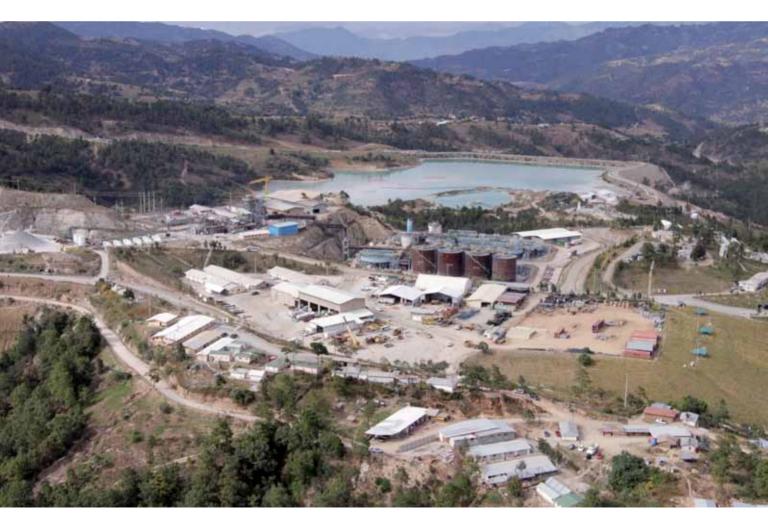


GOLDCORP – MARLIN MINE SUSTAINABLE OPPORTUNITIES



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MARLIN MINE: SUSTAINABLE OPPORTUNITIES

While Guatemala's enormous mining wealth is no longer the well kept secret that it once was it is still an industry very much in its infancy. Through its Marlin Mine operations, Montana Exploradora de Guatemala, a subsidiary of the Canadian firm Goldcorp, is working to ensure the country will soon be able to unlock its potential



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Salvador, as well as the Pacific coastline to the Southwest and a part of the Caribbean coastline to the east.

Possessing a stable, macroeconomic backdrop, Guatemala is fast earning a reputation as having perhaps the greatest future mining potential of any Central American country. Other factors that are helping to attract the interest of international investors include the free movement of goods and trade, and a local labour force with a reputation for being hard working, fast learners. Spanning the boundaries of the San Miguel Ixtahuacán and Sipacapa, located in

San Marcos, the Marlin Mine was originally discovered in 1998 by two Guatemalan geologists. Acquired in July 2002 by Canadian Company Glamis Gold, it was they who, in conducting an exploration study, determined that the mine held a projected 1.4 million ounces of gold.

ossessing a land mass of almost 109,000 square kilometres, the Central America country of Guatemala shares its borders with Mexico, Belize, Honduras and El

Boasting a diverse history, a rich and distinctive culture, and areas of immense natural beauty, Guatemala has, in more recent times, become just as well known for its enormous gold potential. Indeed in 2007 one mine alone processed some 1.7 million tonnes of mineral with an average gold content of 4.55 grams per tonne and 84.31 grams of silver per tonne, further confirming the country as a mining destination of particular interest.





Ounces of gold Marlin Mine is estimated to hold

This projection spurred the Ministry of Energy and Mines of Guatemala into issuing a licence for the development and operation of the Marlin project, on 27 November 2003. Following the successful completion of the construction phase in the third quarter of 2005, the mine began producing gold and silver before the turn of the year.

"One of the first things we recognised about this mine and what makes it so unique," explains Marlin Mine General Manager, Christian Roldan, "is just how well the ore itself responds to metallurgical treatments. When it comes to gold we have extremely high recovery rates of about 98 percent recovery and more than 90 percent for silver. We also benefit from the fact that Marlin is located in a very strong mining district where, to this day, we continue to uncover new resources around the main Marlin vein."

The production process of the Marlin Mine is divided into four phases, these being exploration, construction, operation and production, and technical closure and reclamation. "At present," Roldan continues, "there are three main underground areas that we are mining. In order to extract the full potential of what the mine has to



offer we have had to overcome a number of challenges. These have included creating ventilation systems for both on-going and future underground activities and establishing strong water controls around the mine site."

Strong environmental controls have been a feature of the mine site since it first

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opened. Today these controls include the use of emergency response teams that are on call at all times of day to respond to all manner of events. These include responding to signs of increased sodium or sulphite levels in the surrounding water network or dealing with any issues that may arise during the transportation of hazardous materials. Such



"MARLIN IS LOCATED IN A VERY STRONG MINING DISTRICT WHERE, TO THIS DAY, ITS **OPERATORS CONTINUE TO UNCOVER NEW RESOURCES AROUND THE MAIN MARLIN VEIN"**

is the skill of the mine's emergency teams that they were even called in to assist in the rescue and recovery efforts that followed the earthquake that struck the San Marcos area in November 2012.

