Defying the Law of Metal Prices....

A Copper Tan For A Pallid Industry

By William Annett

It doesn't take a very long memory to recall that British Columbia is copper country. Remember the swinging Sixties -Bethlehem, Brenda, Boss Mountain? None of your little high-grade outfits. We moved mountains for .9 percent. Those were the days when The Old Man was running the province, and whatever else he's been criticized for, there was nothing small about The Old Man's vision.

Craigmont really got the show rolling, although there had been one or two small copper mines before that. Remember the story? Frank Keane tells it beautifully. Craigmont's mining engineer decided to slide into Merritt for a few beer, but he forgot in his haste to tell the boys on the drill to shut down and move to another location. So they kept on drilling. And by the time the engineer wove back into camp the next morning with a kingsize hangover, Craigmont had a kingsize copper property.

From 1961 to 1983 when the ore (some of it 4.4%) played out, Craigmont was a dividend-class producer. It produced something else. A little-known mine manger named Bob Hallbauer was snaffled off by Teck early in the Seventies to bring every mine in the Teck portfolio into production. Now he's holding down the presidential suite at Cominco.

There's no need to linger over those ripsnorting Sixties, except to recall how different the exploration-development scenario was then. But it's important for what comes later, because in those days, the majors ended up with all the marbles and no junior outfit (with one or two exceptions) had any ambition but to sell their findings to the big companies. The rich got richer and the poor got grubstaked.

The difference also had something to do with financing.

"We had the hardest time getting financed," recalls Jack McLallen, 82-year old former chairman of Bethlehem. "Finally, we got the Japanese to back us, but it cost us a lot of stock."

Today, all Bethlehem's CFO would have to do would be to book a flight to London or Zurich and take along an eight-yard P&H bucket to carry the loot home.

But it was a great decade. Craigmont's timing was perfect, because about the time their ore ran out, the price of copper fell in like the roof of an adit in loose shale. Others weren't so lucky.

And then a strange thing happened. It was much more than the fact that we entered a long decline in copper prices. After all, volatile copper markets have been going on for 15,000 years since the first heads-up caveman discovered that the shiny stuff made a spear point that was easier to work, kept an edge better and was prettier than the old stone model. No, the really strange aspect was the stories we were fed by the international market-driven information mills. Stop me if you haven't heard these lines:

1. Copper is obsolete. There are all sorts of exotic metals that can be used instead in, say, the automobile industry.

2. In future, the limited world requirements for copper can probably be met by dredging up the old phone lines under Manhattan. 3. Speaking of phone lines, fibre optics have obviated the need for copper wire.

I don't know why we were fed a bill of goods, but we were. It couldn't have been the copper mining industry - unless there was a colossal short position somewhere. If there was, it's been covered. Because as of about mid-November, copper took off like a scalded bull cook. And as a result, many of the players around Howe Street are attempting to explain it, evaluate it and work out their own strategy.

In the process, says Donn Morgan,

research manager at Placer Dome Inc. in Vancouver, it will be necessary for mine operators to rethink their concept of copper. Because things have changed.

"It's true," says Morgan, "that usage intensity has lessened for copper in a lot of traditional areas. But that's only half the story. There are other areas where copper's use is increasing rapidly."

One of the more dynamic, says Morgan, is the use of copper in robotics especially in leading industrial countries such as Japan.

"Japanese industry," says Morgan "utilizes 32 robots for every 10,000 people. In the U.S. that's 4.7 per 10,000, and in Canada 3.7. Figure the growth potential."

Another factor in the changing copper scenario, according to Morgan, is a gradually lengthening cycle. In the seventies, the copper price cycle took four years to unfold. In 1974 it went to six years, and from 1980 to the likely peak sometime next year, it's eight years. What does that mean?

"It means," says Morgan, "that we still can't wait until a market peak before we start developing copper mines, but at least it will give potential producers a better opportunity to develop their strategy."

There are other fallacies around. We tend to assume that after 1980 when copper plunged to 60 cents, our heroes of the open pit either closed or lost nothing but money for seven and a half years. Setting aside tax loss opportunities, that strains the credibility somehow.

"Let me tell you something," says Mike Muzylowski, president of Granges Exploration Ltd., the champion minefinder this side of Central Canada (that humourous but imprecise pseudonym for Ontario). "Copper is the major metal we produce at Trout Lake. We have never stopped looking for copper, and we have never failed to make money at Trout Lake."

Muzylowski agrees that the tales told about copper in past dreary years have been the product of "relatively closed minds". But he is uncertain as to the motive.

"What's going on right now is not a simple inventory shortage," says Muzylowski. "Although current world inventories are about one third of what they were in 1983. Supplies in New York are at a 14-year low. Meanwhile the big North American producers are consistently working at means of lowering cost."



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How is Granges reacting to this invitation to the dance?

"We have two other properties we'll likely be activating," says Muzylowski. "Bigstone in Saskatchewan is only 50 miles from the Flin Flon mill. On the other hand, drilling isn't complete, and we haven't sunk a shaft. We're looking at about 18 months to production."

