Lawrence River near the mouth of the Saint-Maurice River and smelted there to produce iron beginning in 1737. After the American Revolution, iron furnaces utilizing local ores were erected in what is now southern Ontario in 1800, 1820 and 1822. The earliest recorded Canadian production of gypsum was in Nova Scotia in 1789 and in Ontario in 1822.

Initial Canadian nonferrous metal production, of copper, began in 1848 at Bruce Mines, Ontario. The first production of gold was in the late 1850s from the small Early Bird mine on the Queen Charlotte Islands. Placer gold was discovered and initially produced in 1859 in the Cariboo Region of British

Columbia. Some placer gold was produced from the Chaudiere River in the Eastern Townships of Quebec beginning in 1862. Gold was discovered in Nova Scotia in 1860 and over the years, beginning in 1861, some 45 t of gold have been produced in the province.

Petroleum, found in 1857 at Oil Springs, Ontario, near Lake Erie, represented North America's earliest commercial petroleum discovery – a discovery that was made the same year the European oil industry began in Romania and two years prior to the first commercial discovery in the United States at Oil Creek, near Titusville, Pennsylvania.

Cariboo gold, Ontario petroleum and increased output of Cape Breton coal marked a turning point in Canadian mineral production from minor local events to developments of greater significance.

PRODUCTION STATISTICS

Statistical data concerning Canadian mineral production began to be gathered and compiled in the 1850s. The Geological and Natural History Survey of Canada began collecting and publishing mineral production statistics in 1886. The Department of Mines, which the Geological Survey became a part of, carried out this work through the early part of the 20th century. The work was then transferred to the Dominion Bureau of Statistics (now Statistics Canada), which compiled mineral production data from 1921 until 1978. In January 1979, the responsibility for gathering non-fuel, non-manufactured, mineral production statistics was transferred from Statistics Canada to the Department of Energy, Mines and Resources, which has since become the Department of Natural Resources (or Natural Resources Canada). Statistics Canada retains the responsibility for gathering statistics concerning fuel, crude oil, natural gas, natural gas liquids and coal production, and for gathering mineral manufacturing statistics, including cement, lime and clay products.

A historical compilation of production statistics for minerals, up to and including those for 1946, was published by Statistics Canada (then the Dominion Bureau of Statistics) in 1948, and then annual production statistics were published for subsequent

years. Newfoundland did not join Canada until 1949; therefore, the mineral production statistics published by Statistics Canada prior to that year do not include Newfoundland mineral production. For most mineral commodities, available production statistics begin with those for the year 1886, but there was Canadian production of many mineral commodities in years prior to that year, and production statistics are available for some of those commodities beginning with the following years: gold, 1858; coal, 1867; phosphate, 1870; gypsum, 1874; iron ore, 1876; manganese ore and bog manganese, 1877; arsenic, 1885; barite, 1885; and pyrite, 1885.

HISTORICAL PRODUCTION GRAPHS

Historical production statistics for the mineral commodities that have been produced in Canada are displayed in graphical form (Figures 1 to 75). Although it has not been possible to obtain mineral production statistics for Newfoundland and Labrador for the years prior to 1949, statistics concerning mineral exports were obtained from Newfoundland customs export records. The first recorded mineral exports of copper, lead and limestone begin with 1865. For some of the commodities that were exported (building stone, coal, stone, gypsum, limestone, and sand and gravel), all of them mineral commodities that would have been consumed in the province as well as having been exported, the tonnages exported do not provide a source of production statistics. However, it can be assumed that the total production of ores and concentrates of other mineral commodities (copper, nickel, lead, zinc, chromite, gold, iron ore, silver, barite, talc and fluorite, and probably pyrite) were not further processed in Newfoundland and Labrador, but entirely exported. The exported tonnages can be taken as a proxy for production tonnages, so they have been added to the tonnages of each of the commodities produced in the rest of Canada to obtain total Canadian production of those commodities – these totals have been used to prepare the production graphs for those 12 commodities.

Many of the mineral commodities that were produced in Canada in earlier years are no longer produced, (e.g., corundum, feldspar, fluorspar [fluorite], garnet, grindstones, helium, magnesium sulphate, natrolunite, peat fuel, pulpstones and sharpening stones). The production of some of these mineral commodities has ceased because known reserves have been mined out. The production of others (e.g., natural grindstones, pulpstones and sharpening stones) has ceased because they have become obsolete. The production of some commodities has been intermittent over the years; others were produced for only very brief periods of time.

The annual production tonnages reported by Statistics Canada actually represent tonnages shipped dur-

ing the year rather than production tonnages. Therefore, some production peaks, for example the 15 t of platinum group metals reported for 1942 and the 21 t reported for 1945 (see Figure 22), likely represent delayed shipment from an inventory of metal actually produced in earlier years.

Although various mineral commodities were produced in Canada long before 1886, the only minerals for which any pre-1886 production statistics are available are arsenic, barite, coal, copper, gold, gypsum, iron ore, manganese ore, phosphate, pyrite and silver. The production graphs for these commodities portray production back to the first year for which production data are available. The titles of each of Figures 1 to 72 indicate the first year for which production data are available and, in the case of mineral commodities no longer produced in Canada, the final year of production. For some minerals, it is not certain whether or not the first year indicated actually represents the year of initial Canadian production. For minerals that the graphs indicate as having commenced production subsequent to 1886, the first year indicated in the title likely does represent the year of initial production.

It is evident that all, or nearly all, of the mineral commodities for which production statistics begin with 1886 were actually being produced in Canada prior to 1886.

Tonnages of clay products produced in Canada have never been compiled; only annual production values have been compiled for 1886 to 2000 in dollars of the year. For purposes of comparison, these annual values have been converted to 2001 Canadian dollars and plotted in Figure 66.

In the case of mineral water, production tonnages were not published for the years 1899 to 1920 inclusive, but values were published. For this reason, both tonnages of mineral water (Figure 47) and value in 2001 dollars (Figure 48) have been graphed. Similarly, production tonnages for the titanium dioxide and iron remelt produced in Quebec by QIT-Fer et Titane inc. were published for many fewer years than production values have been published. For this reason, production tonnages (Figures 13 and 62) and production values in 2001 dollars (Figures 14 and 63) have both been graphed.

Subsequent to 1946, although production tonnages for all of the mineral commodities produced in Canada have actually been gathered and compiled by Statistics Canada, or by Natural Resources Canada, in order to preserve confidentiality of company production data, production tonnages and values have not been published for certain commodities produced at only a few operations. For this reason, for some mineral commodities, it is impossible to graphically portray any production tonnages whatsoever. For

others, the availability of publishable production statistics has been intermittent through the years. As a result, production graphs for those commodities are intermittent. The footnotes to the production graphs indicate the years for which production data are either confidential or otherwise unavailable (and so cannot be graphed). The mineral commodities for which production statistics have been confidential over the entire period of production and production statistics for other mineral commodities produced for only a few years are listed in Table 1.

IS CANADA'S MINERAL PRODUCTION DECLINING?

In inflation-adjusted dollars, the value of Canada's non-petroleum mineral production peaked in 1981 and then generally declined (Figure 73). The question is whether this decline occurred because of an actual decline in gross mineral production tonnages or because of declines in the prices of many of the mineral commodities that Canada has produced.

The inflation-adjusted value of Canada's metallic mineral production (Figure 74) peaked in 1979 and has generally declined since then. If the annual production tonnages of all the metallic minerals produced in Canada since 1886 are all valued at mid-2002 metal prices (Figure 75), except for a decline in gross metal production in the second half of the 1970s and the early 1980s, Canada's metallic mineral production appears to have been about stable over the past 30 years. Canadian production of some metals (copper, zinc, lead, silver and molybdenum) is expected to decline over the next 25 years, but these declines are likely to be compensated for by anticipated production increases for other metals.

Although such an analysis has not yet been carried out for the nonmetallic, non-petroleum minerals produced in Canada, it is probable that, as with the metals, there has not been any physical decline in the overall production of those nonmetals valued at 2002 prices.

HISTORICAL PRODUCTION OF CRUDE OIL, NATURAL GAS AND NATURAL GAS LIQUIDS

Although not included in this chapter, graphs depicting annual historical Canadian production volumes and values of crude petroleum, natural gas and natural gas liquids can be found on page 42 of the publication entitled *A History of Mining and Mineral Exploration in Canada and Outlook for the Future* (available on the Internet at www.nrcan.gc.ca/mms/topi-suje/hist_e.htm).

