

## EXPLORATION AND DEVELOPMENT HIGHLIGHTS

1990

## SOUTH-CENTRAL DISTRICT

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## INTRODUCTION

Exploration in south-central British Columbia continued at lower than usual levels during 1990. The competition for exploration dollars, particularly for Junior company projects has been high. Weak gold prices and a scarcity of project funding severely hampered many projects that were previously very active in the 1987-89 period. Announcements of mine closures at Brenda and Beavercell and depleting reserves at other operations added to an already subdued economic outlook in the exploration and mining industry in the southern interior.

Fortunately, a contrastingly strong base metal market has partially off-set the slump in precious metals-oriented Junior company activity. As a result, exploration and development at operating mines has had the effect of counter-acting the negative trends in the region and has contributed to maintaining a stable and secure production environment for the established base metal producers.

Total exploration and development expenditures in the district estimated for 1990 dropped to about \$36.5 million, from some \$70 million spent in 1989 (Table KAM-1). Approximately 49 per cent of the total, amounting to \$18.01 million, was spent on exploration projects (Figure KAM-1). This figure includes nearly \$4.4 million (or 24 per cent) devoted to exploration at active mining operations. Compared to the estimated \$20 million spent in 1989, a 7.5 per cent drop in exploration funding in south-central B.C. is indicated for 1990.

Mine development expenditures in the district were also substantially lower for 1990, totalling \$18.5 million, compared with \$50 million estimated for 1989 (Table KAM-2). However,

the 1989 figure included development costs for two new mines, Afton's Ajax deposit and Minnova's Samatosum mine. The bulk of the 1990 development budget went to general construction and expansion at Highland Valley Copper.

Regionally, exploration in the Adams Lake and Kamloops areas far surpasses the rest of the district as the most active (Figure KAM-2), exhibiting a steady increase over the past three years. The Princeton-Tulameen area is a somewhat distant second, but also shows increased activity, due in large part to major programs near Siwash Lake and at Copper Mountain. The Revelstoke and Greenwood areas have had modest, but notable increases in the numbers of projects, over previous years. However, in spite of the relatively few operators, exploration expenditures for the Revelstoke area rank third in the district (Figure KAM-3), primarily due to the advanced stage of the J & L project. This factor illustrates the impact that just one advanced stage project can have on a region. By contrast, the steady decline of exploration activity and the lack of major projects in the Okanagan and Bridge River areas have seriously changed the industry picture in these two exploration camps in only two years.

On a parallel trend with steadily increasing activity in the Adams Lake, Kamloops and Revelstoke areas, the progressive shift towards base metals oriented projects in the region is another reflection of strengthening base metal markets, particularly for copper and zinc. In the intermediate term, these areas are likely to capture an increased share of exploration funding, particularly if gold and silver prices remain weak. The decline in activity in the Okanagan, Hedley and Bridge River areas also reflects an overall decreasing focus on vein and skarn precious metals targets.

## HIGHLIGHTS

\* **ADAMS LAKE** The Eagle Bay and Fennell Formtions near Adams Lake continue to draw the highest level of exploration activity, stimulated by the success of the Samatosum polymetallic-silver project operated by Minnova Inc. and Rea Gold Corporation. Major projects, such as those operated by Minnova, Homestake Mining Canada Ltd. and others in the area, continued to focus on the "Sam" and "Rea" horizons and on comparable geological environments in Eagle Bay rocks. Minnova also expended considerable effort on areas within the Fennell Formation, associated with the Chu Chua copper-iron massive sulphide deposit.

\* **SIWASH LAKE** In the Siwash Lake area, north of Princeton, the potential of the Elk gold project was substantially upgraded as Fairfield Minerals Ltd. and Placer Dome Inc. completed a second successful year. Detailed drilling on the Siwash North zone increased both the lateral and down dip extent of the deposit and expanded work on other prospects on the property suggest that a major area-wide gold-quartz vein system may be present.

\* **COPPER MOUNTAIN** An aggressive exploration drilling program at Similco's Copper Mountain deposit has outlined two new zones in the Lost Horse Gulch area. The Virginia and Alabama deposits will add nearly 25 million tonnes of potentially mineable copper-gold ore to the mine's reserves.

\* **REVELSTOKE** Exploration activity in the area north of Revelstoke increased over previous years, with the main focus on Early Paleozoic rocks hosting the J & L and Goldstream deposits. Equinox Resources Ltd. and Cheni Gold Mines Ltd. joined efforts at J & L to expand and develop mineable reserves in the deposit. Recent reports that funding may soon be

in place to return the Goldstream mine to production are positive indications that exploration and mining in the Revelstoke area are in an upward trend.

\* **OKANAGAN** The Okanagan was considerably quieter during 1990 than the 1987-89 period. A number of small to mid-size precious metals projects were operated in spite of the strain of poor financing. Work at the Vault epithermal gold project was maintained, albeit under duress. Closure of the Brenda operations and news that the Highland Bell silver mine would close early in 1991 dampened the economic outlook for the Okanagan and marked the end of 90 years of continuous operation at Beaverdell.

\* **HEDLEY** At Hedley, Corona Corporation have indicated that without an improved reserves picture, the Nickel Plate operations would likely cease in late 1991.

\* **BRIDGE RIVER** The area experiencing the greatest downturn in mineral exploration in the region was the Bridge River district, where, except for the Standard Creek property, only minimal work was completed on very few projects.

\* **ECONOMIC IMPACT** The downturn in exploration resulting largely from the lack of project funding has created significant economic stress on the exploration-related service sector of the South-Central District. Drilling companies, assay laboratories, staking and line-cutting contractors and equipment suppliers have all felt the effects in the form of drastic reductions in contracts and clientel. The withdrawal from activity by many project operators has forced a few companies to temporarily close their doors due to insufficient business. In other situations, work-sharing and lay-offs are becoming reality, whereas in previous years, sufficient work was available to carry a nearly full compliment of staff through to the next exploration season.