



## **Belo Sun Reports Positive Results from the Metallurgical Test Work Program for Volta Grande with Average Recoveries of 94%**

**TORONTO, February 21<sup>st</sup>, 2013 – Belo Sun Mining Corp. (TSX:BSX)** has received positive results from the ongoing metallurgical test work program for its 100% owned Volta Grande Gold Project located in Para State, Brazil. The metallurgical test work program returned an average recovery of 94%. The program was focused on the diorite gold-bearing material of the Grotta Seca (GS) and Ouro Verde (OV) ore bodies which make up the Volta Grande Project. The purpose of the metallurgical test work program was to complete various grind determination and gold recovery tests in order to determine the best process flow sheet and economic parameters for use in the upcoming feasibility studies. The metallurgical test work program was designed to test the variability of GS and OV ores under different process conditions. Samples collected for this metallurgical test work program were selected from drill core samples.

For the gold recovery tests, medium and high grade composites were prepared with varying gold head grades from approximately 1 g/t to 4 g/t from each of the GS and OV ore bodies.

- The following tests made up the gold recovery section of the metallurgical test work program:
  - ✓ Chemical characterization, size distribution and DRX analysis of the head samples.
  - ✓ Preg-robbing tests.
  - ✓ Gravity separation tests using centrifugal concentrators.
  - ✓ Leaching tests under different conditions including grind size, slurry density, cyanide concentration and dissolved oxygen concentration.
  
- The highlights of the gold recovery tests included:
  - ✓ Between 25% to 50% of the gold can be recovered in a gravity concentration step prior to leaching.
  - ✓ The optimal leaching conditions for the OV and GS composites were a grind size of 80% passing 75 µm, slurry density of 50% by weight, 0.5 g/L NaCN concentration, 10 ppm dissolved oxygen concentration at a pH of 10.5.
  - ✓ For the OV ore, with a gold head grade varying between 1.17 g/t to 3.80 g/t, with an average gold recovery of 94%.
  - ✓ For the GS ore, with a gold head grade varying between 1.06 g/t to 3.90 g/t, with an average gold recovery of 94%.



- ✓ The OV and GS ores are amenable to conventional gravity and gold leaching processes including leach / CIP or CIL.

A series of nine composites were collected for the grinding test work. These composites were collected such that they represented the main lithology groups found in the OV and GS ore bodies.

- The following tests made up the grind determination section of the metallurgical test work program:
  - ✓ SAG Mill Comminution Test (DWi and A x b).
  - ✓ SAG Power Index Test (SPI).
  - ✓ Bond Abrasion Index Test (Ai).
  - ✓ Rod Bond Work Index Test (RMWi).
  - ✓ Bond Ball Work Index Test (BMWi).
- The highlights of the grind determination tests included the following:
  - ✓ The average results obtained from the grinding determination tests were DWi = 10.2 kWh/m<sup>3</sup>, A x b = 27.8, SPI = 163.2 minutes, Ai = 0.39, RMWi = 14.48 kWh/st and the BMWi = 14.01 kWh/st.
  - ✓ These results indicate that the OV and GS ores are amenable to conventional primary crushing, SAG and ball milling.

Omar Antunes, Metallurgy Manager for the Volta Grande Project, commented: “These metallurgical results are confirming previous test work, with excellent gold recoveries for our planned processing plant as well as confirming a simple, conventional, robust, environmentally safe and straightforward low cost process route to support feasibility studies. We are pleased to be able to report such excellent results for both deposits”.

Ian Pritchard, Chief Operating Officer of Belo Sun, said “The testwork results confirm earlier work and provides Belo Sun with the parameters for finalising the plant design as we move towards the completion of the feasibility studies.”

The results reported in this news release are from test work performed in Santiago Chile by SGS Minerals S.A, Chile. The test work was directly supervised by Sebastián Bravo, process supervisor and by Catherine Souza, head engineer in charge of the Volta Grande Project. SGS Technical Manager Dr. Heriban Soto, coordinated the laboratory work.



The test results reported have been reviewed by Omar Antunes, Metallurgy Manager for the Volta Grande Project.

David Evans, P.Eng., an independent consultant to the Company and a Qualified Person under NI 43-101, has reviewed the scientific and technical information in this release.

### **About the Company**

Belo Sun Mining Corp. is a Canadian-based mineral exploration company with a portfolio of properties focused on gold in Brazil. Belo Sun's primary focus is on advancing and expanding its 100% owned Volta Grande Gold Project, located in Para State. Belo Sun trades on the Toronto Stock Exchange under the symbol "BSX". For more information about Belo Sun please visit [www.belosun.com](http://www.belosun.com).

### **Cautionary Statement on Forward Looking Information**

*This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, without limitation, statements regarding the impact of these metallurgical results on the Company and its understanding of the project; statements with respect to the development potential and timetable of the project; the estimation of mineral resources; realization of mineral resource estimates; the timing and amount of estimated future exploration; costs of future activities; capital and operating expenditures; success of exploration activities; currency exchange rates; government regulation of mining operations; and environmental risks. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including risks inherent in the mining industry and risks described in the public disclosure of the Company which is available under the profile of the Company on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.belosun.com](http://www.belosun.com). Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.*

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