SOURCES OF STATISTICAL DATA USED

The data in the graphs have been compiled from the following sources:

- Dominion Bureau of Statistics, 1948, *Chronological Record of Canadian Mining Events from 1604 to 1947 and Historical Tables of Mineral Production of Canada*, 93 pp. - source of annual production statistics for the years prior to 1947.
- Dominion Bureau of Statistics (annual publication), *Mineral Statistics of Canada* - source of annual production data for the years 1947 to 1963 inclusive.
- Newfoundland customs returns - a series of reports listing annual imports and exports that include mineral commodity export tonnages.
- Statistics Canada (annual publication 26-201), *General Review of the Mineral Industries (Mines, Quarries and Oil Wells)* - source of annual production data for the years 1964 to 2000 inclusive.
- Barr, Elinor, 1988, *Silver Islet: Striking it Rich in Lake Superior*. This book provided annual silver production data for the Silver Islet mine (in Lake Superior) from 1868 to 1883, data that are not available from any other source.
- Natural Resources Canada (and its predecessor departments) annual publication, *Canadian Minerals Yearbook*, provides production tonnages for some mineral commodities for years in which Statistics Canada has reported production as being confidential. Such data were either obtained from company annual reports or provided to NRCan commodity specialists by producing companies for publication purposes.
- Canadian company annual reports - for some mineral commodities, production data that Statistics Canada indicated as being confidential were available from the annual reports of the companies that produced those minerals.

Notes: (1) Information in this review was current as of February 28, 2002. (2) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/mms/cmy/index_e.html.

NOTE TO READERS

The intent of this document is to provide general information and to elicit discussion. It is not intended as a reference, guide or suggestion to be used in trading, investment, or other commercial activities. The author and Natural Resources Canada make no warranty of any kind with respect to the content and accept no liability, either incidental, consequential, financial or otherwise, arising from the use of this document.

TABLE 1. ADDITIONAL MINERAL COMMODITIES THAT HAVE BEEN PRODUCED IN CANADA

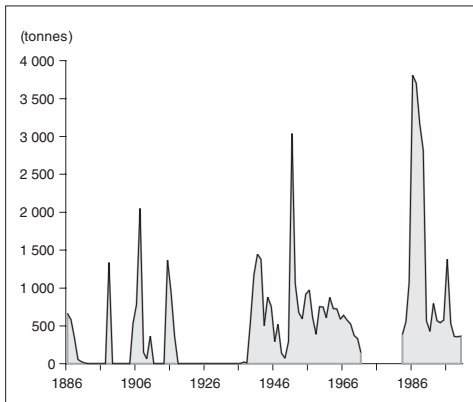
Mineral Commodity	Production Years	Production
Beryl	1929	2023 kg
Cesium	1986-2000	Confidential (there was production of the cesium-rubidium mineral pollucite in Canada prior to 1985 but statistics were not compiled)
Helium (1)	1963-77	Confidential
Marl	1985-2000	Confidential
Natro-alunite	1921-23, 1925, 1927	1921 - 27 t, 1922 - 45 t, 1923 - 14 t, 1925 - 18 t, 1927 - 6 t
Potassium sulphate	1988-2000	Confidential (produced from sodium sulphate that was not included in sodium sulphate production statistics)
Rhenium	1985-95	Confidential (there was production of rhenium in Canada prior to 1985 but statistics were not compiled)
Rubidium	1987-93, 1995	Confidential (see cesium)
Serpentine	1986-2000	
Strontium	1955-56, 1985-86	1955 - 44 t, 1956 - 68 t, 1985-86 - confidential
Thallium	1944, 1955	1944 - 58 kg, 1955 - 125 kg
Thorium (ThO ₂)	1959-69	1959 - 21 t, 1960-65 - confidential, 1966 - 39 t, 1967 - 53 t, 1968 - 63 t, 1969 - 13 t
Tremolite	1986-2000	Confidential
Wollastonite	1998, 2000	Confidential
Zeolite	1994-2000	Confidential

(1) Helium is a gas, not a mineral.

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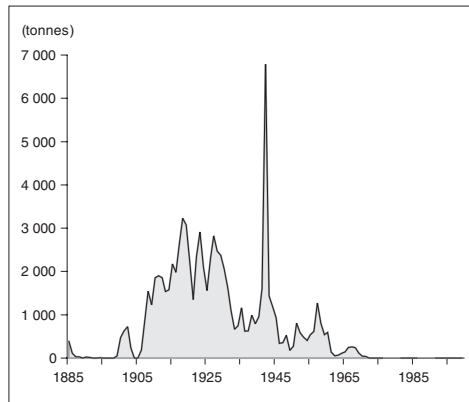
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Industrial Minerals	Figures 32 to 64	8.11
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Figure 1
Canadian Antimony Ore and Antimony Production, 1886-2000



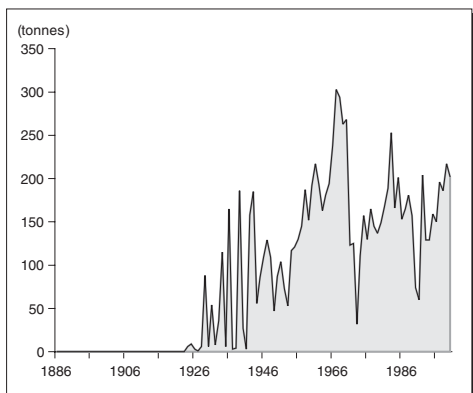
Sources: Natural Resources Canada; Statistics Canada.
Notes: Production for 1886-1925 is antimony ore. Production for 1937-2000 is antimony metal plus metal in ores exported. Production for 1972-82 is confidential.

Figure 2
Canadian Arsenic Production, 1885-1990



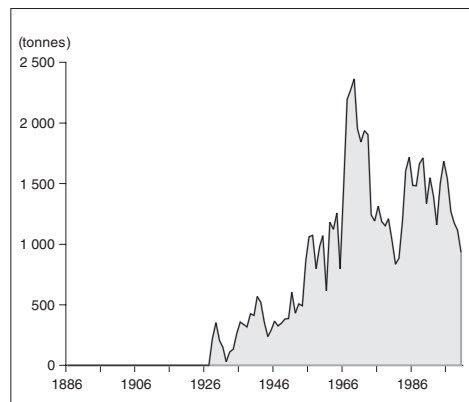
Sources: Natural Resources Canada; Statistics Canada.

Figure 3
Canadian Bismuth Production, 1924-2000



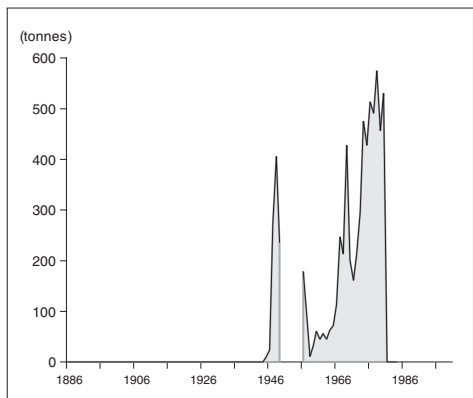
Sources: Natural Resources Canada; Statistics Canada.

Figure 4
Canadian Cadmium Production, 1928-2000



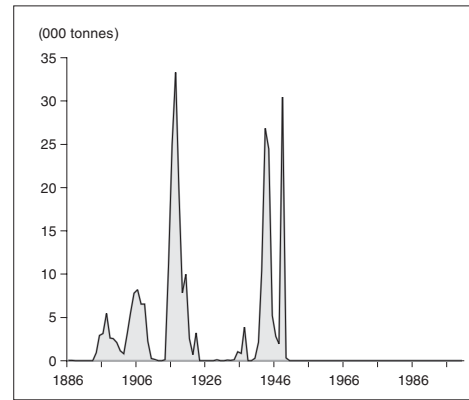
Sources: Natural Resources Canada; Statistics Canada.

Figure 5
Canadian Calcium Production, 1886-2000



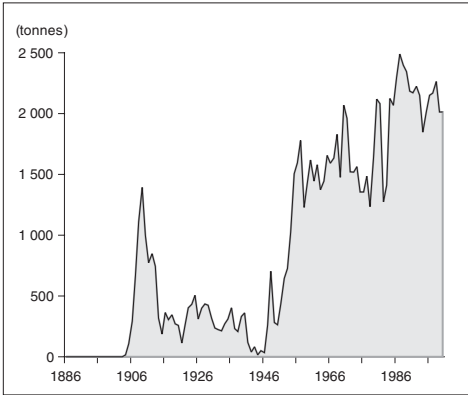
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1950-55 and 1985-2000 is confidential.

Figure 6
Canadian Chromite Production, 1886-1949



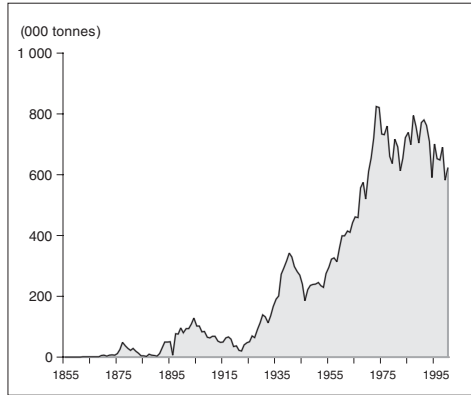
Sources: Natural Resources Canada; Statistics Canada.

