

RED MOUNTAIN - NORTHWEST
BRITISH COLUMBIA'S NEWEST MINERAL TREASURE?

The Red Mountain gold deposit is a brand new gold discovery within British Columbia's "Golden Triangle", centered around the historic mining town of Stewart. Since the initial prospecting discovery in 1987, impressive reserves have been proved up in five seasons of intense exploration activity. Activity in the Red Mountain area was driven by other successes within the Golden Triangle, such as the gold-rich Eskay Creek and Snip deposits in the Iskut River area to the north, and the era of flow-through share financing (1986-1988).

Historically, the Stewart mining camp has produced more than \$1 billion of minerals. Over 200 mineral occurrences have been discovered (mainly to the north and northeast of the town of Stewart) and several became producers such as Granduc, Premier Big Missouri and Prosperity/Porter Idaho. The Eskay Creek gold deposit, 70 kilometres north of Stewart, is currently being readied for production and is estimated to contain some 70.6 tonnes (2.3 million ounces) of gold and 3163 tonnes (102 million ounces) of silver.

There are several reasons why it took longer to discover the Red Mountain gold deposit. It is located in a cirque below the Cambria Ice Field at elevations between 1500 to 2000 metres. Retreat of the icefield by 150 metres in the past 20 years has exposed previously hidden ground where many of the new showings were discovered. The area is characterized by difficult weather conditions and rugged, steep terrain covered by ice and snow. Previous geological mapping was hampered by these factors and the only modern-day geologic map covering Red Mountain was produced by the Ministry of Energy, Mines and Petroleum Resources (MEMPR) in 1986, at a scale of 1:100 000 (Unuk River-Salmon River-Anyox areas). The Red Mountain area remained unexplored prior to the late 1980s because the geological environment was considered favourable only for molybdenum mineralization.

In the fall of 1987, Chuck Kowall, while prospecting on a Ministry of Energy, Mines and Petroleum Resources (MEMPR) prospecting grant awarded under FAME (a provincially funded financial assistance for mineral exploration program), discovered mineralization near the headwaters of Willoughby Creek, a short distance east of Red Mountain. A sample from this area assayed 77.5 grams per tonne gold, 37 grams per tonne silver, 0.13% copper, 3.43% lead, 7.15% zinc, 8.1% arsenic, and 308 ppm antimony. Bond Gold Canada Inc. became interested in the area and contact was made with Kowall. In the meantime, Wotan Resources had staked a small group of claims south of Red Mountain. Fieldwork carried out by Bond

during the 1988 season encouraged them to option both the Kowall and Wotan claims in early 1989.

During 1989, Bond conducted exploration drilling and mountaineering-style sampling programs on the Red Mountain (\$1 million) and Willoughby (\$1 million) properties. During the course of the exploration program on the south slope of Red Mountain, draughtsperson Marc Gauthier was let off by a helicopter and while traversing north towards Red Mountain, he discovered pyrite-rich rock which yielded high gold assays. This mineralized zone was subsequently named the Marc zone. A late season drilling program was quickly completed utilizing an innovative method of constructing concrete pylons which enabled the drills to be mounted on the rugged slopes by helicopters. In September 1989, Bond Gold Canada Inc. made a press release, a rather unusual thing for a major company to do at an early exploration stage, announcing it had made a "brand new discovery" at Red Mountain. The best drill intersection yielded 66 metres grading 9.88 grams per tonne gold and 49.29 grams per tonne silver.

In November Lac Mineral Ltd. acquired 65% of Bond International Gold Inc. and assumed control of the Red Mountain project. In 1990, radiometric age dating yielded 200 Ma ages, suggesting a relationship between a granitic stock and surrounding volcanic rocks and helped to focus the exploration.

Lac's 1990 program cost \$3.4 million and consisted of 55 diamond drill holes which outlined a preliminary geologic resource of 913,725 tonnes grading 12.2 grams per tonne gold and 36.06 grams per tonne silver, using a 3 gram per tonne gold cut-off. In addition, there was an indication of a new buried zone identified by a geophysical survey just north of the Marc zone.

In 1991 Lac discovered the AV zone (a northward extension to the Marc zone) and the recalculated geological reserves climbed to 2.5 million tonnes grading 12.8 grams per tonne gold and 38.1 grams per tonne silver. Preliminary metallurgical test work indicated potential recovery rates of 87% and 90% respectively for gold and silver.

The 1992 exploration program included extensive environmental baseline studies, in particular an examination of the natural acid leaching of rocks over a 12 square kilometre area that had recently been exposed by a retreating glacier, and the potential for avalanche hazards. By the fall of 1992 Lac had identified a potential for 2 million ounces of gold. These positive results from the 1992 program led Lac Minerals Ltd. to submit a prospectus to the government under the Mine Development Approval Process in May, 1993.

The 1993 program, budgeted at US \$7 million, included 59 000 metres of drilling and underground development on two levels from a decline. Fifty to sixty persons were on site, with up to fifteen geologists at one time. With helicopter, expediting and other service-oriented contractors, over 100 people were on the payroll. During the field season, Lac offered tours to the site and conducted open houses in Stewart to keep the local community informed.

On September 24, 1993 Lac made a news release announcing the discovery of two new mineralized zones, JW and 141, with gold grades and widths consistent with those previously encountered in the Marc and AV zones. The new data expanded the total mineral resource and indicates the potential for greater than 2 million ounces of gold. A mining feasibility study is expected to commence in late 1993.

The mineralization at Red Mountain is structurally controlled, with the best grade material occurring near or at the contact between the granitic stock and the brecciated volcanic rocks. Preliminary mineral and alteration zoning patterns indicate a high level porphyry system with a gold apron, similar to the huge Porgera gold deposit in New Guinea. These exciting new geological and structural interpretations for the Red Mountain area will undoubtedly spur explorationists to re-examine the Golden Triangle for this new type of deposit.

The relatively quick success enjoyed by Lac at Red Mountain emphasizes the excellent mineral potential of British Columbia, even in established, well prospected mining camps. The prospectors old adage "the best place to look for elephants is in elephant country" still holds true.