

GOLDCORP: RED LAKE MINE

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Golden opportunities

Goldcorp's Red Lake mining complex is one of the world's richest gold resources. General manager Mike Lalonde talks to Gay Sutton about integrating a portfolio of traditional mines into a single forward looking identity

A great deal can happen in the mining industry in just eighteen months. That is certainly true for Goldcorp's Red Lake Gold Mines division in Ontario, Canada. Since we last reviewed the company a year and a half ago, there has been significant progress. The ongoing program of exploration and development across the entire area has been productive, making 2010 a record year, not only in terms of ore mined but also in ounces of gold produced. RLGGM poured its 20 millionth ounce on May 20, 2010.



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“The total daily capacity of our two mills at the Red Lake and Campbell mine sites is about 3000 tons,” said general manager Mike Lalonde “The mills were being under-utilized, so we increased ore production to fill both mills in 2010 and we produced a total of 703,000 ounces by the end of the year.” The majority of this extra tonnage has been obtained by opening up mining operations in the upper Red Lake reserve, an area that had not received much attention since the mid nineties. “The good thing about 2010 production is we didn’t run down our reserves to do it. Our exploration program for the year has defined a further 1.4 million ounces of gold, so we have actually increased our reserves by around 700,000 ounces after accounting for production and we are in a good position to make further additions in 2011.”

In addition to the new upper Red Lake reserve, there are three major elements to the operational portfolio at the Red Lake Complex. The Red Lake Mine itself is one of the world’s richest sources of gold as well as being one of the lowest cost producers, and contains a lucrative high-grade gold deposit known as the High Grade Zone (HGZ) that plunges down diagonally into the rock at an angle of 45 degrees. Lying only one kilometer away is the Campbell Mine, which was acquired from Placer Dome in 2006 and sits over a lower grade deposit.

Five and a half kilometers to the North West lies the Bruce Channel Deposit, a promising prospect currently under exploration and development via the old Cochenour Mine shaft. Continuing exploration of the Bruce Channel Deposit has already resulted in outlining an inferred resource of 2.7 million ounces. “We have several years of exploration to go, and our feeling is that we’ll end up with a minimum of five million ounces here.”

Goldcorp is involved in a number of joint ventures in the Red Lake area, and is in the process of extensive reconnaissance soil sampling and short hole drilling across the entire area using its “in house” Regional Exploration Group.

One of the significant achievements of 2010, and one that will deliver considerable operational benefits as time goes on, has been to bring the old Red Lake and Campbell Mines together as an integrated mining unit with a single identity. As with all change management initiatives, changing the attitudes and mind sets of the workforce can be quite a challenge. “There had always been quite a bit of rivalry between the two original companies over the years, which has taken quite a while to overcome,” said Lalonde. One of the methods used to unite them into one focused team was to put all employees through two courses, and arrange for attendees to be drawn equally



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mine some five kilometers away, and engineers are in the process of driving a tunnel between the two locations at a depth of 5,400 feet. If all goes according to plan, both access routes should arrive at the deposit concurrently.

As with other projects at Red Lake, the tunnel will perform several financially important roles. Firstly, ore from the deposit can be hauled underground to the

mill at the Campbell site, and secondly, it will provide a great drill platform for future exploration. “Those five kilometers are the most prospective ground in the entire Red Lake area,” Lalonde explained, “and contain a number of shallow deposits that were mined in the past that have a very good chance of projecting to depth. The haulage drift will serve as an exploration drift for new deposits and it will also give us the opportunity to diamond drill the lower end of the Bruce Channel deposit concurrently with mining at the upper portion.”

Based on the exploration to date, Red Lake Gold Mines looks like it will continue to live up to its reputation as a world class gold producer. “Each of these mines is a good economic prospect and with more than 60 years of rich mining history we’re currently projecting a life of more than 20 years,” Lalonde said. “With our ongoing exploration program, we believe that is likely to continue to grow.” www.goldcorp.com

from both locations. One was a safety course and the other was a three day event that drove home the Goldcorp company philosophy and culture. “By giving this training to the united group everybody received the same message at the same time, and this has been very effective.” An employee relations committee was formed in 2010 with representation from both mines. A single superintendent was also appointed to oversee both operations and manage them as one.

Development work at Red Lake has also been helping to support the message of unity. An interconnecting tunnel approximately half a mile in length has been driven between the two mines, reinforcing the shared identity while also improving the ventilation systems underground. “We opened the new tunnel mid-way through last year and it has given us the flexibility to share manpower and equipment between the two locations.” The tunnel also fulfills another important function. The high-grade zone dips down at 45 degrees from Red Lake, and is angling toward the old Campbell mine. The tunnel between the two mines therefore provides an ideal platform for ongoing exploration work.

The angled nature of the deposit, however, means that the lower levels are some distance from the main access shaft. “Our plan is to put in a winze, in other words an internal shaft that doesn’t come to the surface.” This involves excavating a new ramp from the existing mine ramp accessing the HGZ to an area that contains favorable ground conditions, and then to bore the winze using a mechanical raise borer. Work on the new ramp is one-third done and should be completed by the end of the year, and the excavation of the winze will then take a further three to four months.

When last we looked at the Red Lake operations, the old Cochenour mine shaft was in the process of being dewatered to provide access to the Bruce Channel deposit. That work is now complete. The old mine head frame has been stripped out and replaced by a modern concrete one that stands roughly 60 meters tall. The monolithic concrete pour took just twelve days to complete. “We’re now in the process of stripping the timbers out of the old rectangular shaft and we’ll shortly begin work enlarging it to 18 feet in diameter. It’s a big task and will take approximately a year and a half to get down to a depth of 3,500 feet. Once we’ve done that we’ll be able to start developing access ramps from the new shaft to the deposit.”

Concurrently with this, the Bruce Channel deposit is also being approached from the Campbell

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