Figure 7
Canadian Cobalt Production,
1904-2000



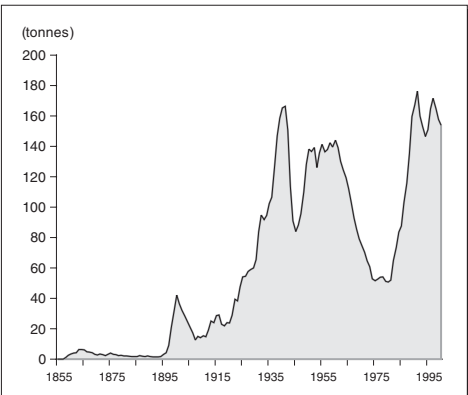
Sources: Natural Resources Canada; Statistics Canada.

Figure 8
Canadian Copper Production,
1848-2000



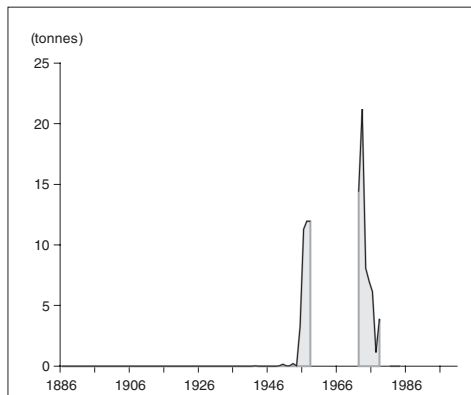
Sources: Natural Resources Canada; Statistics Canada.
Note: Canada (other than Newfoundland) produced a cumulative total of 100 000 t of copper from 1848 to 1885 that is not shown in this graph.

Figure 9
Canadian Gold Production,
1858-2000



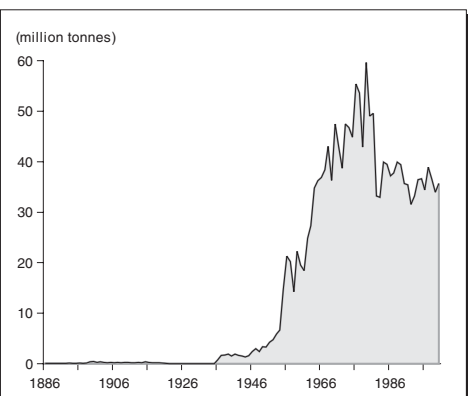
Sources: Natural Resources Canada; Statistics Canada.

Figure 10
Canadian Indium Production,
1942-2000



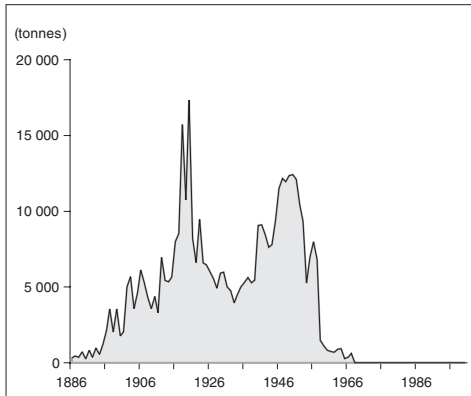
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1959-71, 1978-79 and 1985-2000 is confidential.

Figure 11
Canadian Iron Ore Production,
1876-2000



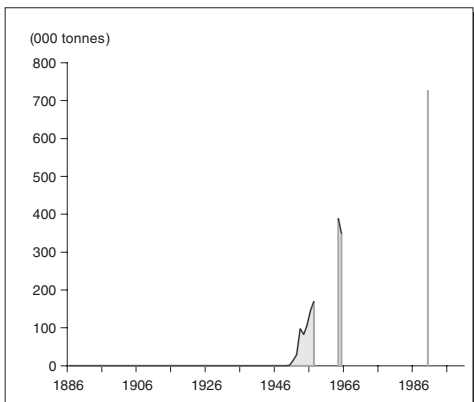
Sources: Natural Resources Canada; Statistics Canada.

Figure 12
Canadian Iron Oxide Production,
1886-1967



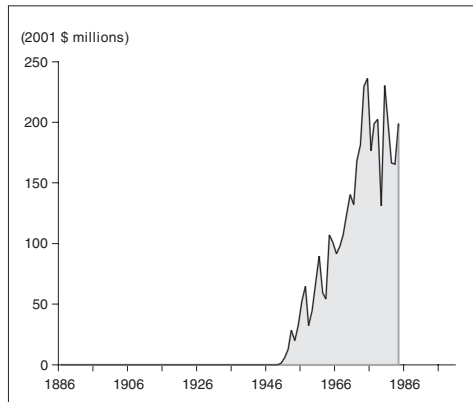
Sources: Natural Resources Canada; Statistics Canada.

Figure 13
Canadian Iron Remelt Production,
1950-2000



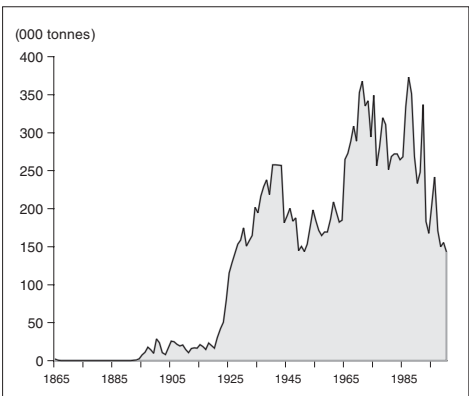
Sources: Natural Resources Canada; Statistics Canada.
Notes: Production for 1958-63, 1966-89 and 1991-2000 is confidential. See Figure 14, which indicates production values for 1950-86.

Figure 14
Value of Canadian Iron Remelt Production,
1950-2000



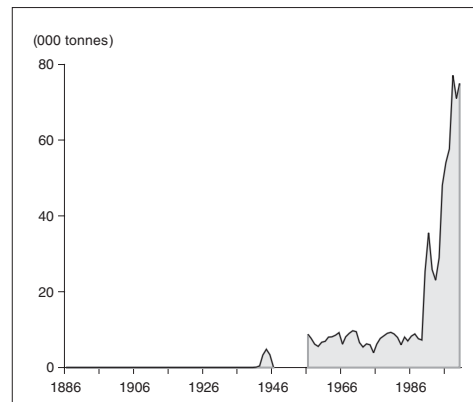
Sources: Natural Resources Canada; Statistics Canada.
Notes: See Figure 13 for available production tonnages. Production values for 1985-2000 are confidential.

Figure 15
Canadian Lead Production,
1865-2000



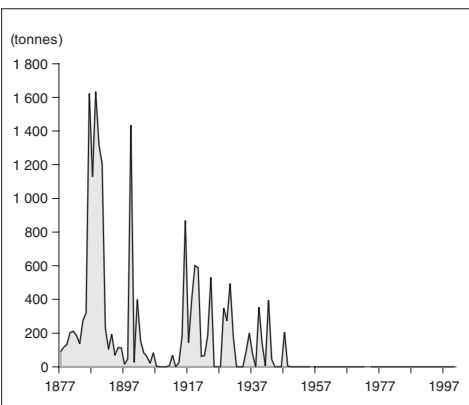
Sources: Natural Resources Canada; Statistics Canada.

Figure 16
Canadian Magnesium Production,
1941-2000



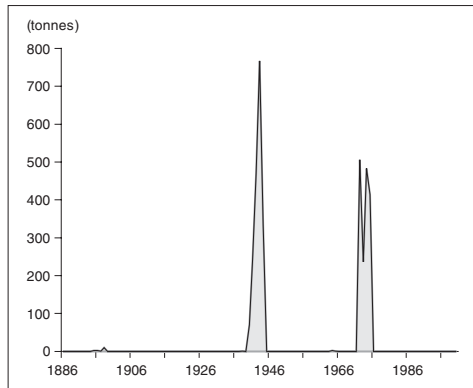
Sources: Natural Resources Canada; Statistics Canada.

Figure 17
Canadian Manganese Ore Production,
1877-1956



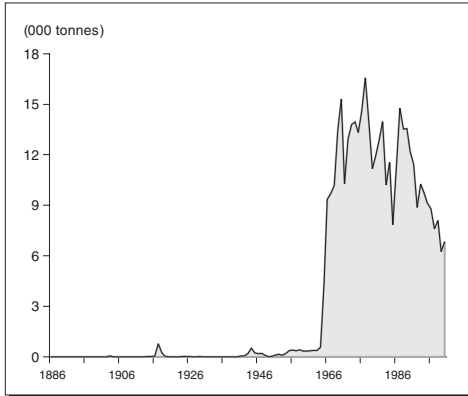
Sources: Natural Resources Canada; Statistics Canada.

