



## Old Similco Mine Reborn as Copper Mountain

By Brian Truscott

Workers assemble a ball mill inside the Copper Mountain concentrator building. The re-commissioned mine is expected to open in June, 2011.

**T**his June, Copper Mountain Mining Corp. (CUM.TO) is set to reopen the old Similco mine, a historic mining camp just south of Princeton, B.C. and a three-hour drive from Vancouver.

Iconic mining names such as Granby Consolidated Mining, Newmont Mining and Cassiar (later renamed Princeton Mining Corp.) have explored and mined Copper Mountain at various times going back as far as 1884, some choosing to go underground, others eventually building three large open pits to get at the copper and, to a lesser extent, gold and silver.

This year's phoenix-like resurrection of the old Copper Mountain mine can be tied to Newmont's decision in 1988 to sell out to Cassiar/Princeton, which continued to work the Similco mine until 1996.

Jim O'Rourke, Copper Mountain's chief executive and president, was Princeton's president when Similco was added to that company's mining portfolio.

"Newmont had plans to run Similco for another year; we took it over and ran it for seven years," O'Rourke told MINING.com. "We shut it down in 1996; even though it still had reserves, the grinding equipment was old and small, relatively speaking. We were also faced with a fairly large increase in the strip ratio, moving to 2:1 from 1:1."

By that time, the decision to shut down the mine had become an easy one, because Mitsubishi Materials Corp. (MIMTF.PK)

had approached Princeton Mining with an offer to develop the copper/molybdenum Huckleberry mine near Houston, B.C. The Japanese company would finance the endeavour through to production.

"Huckleberry showed higher grades and looked much more profitable than Similco at the time; it still runs today," O'Rourke says.

Still, things that go around do come around and O'Rourke found himself with the opportunity to once again buy the old Copper Mountain site in late-2006.

"We knew we still had the reserves, but we also undertook a lot of exploration on the site," he says.

With a past-producing asset in hand, Copper Mountain went public in mid-2007. O'Rourke assembled an experienced exploration and operating team – some new people and some old-time colleagues from other mining projects.

The goal was to put the shuttered mine into production.

"We really weren't ever an exploration company, per se...we had a good idea of what was there, exploration was successful, we had some luck and we had excellent people working on the project," he says.

His longtime relationship with Mitsubishi also paid off. The Japanese conglomerate took a 25% equity stake in 2009. In return, it arranged needed debt financing and agreed to take

100% of the concentrate for the estimated 17-year life of the mine.

“For a junior company to carry out (this project) would have been virtually impossible without the strategic alliance with Mitsubishi, especially considering the global economic downturn we went through. [Mitsubishi] really helped us out, advancing us funds to keep us on schedule,” O’Rourke says.

The volatility, the uncertainty and lack of investor sentiment during the difficult times took Copper Mountain’s shares from C\$2.00 each in June 2007 to a low of \$0.39 in November 2008 and, now, back to just under \$5 in late 2010.

In terms of the market synopsis, in a mid-October report, Jennings Capital rated Copper Mountain Mining a speculative buy and increased its 12-month price target to \$6.00 per share, up from its previous target of C\$4.40.

“Recent strength in copper prices as well as improving supply and demand fundamentals for copper has caused us to revise our price forecast,” it said.

The International Copper Study Group (ICSG) has recently said that it expects the global market for refined copper to swing into a 400,000-tonne deficit for 2011, as increased economic activity boosts demand to outstrip growth of refined production.

“Our view of the copper market is that there is no significant new supply of copper ready to meet the demand of increased economic activity projected by the ICSG,” Jennings Capital says. “In fact, many of the world’s largest copper producers face declining production due to lower grades and aging operations, exacerbating an already tight supply situation.”

It says that Copper Mountain represents one of the few entirely new copper producers, while many copper producers are working to increase production from existing operations.

Given current market machinations and the widespread belief that commodities are in for a volatile, albeit bullish ride over the medium term, Copper Mountain’s concentrate and precious metal byproducts are coming to market at what could be an opportune time. Copper for delivery in three months hit US\$8,830 a metric tonne or US\$4.07 a pound on Nov. 10, 2010.

So, at the end of the day, what exactly is Copper Mountain bringing to the table?

The large porphyry copper project with gold and silver credits should produce 10 million pounds of copper annually during the first 12 years. To accomplish this goal, the newly constructed plant will treat 35,000 tonnes of ore per day.

According to estimates, the head grade will be 0.43% copper, 0.5% copper equivalent. Recovery will be 89% copper, 66% gold and 49% silver.

“We think the silver recovery rate estimate is low. That’s what came out of our feasibility study, but the mine operated from 1972 to 1996 and the silver recoveries were higher than that,” O’Rourke says.

