

# Bankable Feasibility Study of Borborema Gold Project Underway

- → A Bankable Feasibility Study (BFS) of the Borborema Gold Project is underway
- → The BFS will consider a mine processing 4Mtpa for an estimated ten year mine life
- 7 The BFS is due to be completed in the second half of 2012

A Bankable Feasibility Study (BFS), at Crusader Resources Limited's 100% owned Borborema Gold Project in Brazil, led by international consulting group Conestoga Rovers and Associates (CRA) has started.

The BFS will consider a base case project processing 4 million tonnes of ore per year, a significant increase from the recently completed pre-feasibility study (3 million tonnes per year) and reflects the increasing size of and Crusader's rising confidence in the Borborema gold resource.

The Borborema Gold Project currently contains an estimated 2.31 million ounces of gold based on an Indicated and Inferred Mineral Resource of 68 million tonnes at a grade of 1.06g/t based on a 0.5 g/t cut-off grade.

Pit optimisations will be completed in coming months once the new drilling is incorporated into a new Mineral Resource estimate.

Crusader's Managing Director, Rob Smakman, said,

"Borborema has the potential to be a company maker for Crusader. We have advanced rapidly through the exploration and resource definition phase and are taking large strides towards becoming a significant gold producer. The Pre-Feasibility Study on Borborema produced very positive results and we are expecting similarly positive results from the Bankable Feasibility Study due to be finished later this year.

"We are pleased to have CRA on board for the study; they bring a wealth of experience to the project based on similar studies on other projects in Brazil."

# Australian Securities Exchange Information

ASX Code: CAS

- 7 Ordinary Shares 110,146,040
- Options 4,460,000 (exercise prices: \$0.44 to \$1.30)
- Market Capitalisation \$105M
- → Treasury \$15 M (31 Dec 2011)
- Share price \$0.95 (12 month range: \$0.70 to \$1.50)

#### **Board of Directors**

Non-Executive Chairman **David Archer** 

Managing Director **Rob Smakman** 

Executive Director Paul Stephen

Non-Executive Directors
Justin Evans
David Netherway

# CAS Investment Opportunity in Brazilian Projects

- Underexplored and high potential portfolio
- In-country experienced management (inc. MD, COO and Exploration Manager)
- Extensive network into new opportunities



# Borborema Gold Project

Mineral resource estimates will continue to be updated during the 2012 year as the accelerated drilling program on site continues.

Part of the 2011 drilling and that conducted so far in 2012 has been directed at upgrading all of the in-pit resources into the indicated category. Indicated resources are a prerequisite for defining probable reserves, one of the important steps for the project to proceed through to development.

Crusader expects to publish an updated resource estimate containing some ore reserves, during the BFS process.



Figure 1; Three diamond drill rigs operating near the highway at Borborema, 14 February 2012.



The BFS will assess the financial viability of the Borborema Gold Project, using a detailed economic model based on the inputs obtained from a full range of technical studies. These studies involve a revised resource model, pit optimisation and detailed pit design, production schedule, detailed metallurgical testwork and basic engineering design, including firm quotes for all key equipment and materials for the mine, plant and associated infrastructure.

The ore process design will include flow sheets, mass and water balance assumptions, project criteria, technical specifications and equipment lists for all areas of the mine. These include plant and infrastructure, including the mine fleet, waste disposal, earthworks and drainage, concrete, metallic structures, piping and systems, electrical and instrumentation, support facilities, telecommunications, power supply, water supply and tailings disposal.

Outputs from these studies will form the basis of pre-operational and sustaining capital expense estimates and life-of-mine operating cost estimates. The resultant financial model will include a detailed tax model, incorporating all available fiscal benefits plus full sensitivity and risk analyses.

CRA are an international engineering firm with four offices in Brazil and over 3,000 employees worldwide (http://craworld.com/en/). CRA has extensive experience in project engineering and related studies in a range of commodities including gold, iron ore, base metals and alumina. They have specific expertise in Brazil with large scale gold projects. Their clients include:

- Samarco (BHP)
- MMX
- Anglo Ferrous
- Yamana Gold San Andres gold plant in Honduras and copper plant expansion in Brazil
- Jaguar Mining Conceição do Para Gold plant, Paciênca gold plant and CTX gold plant
- Rio Novo Gold PFS and DFS studies of the Almas gold project

CRA will complete many of the range of studies in-house as well as coordinate a group of other specialist consultants who will contribute to the BFS.

The BFS is due to be handed to the company in the 3<sup>rd</sup> quarter of 2012.



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### **About Crusader**

Crusader Resources Limited (ASX:CAS) is a minerals exploration company listed on the Australian Securities Exchange. Its major focus is Brazil, a country Crusader believes is vastly underexplored with high potential for the discovery of world class mineral deposits.

Crusader's key asset is the 2.31 million ounce Borborema Gold Project in north eastern Brazil, targeting production at a rate of 130-180 koz from 2014. The company has 1600 km² of exploration tenements in the Seridó Belt, a highly prospective geological structure which hosts the Borborema Gold Project. This region is under explored and could provide Crusader with a pipeline of high growth, greenfields, gold discoveries.

Crusader's Posse Iron Project, near Belo Horizonte, is close to starting production of high-quality iron ore for consumption in the Brazilian domestic iron industry.

#### About Borborema

The Borborema Gold Project is in the Seridó area of the Borborema province in north-eastern Brazil.

It is 100% owned by Crusader Resources Ltd and consists of three mining leases covering a total area of 29 km² including freehold title to the property over the main prospect area. Borborema is enhanced by good on-site facilities and excellent infrastructure, such as buildings, grid power, water, sealed roads and is in close proximity to major cities and regional centres.

In December 2011, Crusader reported a 24% increase in the JORC compliant resource estimate at Borborema to 2.31 million ounces, whilst drilling continues to define and expand the gold mineralisation, which remains open in all directions.

The current JORC compliant Indicated and Inferred Mineral Resource estimate, using a 0.50 g/t cut-off grade, is 68 million tonnes at 1.06 g/t for 2.31 million ounces of gold. This is an increase from the previous JORC compliant resource estimate of 44 Mt at 1.30 g/t for 1.86 Moz calculated in June 2011.

The 55% increase in the overall tonnes provides the basis for a potentially long-life, large scale gold mine that would currently rank as one of the five largest gold mines in Brazil.

The mineralisation remains open in all directions and is limited only by drilling.

Crusader completed a Pre-Feasibility Study (PFS) in September 2011 into the economic and technical merits of the Borborema Gold Project which considered an open pit mine development of 3Mtpa designed to produce an average of 130,000ozs of gold per annum.

## Disclaimer

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr. Robert Smakman, who is a Fellow of The Australasian Institute of Mining and Metallurgy and is a full-time employee of the company. Mr. Smakman has sufficient experience in the type of deposits under consideration and the activities being undertaken to qualify as a Competent Person as defined in the December 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr. Smakman accepts responsibility for the accuracy of the statements disclosed in this report.

The information in this report that relates to Mineral Resources is based on information compiled by Mr. Lauritz Barnes and Mr. Brett Gossage who are both Members of The Australasian Institute of Mining and Metallurgy. Messrs Barnes and Gossage are both independent consultants to Crusader Resources Limited. Both Messrs Barnes and Gossage and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Messrs Barnes and Gossage consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.