Figure 18
Canadian Mercury Production,
1895-1975



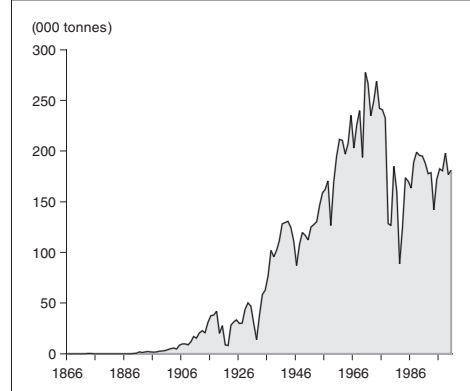
Sources: Natural Resources Canada; Statistics Canada.

Figure 19
Canadian Molybdenum Production,
1902-2000



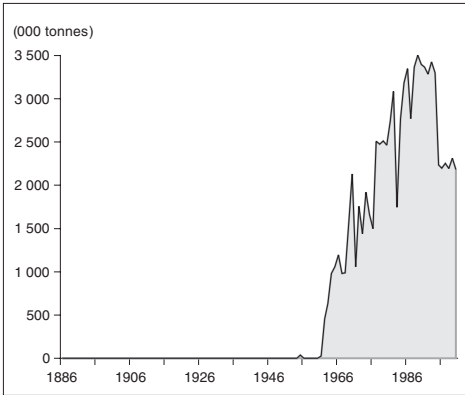
Sources: Natural Resources Canada; Statistics Canada.

Figure 20
Canadian Nickel Production,
1869-2000



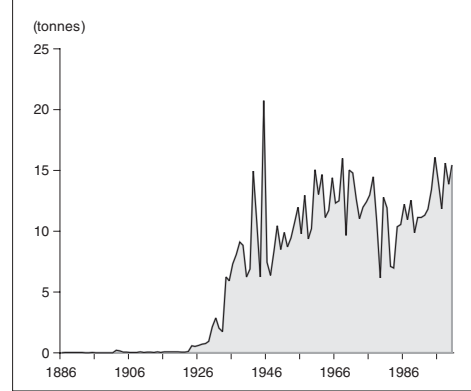
Sources: Natural Resources Canada; Statistics Canada.

Figure 21
Canadian Niobium Production,
1955-2000



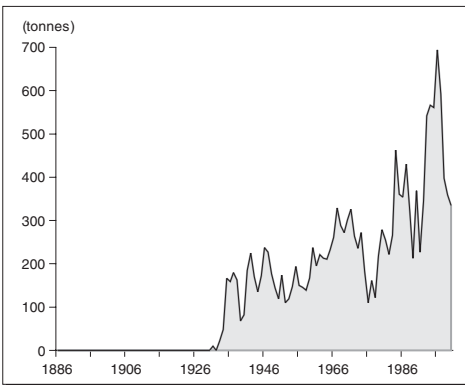
Sources: Natural Resources Canada; Statistics Canada.

Figure 22
Canadian Platinum Group Metals Production,
1887-2000



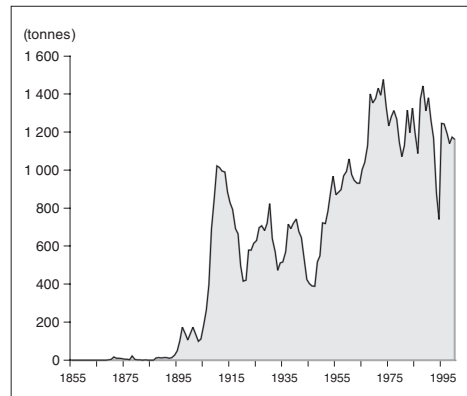
Sources: Natural Resources Canada; Statistics Canada.

Figure 23
Canadian Selenium Production,
1931-2000



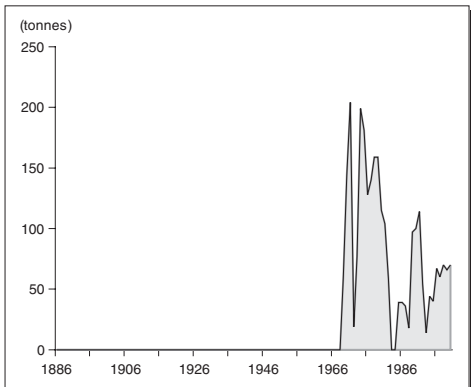
Sources: Natural Resources Canada; Statistics Canada.

Figure 24
Canadian Silver Production,
1869-2000



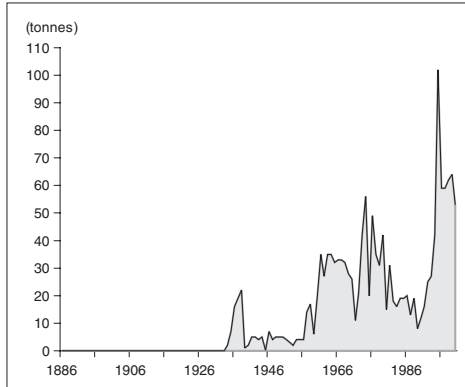
Sources: Natural Resources Canada; Statistics Canada.

Figure 25
Canadian Tantalum Production,
1969-2000



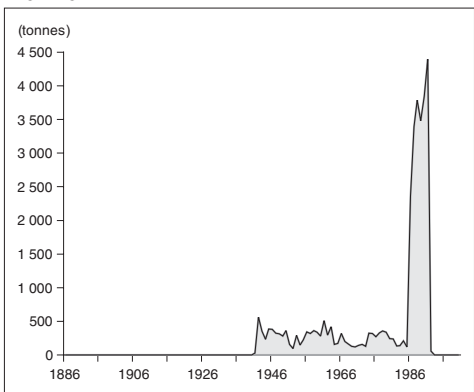
Sources: Natural Resources Canada; Statistics Canada.

Figure 26
Canadian Tellurium Production,
1934-2000



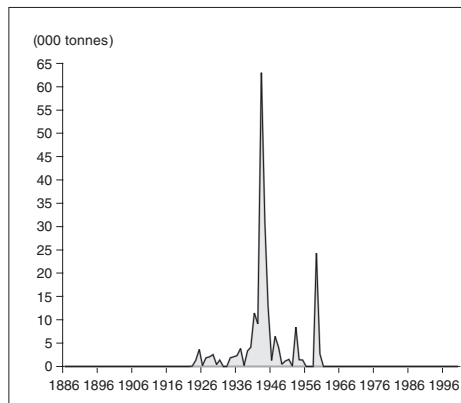
Sources: Natural Resources Canada; Statistics Canada.

Figure 27
Canadian Tin Production,
1941-92



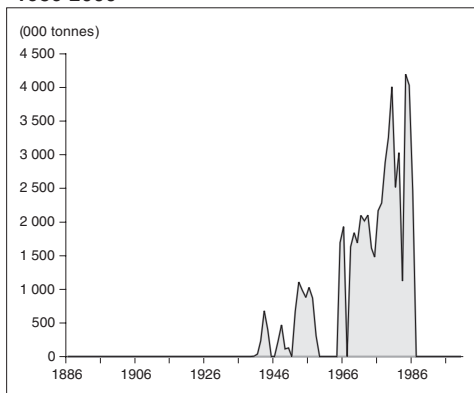
Sources: Natural Resources Canada; Statistics Canada.

Figure 28
Canadian Titanium Ore Production,
1886-1960



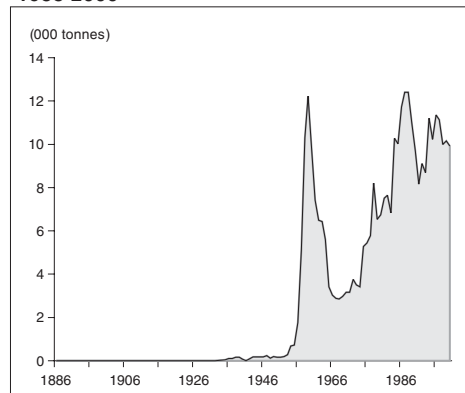
Sources: Natural Resources Canada; Statistics Canada.
Note: Excludes ilmenite produced by QIT-Fer et Titane inc., which is reported as Iron remelt and as titanium dioxide.

Figure 29
Canadian Tungsten Production,
1939-2000



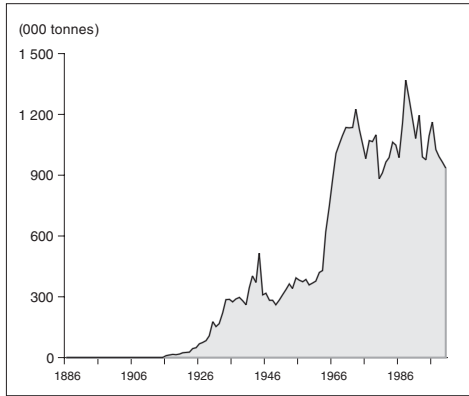
Sources: Natural Resources Canada; Statistics Canada.
Note: Tungsten production resumed in 2002.