In 2012, Montana Exploradora de Guatemala commissioned the building of a tail filtering plant near to the mine. The

concept for the plant came about as a solution to how the operators could reclaim the open pit section of Marlin Mine that is no long in operation. The plant's core function today is to dry the tailings from the mine in order for them to be used to fill pipes and cover the decommissioned pit wall in order to avoid further erosion or drainage.

The operators of Marlin Mine are very much pioneers within the country. "We have known since day one," Roldan says, "that by being situated on indigenous land it has been fundamental to build strong relationships with local communities. By sitting down and listening to their concerns and needs we quickly found that job creation was a big issue for them. Today we are proud to say that approximately 90 percent of our workforce is Guatemalan, with 60 percent of these being people from the local area."

Being a 24 hours a day, 365 days a year type operation, logistics is a hugely vital ingredient in the mines success. Once again

the local community has become a major strategic partner in this area of the business. "We take great pride in the fact that over 68 percent of our suppliers are local providers," enthuses materials manager, Pedro Richmagui.

In getting to this position, the mine operators have worked tirelessly to develop local businesses and to improve their understanding of mining and how it will become even more important to Guatemala in the years to come. "A good example of our work in this field," Richmagui continues, "is how we have helped develop local transport companies, bringing them up to a level of operational excellence that means that when

the day comes that the mine is no longer in operation the community is left with a strong enterprise that can then pitch itself to other organisations."

While local communities have already experienced the benefits that mining can bring to the country, the perception of mining amongst the wider population of Guatemala remains somewhat divided. It is for this reason that the operators of Marlin Mine continue to make a concerted effort to bring people, groups and agencies together in order to highlight how a prosperous mining industry can benefit Guatemala in the long term.

"While there is a large number of people who support what we are doing and understand the vital role that mining has to play in enhancing the economy of a country by means of greater investment and revenue flows, one of our core missions is to help instil this belief in the rest of the population of Guatemala," states national executive director, Mario Marroquin. "This was never going to be a quick process, however trends do suggest that support for mining is slowly growing."

While support for mining continues to build, other challenges lay ahead for Marlin Mine's operators, in particular the question of

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what kind of legacy the mine will leave behind once it has closed. This is a question that has been posed to not only Montana Exploradora de Guatemala, but also Guatemala's local politicians and its national government.

"In planning for the future of the area around the mine," explains corporate social responsibility director, Gustavo Cabrera, "we are looking at a host of factors, from ensuring the long term wellbeing of the local communities to making sure that they have the tools needed to bring economic activity to the area after we have gone. On-going efforts involve closing the gaps that exist in education, healthcare and employment in order to boost the economy." Montana Exploradora de Guatemala's



track record in recent years for generating local jobs cannot be disputed, however it is aware that the task at hand now involves building up the capabilities of these same people in preparation for when the mine does close and the possibility that alternative employment may be required.

"One of our responsibilities, as we see it, is to provide our local employees and communities with the skills and expertise that they will need to take on other roles in the future, both inside and out of the mining sector," Cabrera highlights. "We know, for instance, that the land around the mine has great agricultural potential.



Therefore, what we have been doing is working to establish relationships with big businesses such as Wal-Mart in Guatemala and in Mexico in the hope of creating a scenario in which local Guatemalan agricultural companies can one day earn long-term supplier contracts."

The immediate future of Marlin Mine revolves around what Roldan calls an extensive aspiration programme. "We presently have a number of aggressive exploration programmes underway in many areas of the district surrounding the mine and we have been greatly encouraged by the results we have seen. This gives us great hope for extending the Marlin Mine network further into these parts of the region."

In the meantime the operators also remain committed to setting a strong example of what responsible modern mining can bring to the country in the decades ahead, "On average," Marroquin concludes, "mining in countries such as Chile and Peru accounts for as much as 12 percent of their annual GDP, while here in Guatemala that figure is more like two percent. If we were able to bring this up to just six percent, I believe the results of that would be more than enough to convince a great deal more people to begin accepting the industry and help them realise just how many positive benefits a strong, responsible mining sector could bring to the country." **B**

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