Geology-wise, the deposit is an alkalic porphyry copper deposit and part of what is called the Quesnellia, or Quesnel Terrane, which contains copper-gold and copper-molybdenum deposits. Quesnellia’s major rock formation is late Triassic Nicola group.

Copper Mountain’s exploration and development strategy to date has been to focus on the historic resource contained in the three existing pits on site as well as exploration drilling



[Watch the Copper Mountain story, told by CEO Jim O’Rourke.](#)

between the pits. The result? O’Rourke and his team found that the mineralization was continuous between the pits, which gave way to the company’s current operation plan to build a super pit that encompasses all three pits. What is more, drilling is also being done at depth beneath this so-called super pit.

“Mineralization is indicated down to 700 metres, which is about the same depth they’re mining in the pit at Highland Valley,” O’Rourke says. “We’ve drilled one hole and encountered 1000 feet of 0.6% equivalent — the last 300 feet over 1% copper. It’s quite encouraging that there’s some potential for discovery beneath our super pit.”

There were two drills turning on site in late 2010. The company is exploring targets that emerged when the company undertook a Deep Penetration Titan 24 Geophysical survey at the end of 2007. It is also pushing further out into new zones to get a clearer picture of what is underground, so that a longer-term mining plan can be clarified.

Sure enough, in early November the company said that one zone in particular, the Oriole, located just south of Pit 3, showed promising mineralization. The Oriole is being considered for early-stage mining because drilling has confirmed higher-grade mill feed, and it is in an area earmarked for future waste rock storage.

While exploration continues, Copper Mountain is gearing up to go operational in June, with construction slated for completion at the end of April and the processing plant due for commissioning in May.

Once underway, the production model will be straightforward enough. The biggest difference between 2010 and 1996 is, of course, the technology and the C\$438 million put into capital costs, which is one way of saying that everything is new, bigger and better.

Production will involve a conventional flotation circuit, with a new mill, primary crusher, ball and SAG mill, overland conveyor and concentrator. All of this will be complemented by a new mining fleet: two Komatsu PC8000 hydraulic shovels, 13 830E 240-ton haul trucks, one WA 1200 loader, two D375 dozers and one 16M grader.

“We’ve currently got 485 people on site, constructing all the facilities. We’re on schedule and don’t see any hurdles,”

O'Rourke said in late 2010. "The project is fully financed to production and, as a company, we have C\$40 million extra cash."

Some of that treasury – possibly as much as C\$15 million – will be used to fund Copper Mountain's share of working capital, he says. Some of that will go towards trucking costs; the concentrate will be trucked 300 kilometres to Port Metro Vancouver for shipment to Mitsubishi's refinery in Japan.

"This mine has lots of attributes – excellent infrastructure, close to a town, it's in southern B.C. and a government road comes to the main gate. If this project had been done in another (less accessible) location, the capital cost probably would've been closer to \$1 billion," O'Rourke says. ■

### Links and References

- [Copper Mountain Mining Corp.](#)
- [Imperial Metals: Huckleberry Mine](#)
- [International Copper Study Group](#)
- [Jennings Capital Inc.](#)
- [Komatsu](#)
- [Mitsubishi Materials Corp.](#)
- [Newmont Mining](#)
- [Port Metro Vancouver](#)
- [Teck: Highland Valley Copper](#)

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## Copper Mountain Takes Delivery of Super-Shovel

By Andrew Topf

Copper Mountain moved one step closer to production with the delivery of a massive new excavator to the mine near Princeton, B.C.

Komatsu, SMS Equipment and Copper Mountain staff were on-site November 18, 2010 to mark receipt of the Komatsu PC8000, a 737-ton earthmoving giant.

Manufactured in Dusseldorf, Germany, the shovel is the 75th machine to come off Komatsu's production line.

It was shipped to Tacoma, Washington and trucked to the minesite in 18 separate loads.

The PC8000 is the largest of Komatsu's family of hydraulic mining excavators. It features a bucket capable of moving 42 cubic metres of material. At full production the electric-powered machine is expected to process 68,000 tonnes per day, with 24 million tonnes scheduled to be moved prior to the mill start-up in May 2011.

"We're anxious to see the shovel up and operating, and that'll be the start of our pre-production mining," says Copper Mountain Mining Corp. CEO Jim O'Rourke.

The PC8000 joins seven 240-ton-capacity Komatsu haul trucks, two wheel loaders and three dozers already on site. The second half of the fleet, including six more trucks and a second PC8000 shovel, is expected to be on site by April 2011, bringing Komatsu's total investment in Copper Mountain to around C\$85-million.



Copper Mountain took delivery of a Komatsu PC8000 mining shovel in November, part of a fleet of Komatsu equipment that will be operating at the mine.