Figure 30
Canadian Uranium Production,
1933-2000



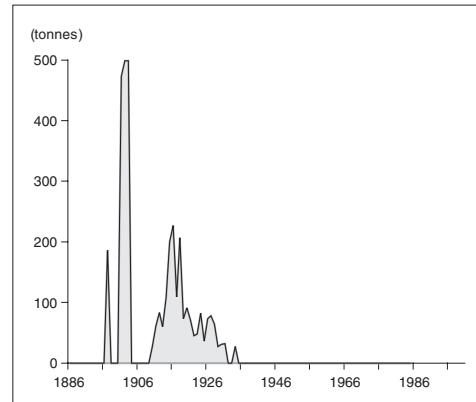
Sources: Natural Resources Canada; Statistics Canada.

Figure 31
Canadian Zinc Production,
1898-2000



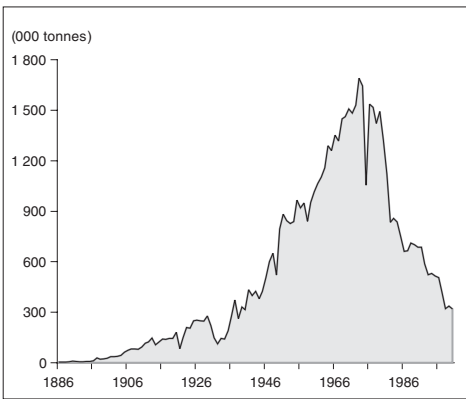
Sources: Natural Resources Canada; Statistics Canada.

Figure 32
Canadian Actinolite Production, 1897-1934,
and Tremolite Production, 1986-2000



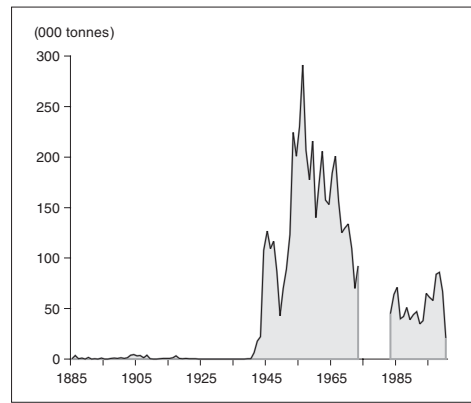
Sources: Natural Resources Canada; Statistics Canada.
 Note: Tremolite production for 1986-2000 is confidential.

Figure 33
Canadian Asbestos Production,
1880-2000



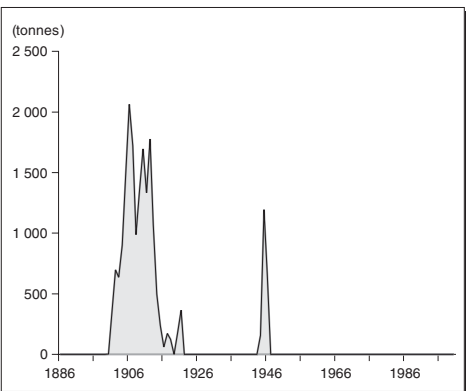
Sources: Natural Resources Canada; Statistics Canada.

Figure 34
Canadian Barite Production,
1885-2000



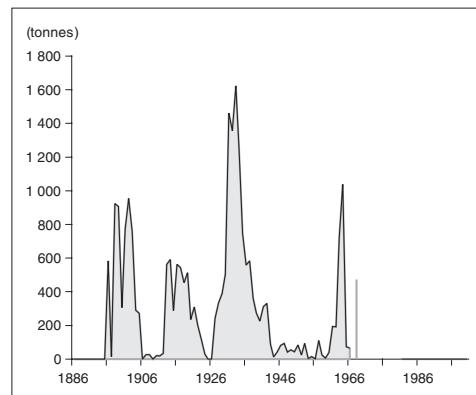
Sources: Natural Resources Canada; Statistics Canada.
 Note: Production for 1974-82 is confidential.

Figure 35
Canadian Corundum Production,
1900-46



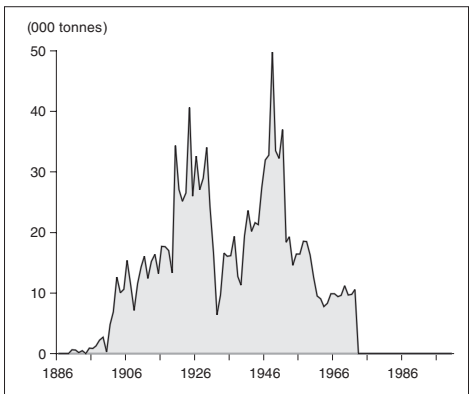
Sources: Natural Resources Canada; Statistics Canada.

Figure 36
Canadian Diatomite Production,
1886-1980



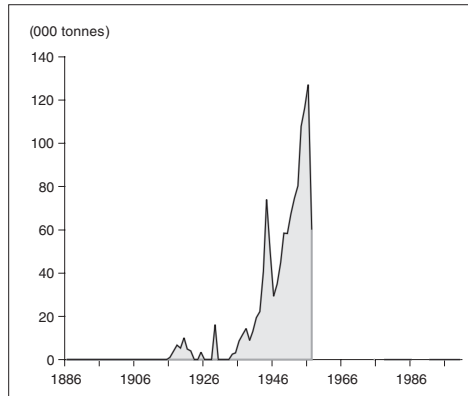
Sources: Natural Resources Canada; Statistics Canada.
 Note: Production for 1967 and 1969-80 is confidential.

Figure 37
Canadian Feldspar Production,
1890-1972



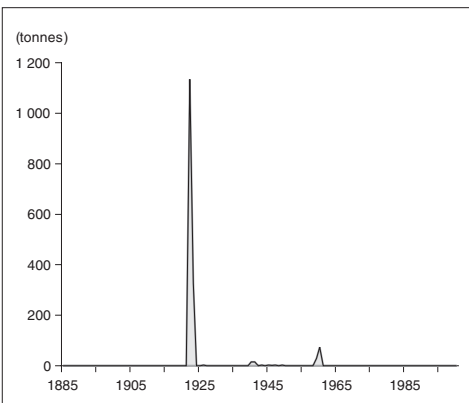
Sources: Natural Resources Canada; Statistics Canada.

Figure 38
Canadian Fluorspar Production,
1905-90



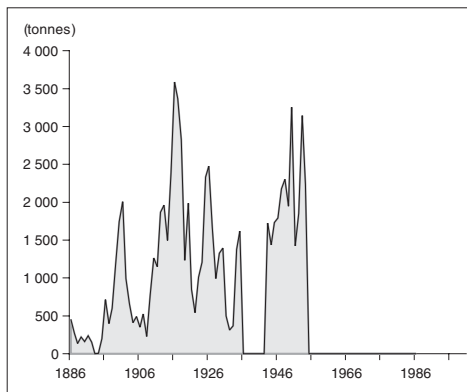
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1958-74, 1976-77 and 1987-90 is confidential.

Figure 39
Canadian Garnet Production,
1923-61



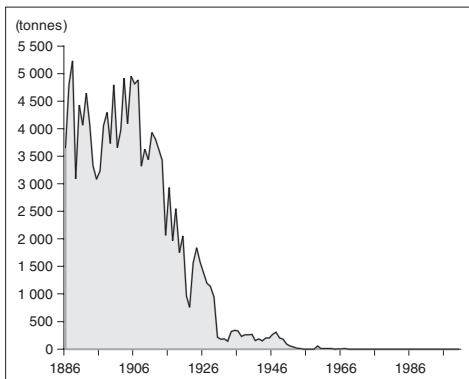
Sources: Natural Resources Canada; Statistics Canada.

Figure 40
Canadian Graphite Production,
1886-2000



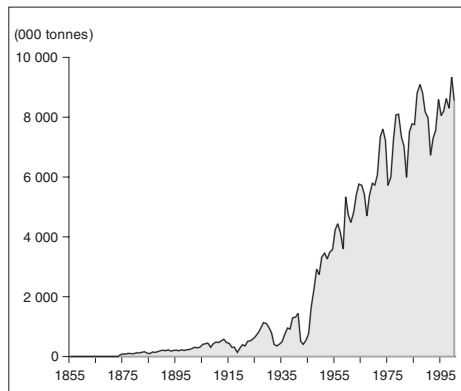
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1987-2000 is confidential.

