

NEW LIFE PROMISED . . . old mine gets a second chance

MULTI-MILLION GAMBLE

\$120 gold spurs Bralorne mine

By GEORGE FROEHLICH Sun Business Writer

BRALORNE - A century ago men invaded the Bridge River Valley of British Columbia with packhorses to search for gold. Today's miners are one mile inside a mountain. riding electrified buggies, in their search for gold.

If they succeed, the ghost town of Bralorne, 78 miles west of Lillooet and 105 air miles north of Vancouver. may again become a thriving community.

And all of this activity is due to climbing gold prices. The price has risen to around \$120 an ounce from \$40 an ounce, within two years.

In the fall of 1971 officials of Vancouver-based Bralorne Resources Limited decided to shut down the mine when it became unprofitable at the price of \$38.50 an ounce of gold.

Until then the mine had been one of the biggest and

richest in the province with \$144 million worth of gold having been produced from it and the adjoining Pioneer mine.

But today the economics have changed. Gold is selling at around \$120 an ounce and Bralorne officials are willing to gable between \$4 to \$6 million in their attempts to reopen the mine.

Says president William F. Fitzpatrick, "There is a greater urgency than usual with this project and we are going at it as fast as we can."

He says management is working on a four point program which will ultimately indicate whether the mine will be reopened.

If everything turns out as expected the mine could be back in operation on a 500ton-a-day basis by late next year or by the middle of 1975.

The first phase of the program will cost \$1 million and consists of mine rehabilitation. This is expected to be completed by late September and will be followed up by an extensive diamond drilling and drifting program.

Once the old mine equipment has been brought up to operating standards the company will engage in a \$600,000 exploration program.

Purpose of the exploration program; Fitzpatrick says, is to define and enlarge the ore reserves. "The proven reserves we have at the moment amount to 600,000 tons grading an average of .25 ounces a ton. With our exploration program we would hope to increase the reserves by an additional 500,000 tons."

Fitzpatrick says that initially all Bralorne is trying to do is to get back into production "as fast as possible."

If the mine is reactivated 175 to 200 people would be employed.

The company's consulting engineers, Bacon & Crowhurst Ltd. in a report, have estimat-

ed that the mine would be a viable operation at \$85 an ounce for gold. At \$100 an ounce the mine is "extremely attractive," the report noted.

Studies by the company indicate that at \$100 an ounce the return for Bralorne would be about \$3 million a year, excluding depreciation and depletion. Price changes of \$10 an ounce would increase the yearly return by \$800,000.

The Bacon & Crowhurst report also indicated that exploration at the lowermost levels on '77 vein at the mine did not indicate a reason to expect a "bottoming" of the orebearing quartz vein.

Fitzpatrick also says that many lower-grade material was discovered and left untouched when the mine was in operation on the major vein, the '51. He adds that this vein was also only partially explored.

Fitzpatrick says that if the mine is re-opened at the '51 vein then the capital costs will come to around \$4 million. However, if it has to go to the '71 vein then it will cost an additional \$2 million.

But management is confident that the additional 500,-000 tons will be discovered during the exploration phase.

The Bacon & Crowhurst report put it this way:

"In light of the general geological environment, it is confidently expected that not only will the anticipated ore tonmage be indicated by the first phase of exploration, and proved up during the second phase, but also that substantial additions, sufficient to keep the mine in operation for many years, can be found on a progressive basis."

Project manager Jack Crowhurstsays the purpose of the present'program "is not to extractore. It is to outline orebodies and to prove up sufficient orein this one particular area of the mine to justify production"

The Bralorne mine began production in 1931 although the first daims were staked at the Pioneer mine, which adjourns he Bralorne mine, in 1897. By 1916 an incline shaft had been sunk and \$135,-0 00 worth of gold has been produced. In 1959 the Bralorne and Pioneer mines merged.

Kitzpatrick says that the company is lucky in that it can rehabilitate the mine. "If we'we're tostart from scratch it would cost an additional \$5 to \$6 million to put such a mine into production."

Bralorne seen yielding gold again

By LEN TAYLOR

province

BRALORNE - This is the dateline that was thought to have expired two years ago when Bralorne Resources Ltd. closed down its world-famous hardrock mine here.

All the obituary notices appear to have been premature, however, for there is every possibility that a year from now Bralorne will be a bustling village once more, its historic mine workings reopened to add higher totals to the \$144 million in gold produced in the 40 years prior to its 1971 closure.

The imminent Bralorne revival depends on a number of unknowns, but the odds are good that it will come back a golden Phoenix arising from the rubble of the deepest mine in British Columbia.

Bralorne has its own brand of loyalists, people who never moved away, some who may move back, and many who recall days of living in a remote community tucked away in the towering mountains of B.C.'s Interior.

Last July 1, for example, some 650 turned up to celebrate a reunion originally planned for former students of the Bralorne school. A couple of hundred was the first estimate of attendance. In the end, that figure was tripled.

