

Beating the Odds

Good people and extensive training are keys to mine's success

Staff Report

When Blue Note Mining, a Montreal-based mining-exploration company, made the decision in 2006 to reopen the Caribou lead-zinc mine in Bathurst, N.B., many were concerned about the company's likelihood for success.

And the reason for those concerns was based on the fact that Blue Note had inherited the same challenge experienced by the mine's previous owners.

That being the ore was/is, quite frankly, among the most complex in the world, making economically viable mineral recovery very difficult and it was because of that difficulty, the mine had been closed for nine years when Blue Note bought it.

The Caribou mine certainly presented a significant challenge.

But now, two years later, the company is proud to announce that it has conquered many barriers and has since realized many milestones with the property.

In less than a year and a half under the management of Blue Note, the Caribou Mining operation achieved commercial production on January 1, 2008, following continuous improvement in metallurgical performance.

Since this achievement, the company has set consistent performance records by processing steadily increasing record

Workers carefully handle steel balls at the mine's grinding mill.



A team of Caribou Mine workers take a break by the IsaMill.



One of the mine's many workers keeps a close eye on what he's doing while attending the controls.

amounts of ore in the April through July period.

Ninety-five per cent of plant capacity (3,000 tonnes/day) was processed in June and July, with several days exceeding 3500 tonnes of processed ore.

"We are thrilled at the upward trend in production and metallurgical performance that we have seen to date," said John Martin, Chief Operation Officer of Blue Note. "The mill has come a long way. We are well on the path to reaching capacity of 3,000 tonnes a day and exceeding our metallurgical targets in the coming months which surpasses even our own considerable and ambitious expectations."

While the ore at the mine is among the most complex in the world, and previous

operations had very low rates of mineral recovery, recoveries for July reached 83.5% for zinc and 75.0% for lead. Through significant investment in re-commissioning the mine and bringing in and training the right people, Blue Note has been able to overcome the production shortcomings faced by previous operators.

The Company is delivering daily lead shipments to the Xstrata smelter in nearby Belledune while zinc shipments are being made to Europe.

"No other company has ever achieved the operational stability and metallurgical performance that we have at Caribou," said Michael Judson, President and CEO of Blue Note Mining.

Blue Note says it is in part through the first-time use in North America of state-



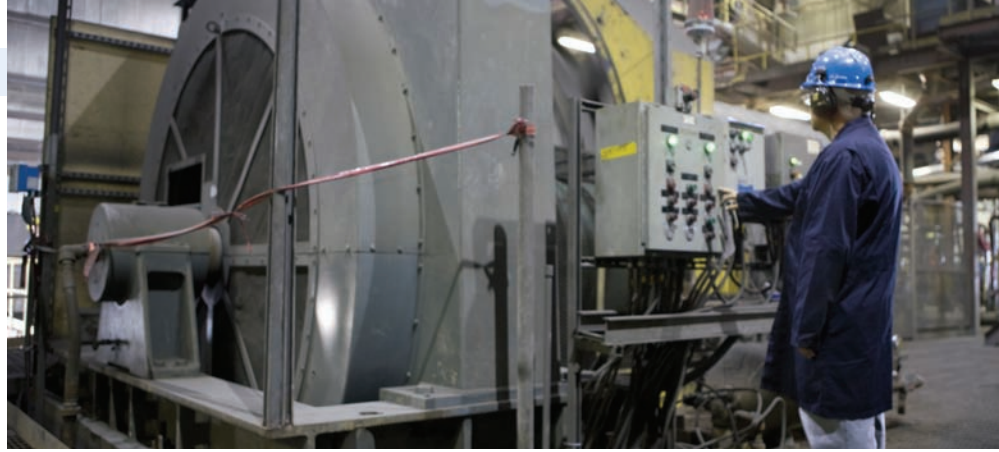
of-the-art “IsaMill” milling technology that the company has succeeded in getting liberation of the economic minerals and thus obtaining the necessary metal recoveries from the ore deposits.