Figure 41
Canadian Production of Natural Grindstones,
1886-1967



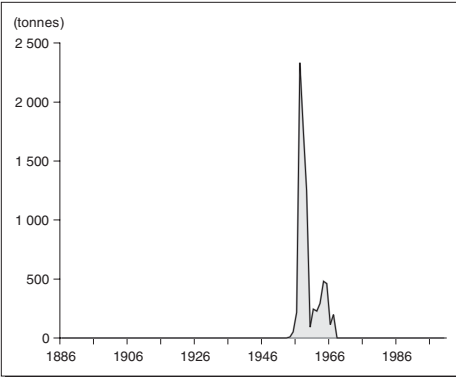
Sources: Natural Resources Canada; Statistics Canada.

Figure 42
Canadian Gypsum Production,
1874-2000



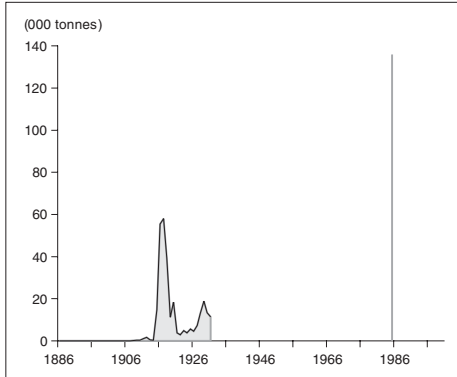
Sources: Natural Resources Canada; Statistics Canada.
Note: Newfoundland gypsum production for the years prior to 1949 is not available.

Figure 43
Canadian Lithia Production,
1954-67



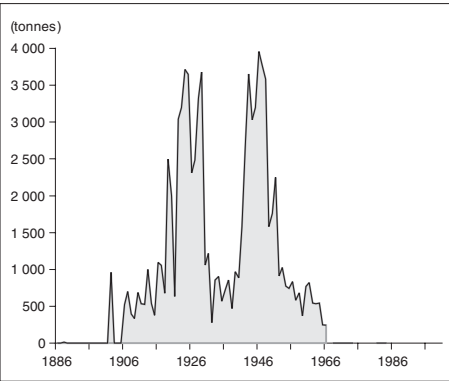
Sources: Natural Resources Canada; Statistics Canada.

Figure 44
Canadian Magnesitic Dolomite and Brucite
Production, 1908-2000



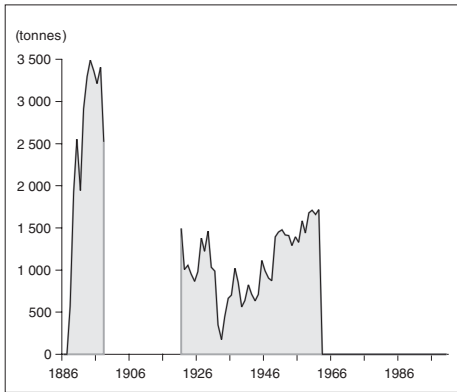
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1932-84 and 1986-2000 is confidential.

Figure 45
Canadian Mica Production,
1902-2000



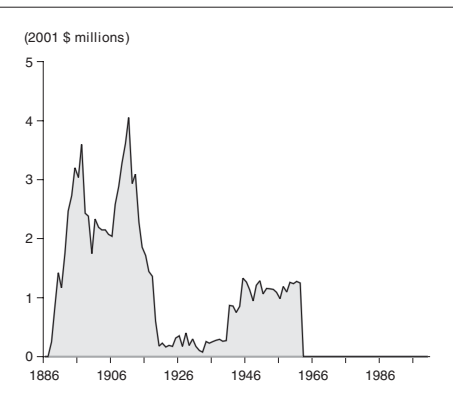
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1967, 1975-80 and 1985-2000 is confidential.

Figure 46
Canadian Mineral Water Production,
1888-1962



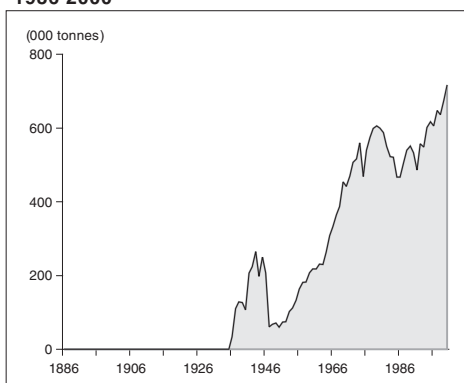
Sources: Natural Resources Canada; Statistics Canada.
Notes: Production tonnages for 1899-1920 are not available (see Figure 47, production value). The production of mineral water from natural sources has resumed in Canada in recent years, but production statistics are not available.

Figure 47
Value of Canadian Mineral Water Production,
1888-1962



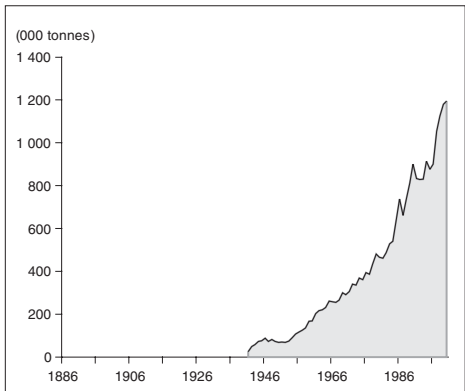
Sources: Natural Resources Canada; Statistics Canada.
Note: The production of mineral water from natural sources has resumed in Canada in recent years, but production statistics are not available.

Figure 48
Canadian Nepheline Syenite Production,
1936-2000



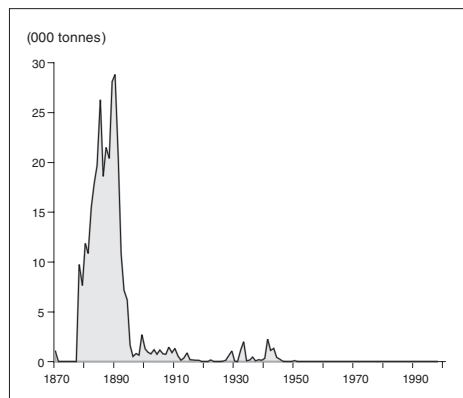
Sources: Natural Resources Canada; Statistics Canada.

Figure 49
Canadian Peat Moss Production,
1941-2000



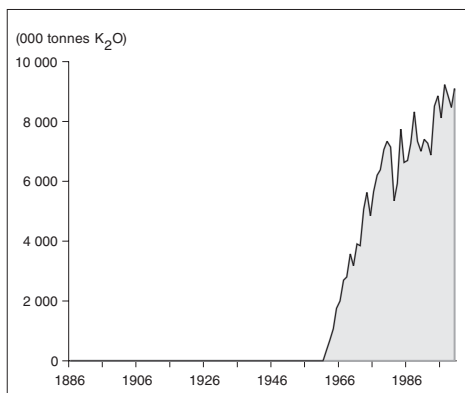
Sources: Natural Resources Canada; Statistics Canada.
Notes: This graph does not include a cumulative total of about 40 000 t of peat fuel produced between 1900 and 1955. See Figure 72 for peat fuel production.

Figure 50
Canadian Phosphate Production,
1870-2000



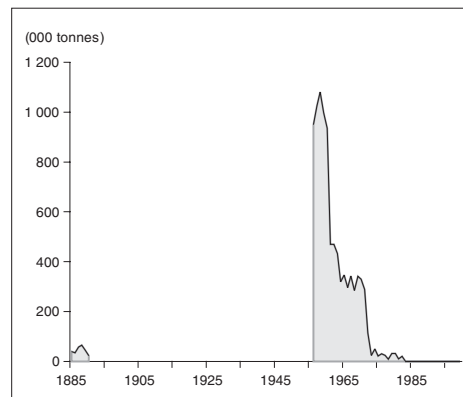
Sources: Natural Resources Canada; Statistics Canada.
Notes: Phosphate production resumed in 1999 but is confidential. Current production is much higher than the highest shown here.

Figure 51
Canadian Potash Production,
1958-2000



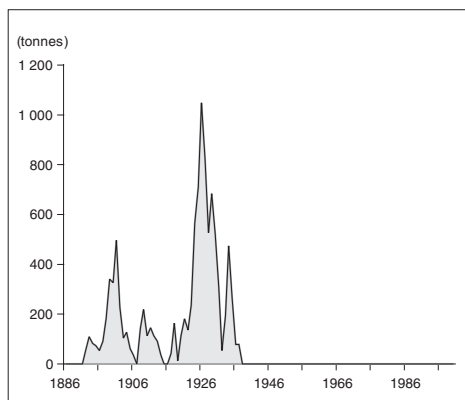
Sources: Natural Resources Canada; Statistics Canada.
Note: The graph does not show the minor production from one mine in 1958 and 1959.

