

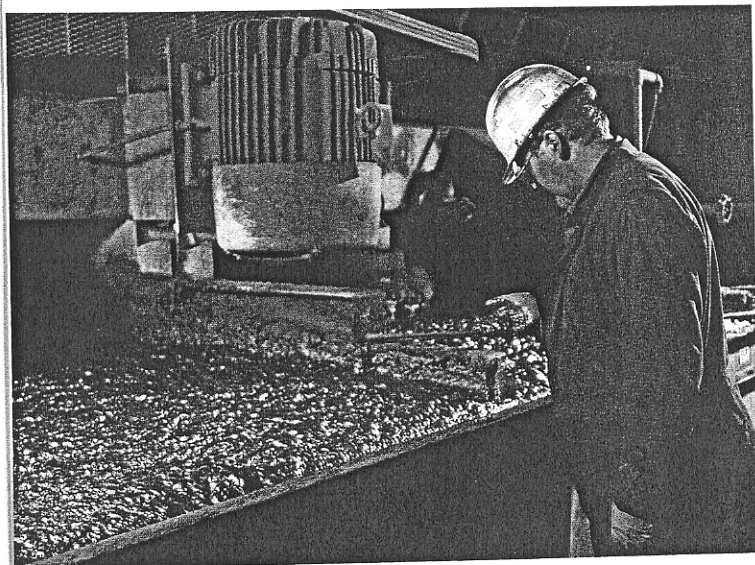
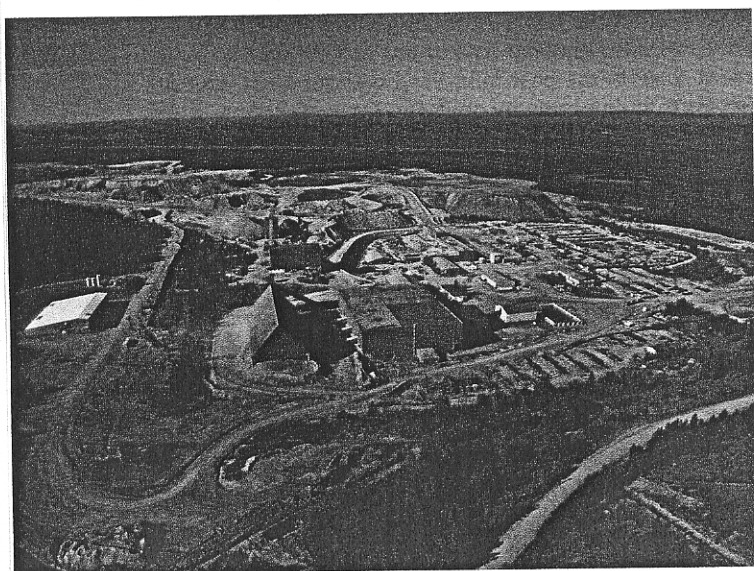
883427 *Tos Gibraltar*

GIBRALTAR REOPENED

EVOLUTION: GETTING OFF THE SWING

Everyone loves a success story, and in British Columbia, the reopening of the Gibraltar mine is a good one. It means jobs for the community, results from keen planning, and attests to the more favourable climate the provincial mining industry finds itself in today.

BY CLAYTON CHEN



The Gibraltar mine is a low-grade copper-molybdenum mine, 68 kilometres north of Williams Lake in British Columbia. Operations began 34 years ago in 1971, and Taseko Mines Ltd. acquired the Gibraltar mine in 1999, a year after operations halted due to low metal prices. Activities restarted in May 2004 and were in full swing by October. Now, a year later, continuous effort is being made to ensure a lasting future.

To reopen, Taseko entered a joint venture with Ledcor (85 per cent Taseko, 15 per cent Ledcor), concerning the operations of the Pollyanna stage 4 pit. Ledcor handled the restaffing of both the mine and mill, took on joint management responsibilities and helped finance the purchase of new mining equipment.

"During the restart, we expanded our mining fleet with a 2800 XPB shovel from P&H and five new MT 3700B haul trucks which has allowed us to raise our mining rates to 120,000 tons per day," said Rob Rotzinger, mine general manager. Other infrastructure changes included replacement of the concentrator DCS and OSA, modifications to the copper cleaner circuit flow sheet, and retrofitting certain equipment. "It involved lots of pumps and plumbing—not glamorous work, but essential."

One major upgrade involved spending over a million dollars on the molybdenum circuit. "It was a complete redesign of the molybdenum flotation plant," explained Rotzinger. "The changes were made to realize opportunities when processing both high- and low-grade molybdenum ores. We now have the circuit capacity to handle the rich pockets and also to have sensible recovery when the grade falls below average." The updated circuit was finished in late December.

A number of technological refinements are on track or at least being considered, to further Gibraltar along the path towards long-term stable future. Through the years the mine was on standby; two main lines of thought were explored. "We first looked at sustainability concepts that could be taken forward through operations to the eventual closure of the mine and beyond," Rotzinger said. Some significant results include formation of a public-private partnership with the Cariboo Regional District to locate the regional landfill on one of the mine's waste dumps and identification of a project to generate power with treated water from the mine site, which is now in the permitting stage.

A study was also completed to assess the feasibility of having an onsite hydrometallurgical copper refinery utilizing Teck

Cominco's CESL (Cominco Engineering Services Ltd.) process. "We identified with that study that this technology will dramatically lower Gibraltar's long-term cost of production. In addition, it is a green technology," Rotzinger explained. Potential savings of \$0.20US per pound of copper could be realized. "The first step was to get the mine up and running

and, now that that is done, the hydromet refinery project is a major priority."

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The Gibraltar mine is one year into a 12-year plan to produce an annual average of 70 million pounds of copper and 900,000 pounds of molybdenum. "The mine has a lot of resources beyond our current 12-year mine plan. We're currently doing some exploration and some delineation drilling," Rotzinger said, referring to the possibility of extending the mine life to 30 or so years. "Utilizing new technology like the refinery will allow us to reduce our processing costs and convert resources to

reserves. Even after more than 30 years of history with the operation, we still have some excellent exploration potential on the claims."

With metal prices what they are, including recent record prices for copper and molybdenum (\$1.838US per pound for copper and \$33.50 per pound for molybdenum), mining companies are mapping out their futures. "Now is the right time to make the change from Gibraltar being a swing producer to being a sustainable player in the market," said Rotzinger. Referring to the swing producer *modus operandi* of hibernation followed by quick response, he said, "The mine was forced to be opportunistically in and out of the market depending on metal prices. From what we see now, this is the time to implement a change in technology. The refinery technology is developed and it's ready to be commercialized. This is the key element of our strategy."

Evolution requires the right circumstances to occur at the right time for the right subjects. It is the process of transi-

tion, in which something changes into a different and better form or system. Taseko has the opportunity to dig in deep, step up, and make something greater with what they already have in Gibraltar. The timing is right for them to capitalize fully and move from a sporadic, market-dependent mine to a solid, balanced foundation for growth. "For Taseko, Gibraltar is a new beginning; it is the base we want to build from," said Rotzinger. "We're focused on what can be done with technology and other opportunities to make Gibraltar a long-term sustainable player." ■

