



PRESS RELEASE

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JAG – TSX/NYSE Arca

Jaguar Mining Provides Q4 and FY 2008 Update of Operations FY Gold Output Totals 115,348 oz, Up 65% over 2007 Production; Company Reaffirms 2009 Production Outlook at Lower Cash Operating Costs

Jaguar Mining Inc. (“Jaguar” or “the Company”) (JAG: TSX/NYSE Arca, JAG.NT: TSX) provided a summary today of its preliminary Q4 2008 operating performance. All figures are in U.S. dollars unless otherwise indicated. See recent operating highlights below.

Consolidated Operations (Turmalina, Paciência and Sabará)

- In Q4 2008, the Company produced a record 37,916 oz of gold at an average cash operating cost of \$396/oz compared to 20,463 oz at an average cash operating cost of \$405/oz during the same period last year. This represents a production increase of 85% over the comparable quarter in 2007.
- Cash operating costs for Q4 2008 were 14% below the Q3 2008 average cash operating cost due to improved plant and mine efficiencies and a stronger U.S. dollar against the Brazilian real. The December cash operating cost of \$364/oz reflects the effect of improved grades and mining costs incorporating the impact of more favorable exchange rates.
- Q4 2008 gold sales rose to 35,138 oz at an average price of \$793/oz, 87% above the comparable Q4 2007 gold sales of 18,742 oz at an average price of \$796/oz. Revenue in Q4 2008 also increased 87% to \$27.8 million from \$14.9 million in Q4 2007.
- For FY 2008, the Company produced a record 115,348 oz of gold at an average cash operating cost of \$429/oz compared to 70,113 oz at an average cash operating cost of \$346/oz in 2007. This represents a production increase of nearly 65%.
- Cash operating costs for FY 2008 were US \$429/oz, 24% above the FY 2007 figure of US \$346/oz. Costs were primarily higher due to the commissioning of the Paciência operation and exchange rates, which were unfavorable on balance.
- For FY 2008, the Company’s gold sales totaled 108,944 oz at an average realized price of \$860/oz compared to gold sales of 67,350 oz at an average realized price of \$710/oz for FY 2007. Revenue for FY 2008 increased 96% to \$93.7 million from \$47.8 million in FY 2007.

Turmalina

- In Q4 2008, Turmalina produced 19,987 oz of gold at an average cash operating cost of \$330/oz compared to 14,019 oz at an average cash operating cost of \$346/oz in Q4 2007.
- During Q4 2008, the following was achieved at Turmalina:

- Mine production totaled 126,777 tonnes of ore at an average grade of 6.01 g/t. The average grade produced during December 2008 was 6.75 g/t.
- Ore processed through the mill totaled 128,438 tonnes at an average feed grade of 5.93 g/t.
- The plant recovery averaged 89%.
- Mine development totaled 1.16 km.
- During FY 2008, the following was achieved at Turmalina:
 - Mine production totaled 497,122 tonnes of ore at an average grade of 5.31 g/t compared to 286,607 tonnes at an average grade of 5.75 g/t for FY 2007.
 - Ore processed through the mill totaled 480,814 tonnes at an average feed grade of 5.46 g/t.
 - The plant recovery averaged 88%.
 - Mine development totaled 4.06 km.
- Based on the successful conclusion of Jaguar's deep drilling program at Turmalina recently announced by the Company, management expects additional inferred mineral resources will be added between the 500-meter and 800-meter level delineated during the recent drill program. Jaguar's present statement of mineral resources for Turmalina is based on drill data to a depth of approximately 500 meters.

Paciência

- In Q4 2008, Paciência produced 13,423 oz of gold at an average cash operating cost of \$413/oz. Commissioning operations at Paciência were initiated in Q3 2008 and the operation was deemed commercial during the latter part of Q4 2008 based on throughput rates. The following was achieved at Paciência during Q4 2008:
 - Mine production totaled 114,785 tonnes of ore at an average grade of 3.29 g/t, which includes 7,014 tonnes at an average grade of 5.43 g/t from the Pilar mine.
 - Ore processed through the mill totaled 146,666 tonnes with an average feed grade of 3.43 g/t.
 - The plant recovery averaged 92%.
 - Mine development at St. Isabel totaled 1.06 km.

As part of management's evaluation to temporarily place the Caeté Project on hold, which was announced by the Company on November 6, 2008, ore from the fully-developed Pilar mine began shipping to Paciência in December to blend with ore from the St. Isabel mine and utilize the plant's spare capacity. Management anticipates this practice will continue throughout 2009 or until a decision is reached to re-start the Caeté Project where the ore mined at Pilar will be transported to the new regional Caeté plant.