Figure 52
Canadian Pyrite and Pyrrhotite Production,
1885-1982



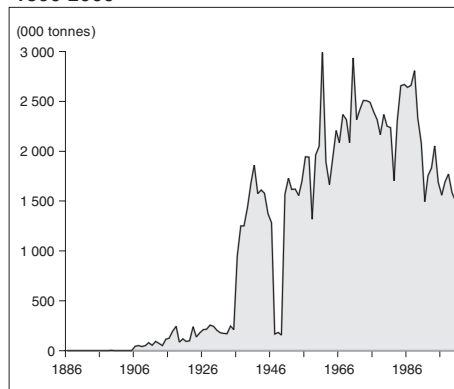
Sources: Natural Resources Canada; Statistics Canada.
Note: Pyrite was also produced from 1883 to 1955 inclusive, but was reported as sulphur content of pyrite and smelter gas.

Figure 53
Canadian Production of Natural Pulpstones,
1892-1937



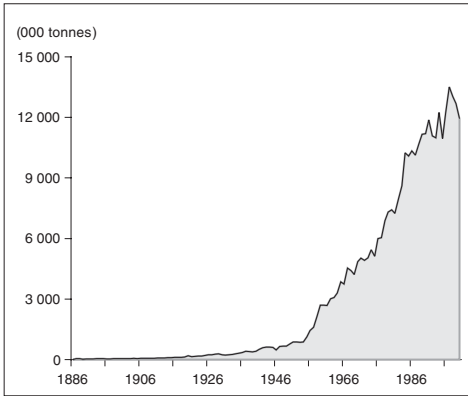
Sources: Natural Resources Canada; Statistics Canada.

Figure 54
Canadian Quartz (Silica) Production,
1890-2000



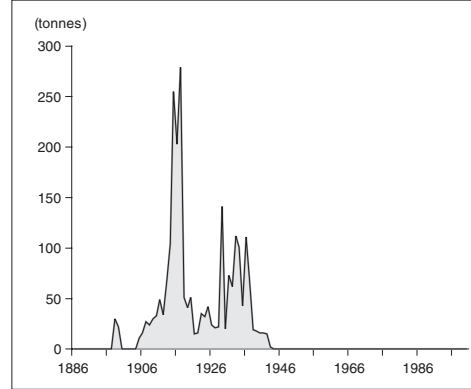
Sources: Natural Resources Canada; Statistics Canada.

Figure 55
Canadian Salt Production,
1886-2000



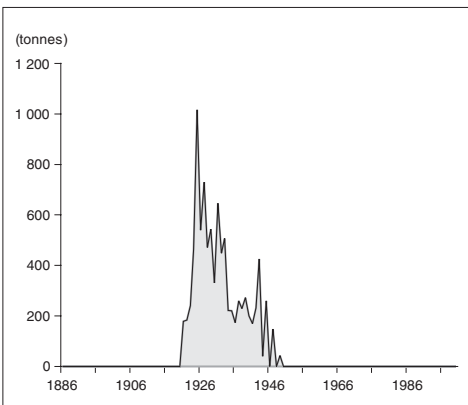
Sources: Natural Resources Canada; Statistics Canada.

Figure 56
Canadian Natural Sharpening Stones
Production, 1898-1943



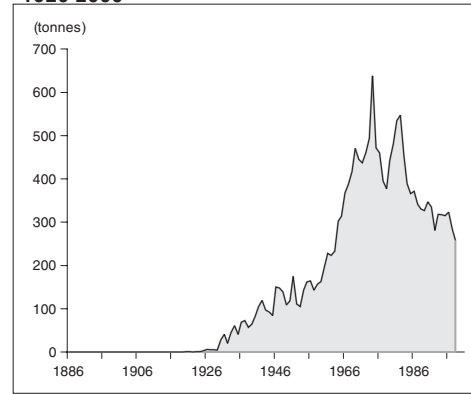
Sources: Natural Resources Canada; Statistics Canada.

Figure 57
Canadian Sodium Carbonate (Natural)
Production, 1921-49



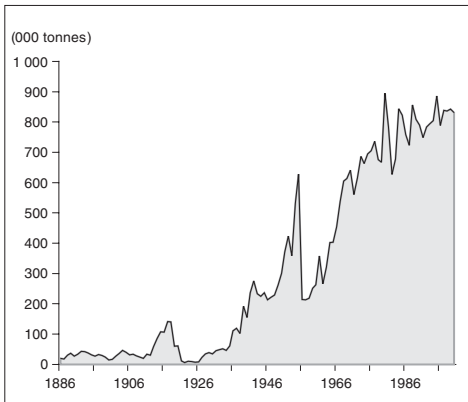
Sources: Natural Resources Canada; Statistics Canada.

Figure 58
Canadian Sodium Sulphate Production,
1920-2000



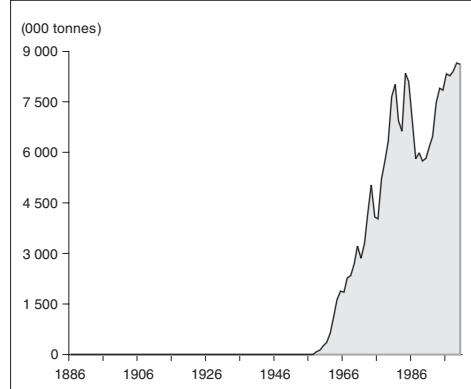
Sources: Natural Resources Canada; Statistics Canada.
Note: Production for 1999-2000 is confidential.

Figure 59
Sulphur Content of Canadian Pyrite and
Smelter Gas Production, 1886-2000



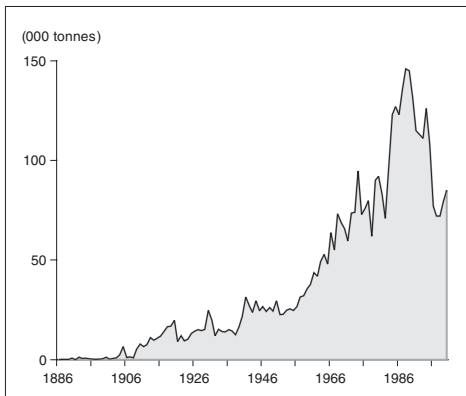
Sources: Natural Resources Canada; Statistics Canada.

Figure 60
Canadian Elemental Sulphur Production,
1956-2000



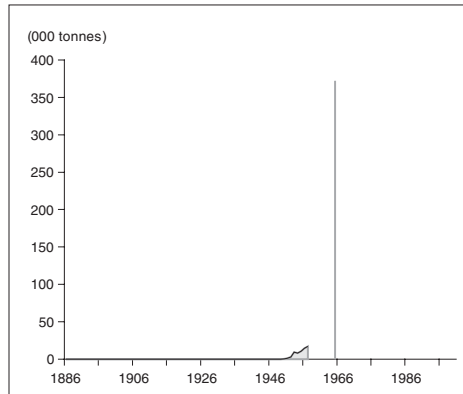
Sources: Natural Resources Canada; Statistics Canada.
Note: Production of sulphur in SO₂ smelter gases, and in pyrite and pyrrhotite concentrates, is not included.

Figure 61
Canadian Talc, Soapstone and Pyrophyllite
Production, 1886-2000



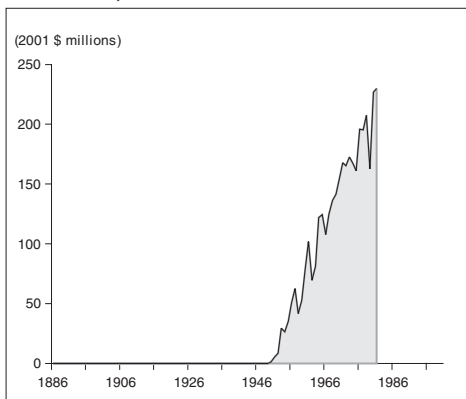
Sources: Natural Resources Canada; Statistics Canada.

Figure 62
Canadian Titanium Dioxide Production,
1950-2000



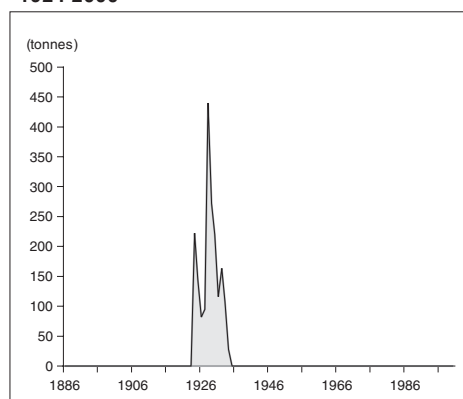
Sources: Natural Resources Canada; Statistics Canada.
Notes: Production for 1958-64 and 1966-2000 is confidential. See Figure 63, which indicates production values for 1950-82.

