



Crusader leads the Brazilian gold rush

Not so many years ago Brazil was famous for soccer players, Carnivale and the Amazon.

Shortly, the soccer World Cup and soon after, the Olympic Games, will cement Brazil's reputation for running world-class events.

But the resources industry will provide a more lasting legacy for one of the world's most culturally rich and diverse nations.

In particular Crusader Resources Ltd's (ASX:CAS) rapidly growing Borborema gold project will help bring new focus to Brazil's mineral opportunities.

Like all mining projects the growth of gold resources at Borborema has been a marathon effort with a massive drilling program underway to fully explore the project's as yet unrealised potential.

Already a mineral resource estimate (Crusader's third resource update in two years) stands at 2.31 million ounces of gold at a cut-off grade of 0.5 grams of gold per tonne (g/t).

The resource estimate, completed in December 2011, includes 1.2Moz in the indicated category and a further

1.1Moz at the inferred level for a total gold content of 2.3 Moz. That was 24 per cent above the earlier resource calculation, a major leap forward for the scale of the project but the mineral resource remains open in all directions and is only limited by drilling.

As a consequence, the mineral resource is expected to grow considerably as the results of a major drilling program, ongoing since September 2011, are absorbed into the ore resource calculations, all done so far by independent, world-class, geological-consulting firms.

The Borborema gold project is in the Brazilian state of Rio Grande do Norte, 140 kilometres west of the state capital, Natal, and 30 kilometres east of the regional town, Currais Novos.



Crusader has completed more than 48,000 metres of drilling since acquiring 100 per cent of Borborema in August of 2010.

So far the mineral resource estimate extends down to approximately 350 metres below surface, a depth considered realistic for open pit mining.

Since September, drilling with up to six rigs has continued 24 hours a day with a further resource and reserve update a key target for 2012.

Mineralisation at Borborema remains open at depth with consistent widths and grades and with some holes returning better grades at depth.

Currently five diamond rigs and two reverse circulation rigs are operating at Borborema with drilling directed to upgrading the inferred resources that fall within optimised open pit mine shells.

Other programs are being planned to test numerous soil anomalies and areas adjacent to the existing discovery.

Like much of Brazil, the exploration potential remains high as mining in the country has mostly focused in the past on iron ore.

Brazil is one of the world's biggest producers of iron ore, but falls well down the scale among global gold producers.

To take advantage of that, Crusader has significantly expanded its exploration land tenure to a more than 3500-square-kilometre area under application and exploration license.

Rob Smakman, Crusader Resources CEO, who lives in Brazil with his family, is ecstatic about the growth and remaining potential of both the Borborema project and the company's rapidly growing exploration portfolio.

'Brazil has a very strong mining and exploration history, although the rest of the world has been quite slow to discover the potential of this country.

'Crusader has gained a huge advantage by moving to Brazil quickly and being one of the first Australian companies to start a comprehensive exploration program here.

'We have rapidly expanded our exploration acreage portfolio and we have very high hopes of making other substantial gold discoveries to stand alongside Borborema.

'We have gained early access to some prime exploration territory, but, perhaps equally important, have developed our understanding of the business and administrative environment here and established ties with all the government agencies, suppliers and professionals that a mining company needs to develop a significant project.'

Now Crusader is heavily involved in much of the 'behind the scenes' geotechnical work necessary to bring a new mine into production.

This includes examination of the existing drill core and mapping of the pit walls necessary to sustain a safe mine.

Complementary metallurgical sampling is also underway following recommendations made in the September 2011 pre-feasibility study. This sampling includes additional leaching test work, grinding testing and filtering tests on tailings samples.

Environmental baseline studies are also underway as part of the overall environmental licensing process while a detailed sensitivity and risk analysis into any potential social impact of the project has also started.

To complement the intensive efforts to bring Borborema into commercial



production, Crusader has now started an extensive program to test some of its most prospective exploration acreage for potential new discoveries.

An extensive soil sampling program, covering the 'along strike' extensions and areas immediately around the Borborema area, has started, and over 200 kilometres of lines have been cleared, surveyed and over 7000 soil samples collected for analysis.

Multiple encouraging anomalies were defined and a program of follow-up sampling ahead of targeted drilling in February 2012 took place.

In the Seridó region, which surrounds Borborema, Crusader has applied for another 1869 square kilometres of exploration acreage and is now the biggest landholder in this exciting region.

Numerous artisanal workings (garimpos) and historical gold anomalies have been located and several prospective rock types and structures have already been defined

by a combination of geophysical re-interpretation in conjunction with local and regional scale geological mapping.

Local prospectors and miners have long understood Brazil's potential for gold and other metals.

A geologist, Rob Smakman is fond of relating global tectonic history that shows that the prospective rocks of West and Central Africa, and those on the north-eastern side of Brazil, are identical, as the two continents were once joined together, only drifting apart over billions of years.

Now some of the investor enthusiasm for West Africa is moving across the Atlantic to Brazil where more than 20 Australian exploration companies have started work.

'Brazil is very politically stable and has a long-established mining law and regulatory regime, which makes it a great place to do business.

'And it's a fun place to live and raise children, so Crusader will be here for a long time yet,' said Smakman. 

