



BRITISH  
COLUMBIA

**Ministry of Energy and Mines**  
Energy and Minerals Division  
Mines Branch

# Exploration and Mining in British Columbia - 2000





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## *COVER PHOTO...*

George Gorzynski, project manager, Redhawk Resources Inc. at Trench B-2000-1, Redbird Zone B, Remac zinc oxide project, 22 kilometres south of Salmo. (12.8m @ 12.65% Zn).

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## FOREWORD

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This volume provides details of exploration, development and mining activity in British Columbia during calendar year 2000. Reviews of activity are provided by regional geologists based in Mines Branch offices in Nanaimo, Kamloops, Cranbrook, Prince George, and Smithers. In addition, there are several short exploration-oriented papers by Mines Branch or Geological Survey Branch staff.

Exploration activity in British Columbia registered a slight improvement in year 2000. Spending is estimated at \$27 million, up slightly from the \$25 million spent in 1999. Exploration drilling was up marginally to about 180 000 metres. A little over half of the drilling was at operating mine sites, and almost half of that was at the Elk Valley coal mines. The most encouraging sign for year 2000 is that claim staking activity was up sharply as a result of several new grassroots discoveries. Over 28 000 new claim units were recorded during the year, a gain of 68% relative to 1999.

New discoveries highlighted the year's exploration results. Early in the year, the **Bonanza Ledge** auriferous pyrite body was discovered by drilling in the Wells-Barkerville gold belt. This prompted a staking rush with about 7900 claim units recorded. Later in the year, several new polymetallic massive sulphide prospects were discovered elsewhere in southern British Columbia, including: the **Fox** in Nicola volcanic rocks near Merritt; the **Spire** near the Goldstream mine north of Revelstoke; several zinc-lead showings in metamorphic rocks on the **Broken Hill** property near Blue River; the **Silver Lynx** in Rossland volcanics near Nelson and the **Raven** on Nootka Island. Some of these will be drilled in early 2001.

Base metal targets were the focus of many of the advanced exploration projects in the province. The **Remac** property near Trail was explored for carbonate-hosted zinc oxide mineralization. At the past-producing **Afton** mine near Kamloops, deep holes evaluated a high-grade, breccia-hosted, alkalic porphyry copper-gold deposit. Porphyry copper-gold mineralization was also tested at **Morrison** and **Ann North** while polymetallic skarn-manto targets were drilled at **Lustdust** and redbed copper deposits were drilled at **Sustut**. At **Silvertip**, underground holes were drilled to define a silver-zinc-lead manto deposit.

The sharp rise in prices of platinum group metals

(PGMs) rejuvenated worldwide interest in these metals. In British Columbia, it spurred grassroots prospecting in numerous locations, and re-evaluation of known nickel, copper and chromite prospects. Interest in PGMs is expected to increase in 2001.

British Columbia's mines and quarries produced a wide variety of solid mineral commodities in 2000. Based on the value of production, the most important of these are metallurgical coal (28%), copper (25%), structural materials (15%), gold (12%), zinc (9%), silver (5%), molybdenum, lead, industrial minerals and thermal coal. Despite continued low prices for coal and most of the metals through 2000, the total value of solid mineral production is forecast at \$2.84 billion, up from \$2.6 billion in 1999. The increase in value is mainly due to higher production at **Highland Valley**, **Myra Falls** and **Kemess** mines.

Among the operating mines, the most significant event during the year was the permanent closure of the **Quintette** mine in the Northeast coalfields in August. The low price of coal was cited as the reason for closure. The **Endako** mine continues to work with the Job Protection Commission on an economic plan that would keep the mine operating beyond a May 2001 closure, which is planned due to the low price of molybdenum. The **Sullivan** zinc-lead-silver mine will close in December, 2001 due to exhaustion of reserves. The **Kemess** copper-gold mine reduced operating costs and raised recoveries and mill throughput, the **Eskay Creek** gold-silver mine completed a mill expansion and raised production, and **Highland Valley Copper** reduced operating costs and established production records. A successful season of mining and heap leach processing took place at the **Golden Bear** gold mine, but leach ore is now essentially exhausted.

Optimism is high that 2001 will be a better year for exploration in British Columbia. This is due to several exciting new polymetallic discoveries made late in 2000 and renewed interest by companies in base-metals. The federal government's new Exploration Investment Tax Credit should support junior companies' efforts to finance work, particularly when combined with the BC Mining Exploration Tax Credit, which was amended in July to include a flow-through component.

Mike Cathro  
Regional Geologist, Kamloops



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# **PART A**

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