Figure 63
Value of Canadian Titanium Dioxide
Production, 1950-2000



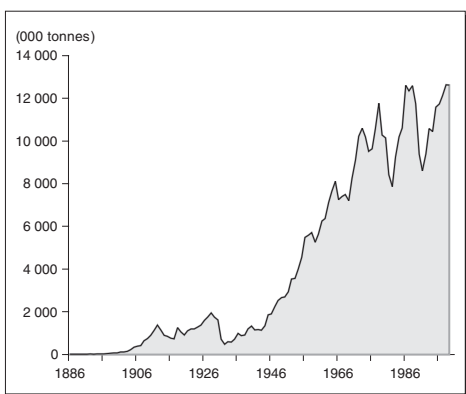
Sources: Natural Resources Canada; Statistics Canada.
Note: See Figure 62 for available production tonnages.

Figure 64
Canadian Volcanic Dust (Pumice) Production,
1924-2000



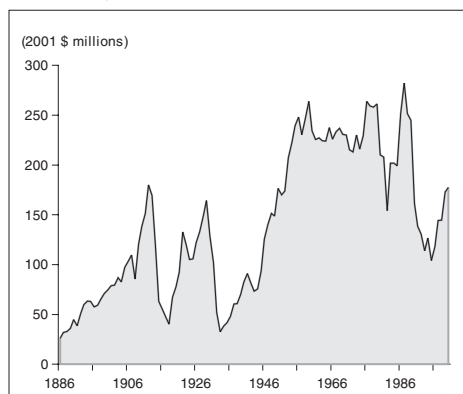
Sources: Natural Resources Canada; Statistics Canada.
Note: Pumice production for 1995-2000 is confidential.

Figure 65
Canadian Cement Production,
1887-2000



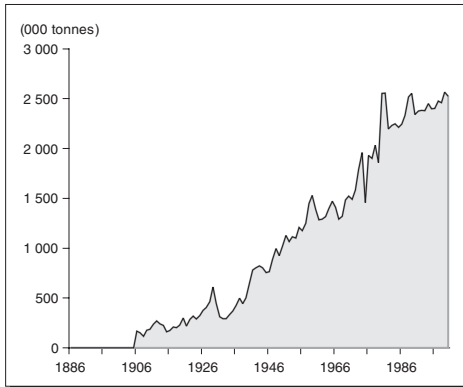
Sources: Natural Resources Canada; Statistics Canada.

Figure 66
Value of Canadian Production of Clay
Products, 1886-2000



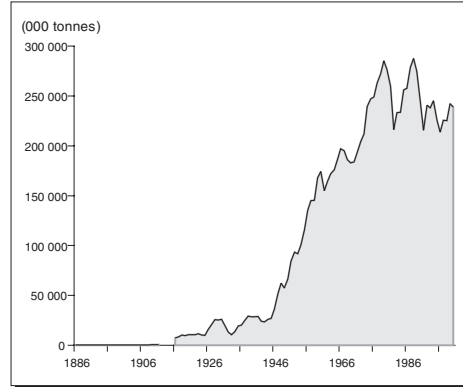
Sources: Natural Resources Canada; Statistics Canada.
Note: Newfoundland clay products production for the years prior to 1949 is not available.

Figure 67
Canadian Lime Production,
1906-2000



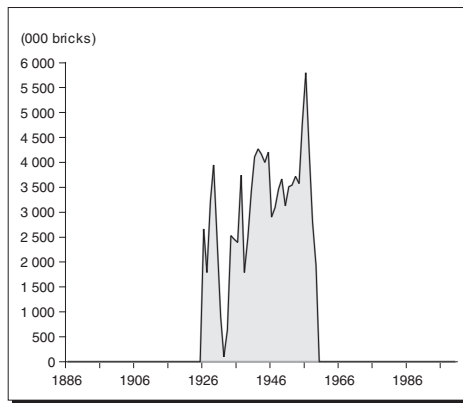
Sources: Natural Resources Canada; Statistics Canada.

Figure 68
Canadian Sand and Gravel Production,
1886-2000



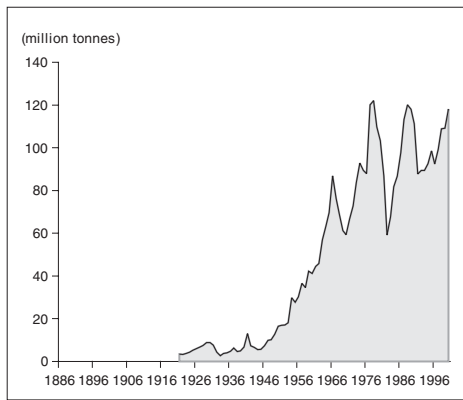
Sources: Natural Resources Canada; Statistics Canada.
Notes: Production for 1912-15 is not available. Newfoundland sand and gravel production for the years prior to 1949 is not available.

Figure 69
Canadian Silica Brick Production,
1926-59



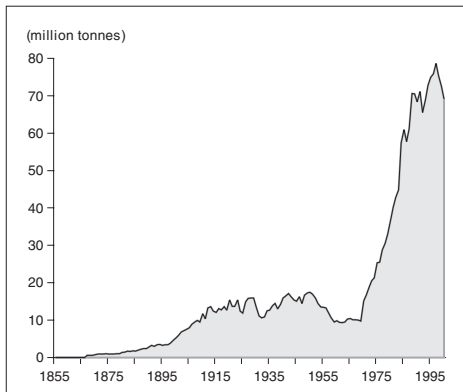
Sources: Natural Resources Canada; Statistics Canada.

Figure 70
Canadian Stone Production,
1886-2000



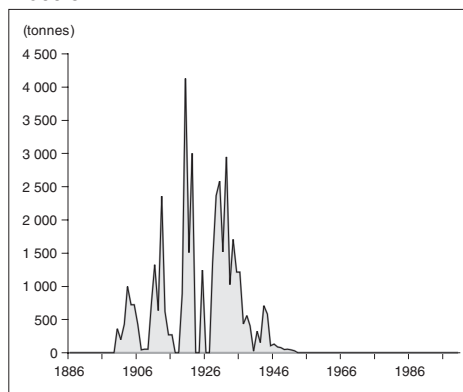
Sources: Natural Resources Canada; Statistics Canada.
Notes: Stone production for 1886-1920 is not available. Newfoundland stone production for the years prior to 1949 is not available.

Figure 71
Canadian Coal Production,
1867-2000



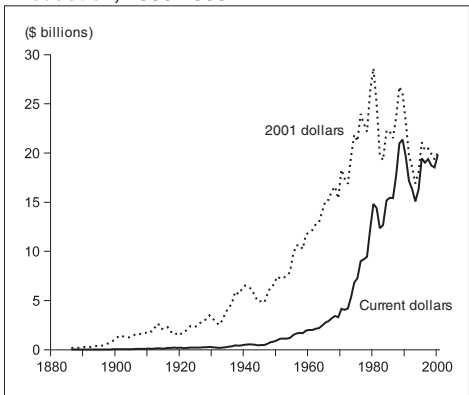
Sources: Natural Resources Canada; Statistics Canada.
Note: Canada produced a cumulative total of 2.6 Mt of coal from 1785 to 1866.

Figure 72
Canadian Peat Fuel Production,
1900-52



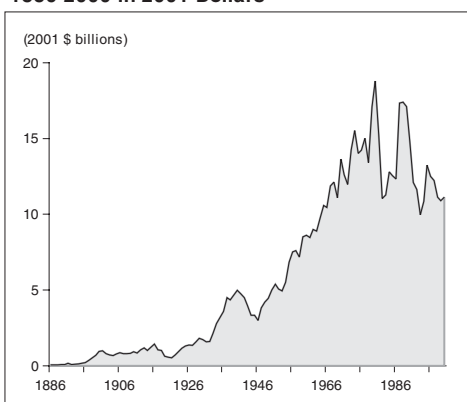
Sources: Natural Resources Canada; Statistics Canada.

Figure 73
Value of Canada's Non-Petroleum Mineral Production, 1886-2000



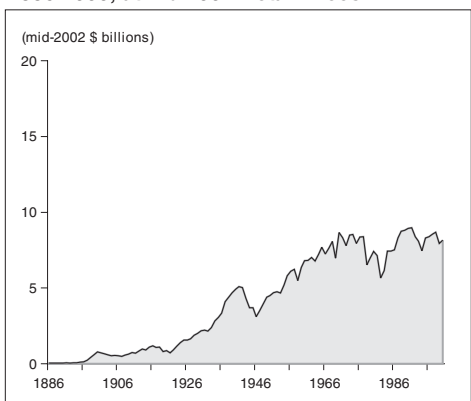
Sources: Statistics Canada; Natural Resources Canada.
 Note: Production value statistics prior to 1886 are incomplete.

Figure 74
Value of Canadian Metallic Mineral Production, 1886-2000 in 2001 Dollars



Sources: Natural Resources Canada; Statistics Canada.

Figure 75
Value of Canadian Metallic Mineral Production, 1886-2000, at Mid-2002 Metal Prices



Sources: Natural Resources Canada; Statistics Canada.