- For FY 2008, the following was achieved at Paciência:
 - Mine production, primarily at the St. Isabel mine and a small portion from the Pilar mine, totaled 283,245 tonnes of ore at an average grade of 3.29 g/t.
 - Ore processed through the mill totaled 277,431 tonnes with an average feed grade of 3.28 g/t.
 - The plant recovery averaged 92%.
 - Mine development at St. Isabel totaled 2.86 km.

Sabará

- In Q4 2008, Sabará produced 4,506 oz of gold at an average cash operating cost of \$641/oz compared to 6,444 oz at an average cash operating cost of \$534/oz in the same period in 2007. Ore from the newly developed Serra Paraíso mineralized body accounted for approximately 19% of the tonnage processed at the Sabará operation during Q4 2008.
- For FY 2008, Sabará produced 18,199 oz of gold at an average cash operating cost of \$667/oz compared to 24,586 oz of gold at an average cash operating cost of \$462/oz in FY 2007.

Daniel Titcomb, Jaguar's President and CEO stated, "Jaguar's team continues to enhance the production profile of our operations in Brazil and we reached a significant milestone during November surpassing 100,000 oz of gold produced in any year. As we move into 2009, we continue to find new resources, which will assist us in our future growth plans, and we are very pleased with our progress. The expansion of Turmalina is underway and our cash flow from operations continues to grow."

2009 OUTLOOK

Jaguar reaffirms its production outlook for 2009 provided in early November 2008 and has reduced the expected total cash operating costs based in-part on a further weakening of the Brazilian real versus the U.S. dollar. The Company's 2009 production and cash operating cost estimates are as follows:

Operation	<i>Estimated</i> FY 2009 Production (oz)	<i>Estimated</i> FY 2009 Cash Operating Cost (\$/oz)
Turmalina	80,000-85,000	\$354-387
Paciência	65,000-70,000	\$362-398
Sabará	<u>20,000</u>	\$374-411
Total	165,000-175,000	\$360-394

Note: Estimated cash costs based on R\$2.00 to R\$2.20 per US\$1.00. Previously the Company had expected total cash operating costs for FY2009 to average between \$405 – 460/oz based on a R\$1.85 to R\$2.00 per US\$1.00 exchange rate.

About Jaguar

Jaguar is one of the fastest growing gold producers in Brazil with operations in a prolific greenstone belt in the state of Minas Gerais. Jaguar is actively exploring and developing additional mineral resources at its 72,000 acre land base in Minas Gerais and on an additional 159,000 acres in the state of Ceará in the Northeast of Brazil through a joint venture. The Company has no gold hedges in place thereby providing the leverage to gold prices directly to its investors. Additional information is available on the Company's website at www.jaguarmining.com.

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Forward Looking Statements

This press release contains forward-looking statements, within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws, concerning the Company's expansion at Turmalina and production and cash cost estimates for the Company's operations for 2009. These forward-looking statements can be identified by the use of the words "intends", "plans", "expects", "expected" and "will". Forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, or performance to be materially different from any future results or performance expressed or implied by the forward-looking statements.

These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other ecological data, fluctuating gold prices and monetary exchange rates, the possibility of project cost delays and overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future, uncertainties related to production rates, timing of production and the cash and total costs of production, changes in applicable laws including laws related to mining development, environmental protection, and the protection of the health and safety of mine workers, the availability of labor and equipment, the possibility of labor strikes and work stoppages and changes in general economic conditions. The addition of inferred mineral resources at Turmalina is subject to interpretation applying NI 43-101 standards. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

These forward-looking statements represent our views as of the date of discussion. The Company anticipates that subsequent events and developments may cause the Company's views to change. The Company does not undertake to update any forward-looking statements, either written or oral, that may be made from time to time by or on behalf of the Company subsequent to the date of this discussion. For a discussion of important factors affecting the Company, including fluctuations in the price of gold and exchange rates, uncertainty in the calculation of mineral resources, competition, uncertainty concerning geological conditions and governmental regulations and assumptions underlying the Company's forward-looking statements, see the "CAUTIONARY NOTE" regarding forward-looking statements and "RISK FACTORS" in the Company's Annual Information Form for the year ended December 31, 2007 filed on System for Electronic Document Analysis and Retrieval and available at <http://www.sedar.com> and the Company's Annual Report on Form 40-F for the year ended December 31, 2007 filed with the United States Securities and Exchange Commission and available at www.edgar.com.

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