Bralorne, says mine manager Jim Thomson, who has been keeping watch on the deserted premises for the past two years, once was a community of 4,000 that suddenly dropped to fewer than a dozen. It is unlikely to reach its former population, but it could return to 1,000 or more within 18 months, because about 200 full-time employees will be needed in any mining revival. This would include 100 underground hardrock miners.

This week Bralorne president F. William Fitzpatrick, or just Bill as he prefers to be known, dropped in on Bralorne with some company executives to see how preliminary work of the mine reopening is proceeding.



Company officials examine a gold-bearing quartz wein at Bralorne mine.

Two years of idleness have created some havoc among the facilities left in place. Pipes have rusted, some cables are of doubtful utility. But a surprising amount are expected to be usable after being fully tested.

At the moment a dozen workmen are dealing with the main shaft hoist which operates the twin cages to the 26th level from the Crown vein opening at level eight. They have installed a new 300horsepower motor and are checking the six-foot drums and cables around which the hoist cables wind.

Thomson predicts they will be ready to work down in the shaft elevator cages in a matter of weeks and should be able to put experts on the 46th level, where the rich 77 vein is situated, in a couple of months.

Vein 51 on the 26th level is another one that was left with good ore available. Fitzpatrick says the development program, to which the directors have voted \$1 million for preparatory work, is flexible. If enough proven ore is located in the 51 vein, his inclination is to proceed with mining it immediately, letting the mine produce the development money for what has been estimated as a \$6 million program in all.

In that case, Bralorne should be back in production by mid-summer 1974. If the decision is to start up both the 51 and 77 veins simultaneously that will not be until the end of next year.

A 500-ton-daily crushing mill is part of the program.

Actually the first-stage work has been under way for two months. Mine rehabilitation should be completed by September when extensive diamond-drilling and drifting will begin.

Fitzpatrick says the hope is to add immeliately 500,000 tons of ore to known reserves of 600,000 tons. This may be only scratching the surface, he says, for there is some reason to suspect as much as three million tons may be available.

None of this takes into account the older Pioneer workings of the combined mines where rich ore was abandoned in the Taylor shaft and where the possibilities for development are believed to be excel-

In the past, Bralorne ore has averaged .5 ounces per ton. With gold around \$120 an ounce, and rumors that it may go higher, perhaps up to \$200, the directors are confident the mine can pay. Computations have shown that \$85 ore, well within the mine's capacity, would be profitable. Fitzpatrick says he thinks the new exploration program will provide from 20 to 30 years of new life for Bralorne.

"And if gold hits \$200 we'll be in business well into the 21st century," he predicts.

Jack Crowhust of Bacon and Crowhust, geological consultants, agrees that there is reason to believe the ore body can be mined for many years. There is no reason, he adds, to think that the rich 77 vein, which has averaged 1.12 ounces per ton (\$140 ore at present prices), will bottom out, and there are plenty of reasons to think that it may go many hundred feet deeper.

Fitzpatrick points out that mines in South Africa are retrieving gold at 10,000 feet below sea level. White Bralorne is 6,500 feet deep, its top level is halfway up a side of the Ferguson range of mountains and its 46th level, as a result, is only 2,100 feet below sea level.

Even there the rocks are 135 degrees Fahrenheit and working conditions have to be cooled by pumped-in air and the action of a slurry, used to fill the holes left by ore excavations, that is 30-per-cent water. The result is a steady 80-degree temperature.

Projections suggest a twoyear payout for the estimated \$6 million expenditure, Fitzpatrick said. The only fly in the financial ointment is the uncertainty of provincial government attitudes although Bralorne officials feel there is no reason to be uneasy.

"This mine is unique for redevelopment," Fitzpatrick says, "for all the studies have been done for 40 years. If we had to start such a venture from scratch it would cost another \$10 million." When all the data have been collected from the present surveys, he added, Bralorne will approach the province to get a firm deal in the way of royalties and other payments that may be required. It has no title difficulties for it holds old Crown grants on which it pays the 25 cents an acre recently imposed.

But, Fitzpatrick says, had they been starting from scratch they would have had to reach a firm agreement

with the government before risking any money.

For him, though the biggest problem will be finding hardrock miners.

A few of the old Bralorne team will return. At least one already has done so. Vic Zaporozan is back from a twoyear stint on the Bradina operation south of Houston.

"I'm happy to be back. This is the place for me," says Zaporozan, who piloted the electric train that took the inspection party a mile into the mine at the eighth level. "I love the hunting and the fishing here and I have my own log cabin on Gun Lake."

He doubts if many of the oldtimers will follow him. Thompson feels that Bralorne will have to get as many experienced hands as possible and train younger men on the

When the mine was closed Bralorne sold the surface rights and retained ownership of only eight houses in the town it had built. How many will be needed, whether they will be refurbished homes or new ones, are details for the future.

Bralorne, now a diversified company, is reaping its first benefits from the wider horizon of operations. More than \$6 million received as the result of a 1972 sale of its holdings in Bracell Petroleums of Calgary is the nestegg that can finance the Bralorne gold revival.

Fitzpatrick and his associates emphasize that the final decision to reopen the mine has yet to be made but their words suggest it will merely give public appearance to a thought they have accepted.