

# Crusader Options Crushing and Milling Plant for Juruena

## Highlights

- Crusader has signed a purchase option for a crushing and milling plant for the Juruena Gold Project
- The plant will include a re-furbished second-hand crushing, screening and grinding circuit, capable of treating up to 300tpd
- The option has been signed with Brazilian equipment supplier and foundry – GNA, a group that has had a long association with Crusader as crushing, screening and wear part supplier for the Posse Iron Ore Mine
- The option is exclusive for 90 days and includes a total cost of R\$8 million (~US \$2 million) for a “turn key” contract including installation and delivery to site
- Two diamond rigs have arrived on site and are progressing the recently announced 6,000m diamond drilling program

Brazil-focused resource development company Crusader Resources (ASX: CAS) (“Crusader” or “the Company”) is pleased to advise the Company has signed a non-binding option to purchase and install a refurbished plant from Brazilian equipment supplier GNA (Minerales equipamentos e Acos Especiais Ltda.), for its wholly owned high-grade Juruena Gold Project.

The plant includes three stage crushing and a single ball mill recently purchased (second hand) by GNA. The option is for the supply and installation on site at Juruena (turn-key) and comes at a cost of ~R\$8million (~US\$2 million).

Commenting on the purchase, Crusader’s Managing Director Rob Smakman said: *“We have worked with GNA for a long time at Posse and have always had great service, reasonable terms and reliable products. With this plant option now available, it demonstrates our commitment to Juruena- the Scoping Study currently underway will be positively affected by this option. The availability of second-hand mining equipment in Brazil has never been better and when coupled with the purchasing power of US dollars with the current exchange rate, we have a unique opportunity to fast track Juruena into production.”*

During the Scoping Study, various equipment suppliers have been contacted for quotations on both new and used equipment and this information was built into the financial analysis of the capital costs and overall viability. GNA are one of the suppliers who were a part of this search and had previously provided a competitive bid for a new crushing and grinding circuit.

Further to this, GNA was able to purchase a used ball mill of suitable size and had enough crushing and screening equipment available to quote on a refurbished option. The turn-key concept will remove much of the execution risk involved in the installation of the plant and the Company will work closely with GNA to refine the design and implementation of the project. The plant throughput rate of up to 300tpd is considered appropriate for the project scope at this stage, however there is some flexibility with final throughput rates dependant on additional testing and process flowsheet finalisation.

Exercising of the option is exclusively Crusader’s decision and will depend on the outcome of the Scoping Study, prevailing market conditions as well as the ongoing drilling program.

### Juruena Drilling Program Update

The Juruena Project (> 400km<sup>2</sup> of contiguous tenements) is located in Central Brazil on the southern fringe of the Amazon Basin. Situated on the western end of the prospective Juruena-Alta Floresta gold belt (estimated to have produced ~7Moz Au), Juruena has been explored extensively by artisanal miners since the 1980's, producing an estimated 500koz of gold. A maiden JORC compliant mineral resource estimate was released to the market in 2015, which included inferred resources at Querosene and Dona Maria of 460kt @ 12.1g/t for 178koz.

Crusader recently announced a 6,000m diamond drilling program at the Juruena Project, initially targeting Querosene and Dona Maria prospects (refer to ASX announcement dated 16 March 2016).

The resource-infill and expansion program comprises around 50 holes for approximately 6,000m over a period of up to 90 days. The Company expects to convert a high percentage of the current Inferred resources at Dona Maria and Querosene to the Indicated category as well as seek to expand the size of the overall gold resources at Juruena.



**Drill rigs arriving on site and collaring the first hole at Querosene**

The Company will provide regular updates to the market as drilling results come to hand.

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**About Crusader**

Crusader Resources Limited (ASX:CAS) is a minerals exploration and mining company listed on the Australian Securities Exchange. Its major focus is Brazil; a country Crusader believes is vastly underexplored and which offers high potential for the discovery of world class mineral deposits. Crusader has three key assets:

**Posse Iron Ore**

The Posse Iron Ore Mine is located 30km from Belo Horizonte, a city acknowledged as the mining capital of Brazil and the capital of Minas Gerais state. The project had an indicated and inferred Mineral Resource estimate of 36Mt @ 43.5% Fe when mining began in March 2013. Posse is currently selling DSO into the domestic market. With an experienced mining workforce amongst a population of over 2.5 million people, the infrastructure and access to the domestic steel market around the Posse Project is excellent.

**Borborema Gold**

The Borborema Gold Project is in the Seridó area of the Borborema province in north-eastern Brazil. It is 100% owned by Crusader and consists of three mining leases covering a total area of 29 km<sup>2</sup> including freehold title over the main prospect area.

The Borborema Gold Project benefits from a favourable taxation regime, existing on-site facilities and excellent infrastructure such as buildings, grid power, water, sealed roads and is close to major cities and regional centres. The project's Ore Reserve includes Proven and Probable Ore Reserves of 1.61Moz of mineable gold from 42.4Mt @ 1.18g/t (0.4 & 0.5g/t cut-offs for oxide & fresh).

The measured, indicated and inferred Mineral Resource Estimate of 2.43Moz @ 1.10 g/t gold, remains open in all directions.

**Juruena Gold**

The Juruena Gold Project is located in the highly prospective Juruena-Alta Floresta Gold Belt, which stretches east-west for >400km and has historically produced more than 7Moz of gold from 40 known gold deposits.

The Juruena Project has been worked extensively by artisanal miners (garimpeiros) since the 1980s, producing ~500koz in that time. Historically there is a database of more than 30,000 meters of drilling and extensive geological data.

**Competent Person Statement**

The information in this report that relates to Juruena Gold Project exploration results, Posse Iron Ore Project exploration results and Borborema Gold Project exploration results released after 1 December 2013, is based on information compiled or reviewed by Mr. Robert Smakman who is a full time employee of the company and is a Fellow of the Australasian Institute of Mining and Metallurgy. The information in this report that relates to Mineral Resources at the Juruena Gold Project is based on information compiled or reviewed by Mr. Lauritz Barnes and Mr. Aidan Platel who are independent consultants to the company and Members of the Australasian Institute of Mining and Metallurgy. Each of Mr. Smakman, Mr. Barnes and Mr. Platel have sufficient experience that is relevant to the type of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Smakman, Mr. Barnes and Mr. Platel consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to:

- a) Borborema Gold Project and Posse Iron Ore Project Exploration Results released prior to 1 December 2013 is based on information compiled or reviewed by Mr. Robert Smakman who is a full time employee of the company;
- b) Borborema Gold Mineral Resources is based on information compiled by Mr. Lauritz Barnes and Mr. Brett Gossage, independent consultants to the company;
- c) Borborema Gold Ore Reserves is based on information compiled by Mr. Linton Kirk, independent consultant to the company;
- d) Posse Fe Mineral Resources is based on and accurately reflects, information compiled by Mr. Bernardo Viana who was a full time employee of Coffey Mining Pty Ltd,

and who are all Members of the Australasian Institute of Mining and Metallurgy (Rob Smakman and Linton Kirk being Fellows), and who all have sufficient experience that is relevant to the type of mineralisation and type of deposit under consideration, and to the activity which they are undertaking 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. Each of Mr. Smakman, Mr. Barnes, Mr. Kirk, Mr. Viana, and Mr. Gossage consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information was prepared and disclosed under the JORC Code 2004. It has not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.