Just in time for the next downturn. And the other?

"In Manitoba, we have a property at Pine Bay," says Mike. "Here we have a shaft, it's drilled out and it's like 3% copper. We have a road and power. It could be there in six months."

Granges might be an exception to the rule. More likely some of the others, for their own corporate reasons, would rather view with alarm than point with pride. There's an old mining phobia in this province that if you send out an enthusiastic press release they'll either slap a stop trading order on your stock or raise the provincial tax, or both. With some justification.

But the group pretty well breaks down into existing producing mines (marginal losers) or others within a stone's throw of production. An exception is the Noranda Goldstream Mine near Revelstoke that was in production but shut down for lack of net income, or interest. Or the Esso-Sumitomo Kutcho Creek spread in northern B.C. that is so far advanced they even have their regulatory approvals. We even have a junior or two, defying the laws of copper gravity in a world gone mad for gold.

Gibraltar Mines, that empty socket in Placer's tiara, has been twisting and turning, using every mining and technological trick in the book to stay profitable. And failing. But with declining mineable

reserves and production costs up to 76 cents a pound in 1986, Gibraltar took a farsighted stance and spent \$12.6 million on a solventextraction and electrowin plant designed to produce 10 million pounds of low-cost cathode copper annually.

In the short run, this will keep copper output high in the face of the harder material now being mined. Long term, it will produce copper for 10 years from Gib's low-grade dumps.

Meanwhile, higher priced copper prices will rewrite Gibraltar's books from total revenue on down.

Sister company Equity Silver has also been taking its lumps for different reasons. Recently reorganizing its silver and gold recoveries, the mine under president Anthony Petrina (also president of Gibraltar and executive vice-president of the new Placer Dome Group), had already been looking at the prospect of a turnaround in profitability. Now with 16 million pounds of copper (1986) as a by-product, Equity is likely to show impressive gains in the current year.

One of the surprising mining stories of the year in B.C. saw Cominco's Valley Copper linked with Lornex by a huge 2.5 metre conveyor that stretched from Valley's open pit to Lornex's mill. Valley's own mill continued to operate producing copper concentrate. Total cost of the project was \$83 million, and it will escalate total throughput to 90 million metric tons a year, thereby making it the third biggest metal mine in the world, after Chuquicamata in Chile and Palabora in South Africa.

The lucky Pierre in the middle is Teck Corporation, which of course not only con-

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trols Cominco but also owns 22% of Lornex, not to mention its own Highmont mine just over the hill.

The whole question for the innocent mine watcher is - can the copper industry be that bad when this kind of expenditure took place against the gloomy backdrop of 60-cent metal? The Valley-Lornex project was in place long before the copper price made its move.

And looking back over the past half decade, something seems to be missing from the equation. According to the Mining Association of B.C., net copper mining revenue has climbed from \$320 million in 1982 to \$468 million in 1986, a strong second place to met coal, which had corresponding figures of \$550 million and \$847 million. Both industries where, we're repeatedly told, we operate at a loss for the the benefit of those two well-known charities, the Japanese steel consortium and the European auto industry.

One way or another, something is being exaggerated. We're either not losing as much as reported, or we should cease, desistand become a province of carrot growers.

But the question will likely be shelved, at least for the current swing of the price pendulum.

Meanwhile, there are other, smaller companies that stand to benefit from better copper prices, where they aren't doing so already.

On Vancouver Island, Westmin's H-W Mine is being expanded to a capacity of 4,400 tons per day, producing gold, silver, • GEOLO copper and zinc, with the copper being a significant component. In 1986 the mine operated at a loss due to low base metal prices, and the substantial increase in prices

in 1987 were too late to create a significant turnaround. That will happen in 1988, when mining revenue will likely outdistance the oil and gas sector of the company. Westmin, of course, is that unusual hybrid organization that has its cake in Alberta oil and eats it in B.C. mining.

Few junior mining stocks are well positioned with copper properties, simply because it has been a long time since a solid incentive existed for copper exploration. In addition the era of the Sixties, when copper development was taking place had the effect of shaking most copper properties down into the hands of the majors.

Still, there remain one or two possibilities. Abermin Resources and Getty Resources both have copper properties which they will no doubt be urging along, and no doubt there will be others with multi-mineral locations which will be examined a little more closely with respect to their copper content.

The thing people miss when they talk about copper becoming obsolete is that it's been around so long simply because it's so flexible, so tough and so adaptable. For 15,000 years it has served primitive tribes, the Egyptians, the Greeks and the ancient Chinese in every way from plumbing to kitchenware. If it's replaced in electric wiring, it pops up as a replacement for expensive rare metals. You can't count copper out.

And if that's true, it remains for us to play this market properly, not with egg on our face. Cominco and Granges are two excellent examples of rolling with the market, an art that by now British Columbians should have mastered, since we're purveyors to the world.

That's copper country.