Recognizing the value of the mine, Blue Note made some critical technological investments to finely grind its ore.

The IsaMill system, marketed by Xstrata, grinds ore through a high intensity stirred milling technique called ‘attrition milling’, which reduces the ore to a grain similar to the width of a human hair. This contrasts with the output of conventional grinding which produces ore the size of a grain of sand.

“The IsaMill has played a significant role in our success, particularly in the lead circuit. Due to the use of this innovative technology, our recovery has been five to ten per cent higher than we targeted,” said Denis Doucet, General Manager of the Caribou Mine.

With production reaching or exceeding targets, the future focus for Caribou will be on continuing to improve mill performance, expanding reserves and applying cost controlling measures. A commitment to continuously invest in the mine saw Blue Note announce its plans to contribute another \$2 million for underground exploration over the next three years.



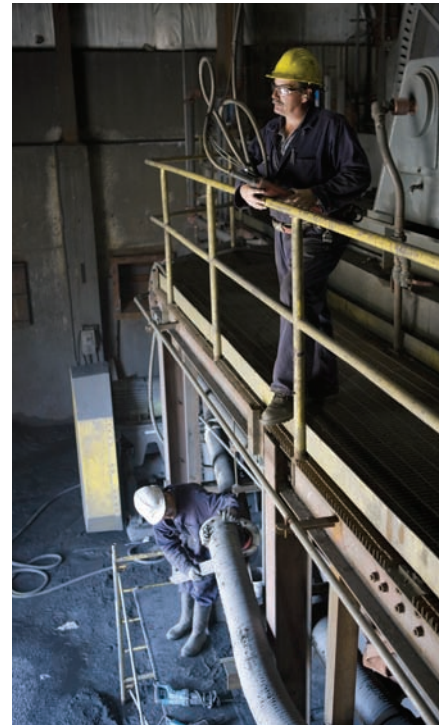
A careful watch over the ball mill's controls helps ensure the operation runs smoothly.

As well, in April, 2008, Blue Note and the provincial government agreed on a joint \$6 million investment to expand the company's reserves to support the current mine and mill infrastructure.

The Caribou Mine now employs 280 people from Bathurst and the surrounding area. On June 20, 2008, Caribou employees along with other members of the community and of the provincial government joined Blue Note executives in celebrating the official grand opening of the Caribou Mine.

Blue Note currently operates two mines in the Bathurst mining camp (with mining leases and exploration properties), the Caribou mine and nearby open-pit Restigouche mine, together covering a total of 110 square kilometres.

The proven and probable mineral reserves show the project will produce more than 565 million pounds of zinc, 239 million pounds of lead and 5 million ounces of silver over its five-year mine life.



Teamwork from all levels within the mine has been key to the operation's success.

CMJ

A look at how the IsaMill works



The IsaMill is unlike any other grinding mill!:

- It is very high intensity – 300kW/m³, compared with typically 20kW/m³ for ball mills. This means it is easily installed in a small area.
- It produces a very sharp size distribution in open circuit. This is due to 8 grinding chambers in series, closed with an internal centrifugal classifier. The internal classifier means simple operation, no screens to block or maintain, and allows low cost natural grinding media to be used (e.g. sand).
- It has high energy efficiency – because it uses small media suited to the target grind size.

- The inert grinding environment has profound benefits for the chemistry of flotation and leaching. The IsaMill is an intense chemical reactor, creating fresh mineral surface in a closed inert environment. It does this quickly – typical residence time is 90 seconds. This creates a unique opportunity to control the surface chemistry of particles.
- Unlike other stirred mills which are vertical, the horizontal configuration of the IsaMill has allowed rapid scale up, with the latest installation a 3MW unit.

References:

- ¹ IsaMill overview. IsaMill website. http://www.isamill.com/index.cfm?action=dsp_content&contentID=24.