

PRESS RELEASE

October 14, 2009 Concord, New Hampshire $\begin{array}{c} 2009\text{-}19 \\ JAG-TSX/NYSE \end{array}$

Jaguar Mining Provides Q3 2009 Update of Operations

Record Quarterly Output Up 19%, Turmalina Phase I Expansion Completed on Schedule

Jaguar Mining Inc. ("**Jaguar**" or "the Company") (**JAG: TSX/NYSE, JAG.NT: TSX**) provided a summary today of its preliminary Q3 2009 operating performance. All figures are in U.S. dollars unless otherwise indicated. See recent operating highlights below.

Consolidated Operations (Turmalina, Paciência and Sabará)

- In Q3 2009, the Company produced a record 41,585 ounces of gold at an average cash operating cost of \$451 per ounce compared to 34,935 ounces at an average cash operating cost of \$461 per ounce during the same period last year, a production increase of 19%.
- For the first nine months of 2009, Jaguar produced 115,211 ounces of gold at an average cash operating cost of \$444 per ounce compared to 77,130 ounces at an average cash operating cost of \$450 per ounce during the first nine months of 2008, a production increase of 49%.
- Excluding the Sabará operation, which was idled during August and September 2009 (See *Sabará Operations* below), Q3 2009 gold production increased 12% or by 4,370 ounces over Q2 2009 gold production.
- Q3 2009 gold sales rose to 36,314 ounces at an average price of \$969 per ounce, 21% above the comparable Q3 2008 gold sales of 29,926 ounces at an average price of \$862 per ounce.
- Although cash operating costs were lower than Q2 2009 and 2008, the further weakening of the U.S. dollar continued to impact reported cash operating costs. Exchange rates in Q3 2009 averaged R\$1.87 per \$1.00 compared to R\$2.08 and R\$2.32 per \$1.00 in Q2 2009 and Q1 2009, respectively; an increase (of the Brazilian real) of 10% and 19% respectively. Had the Brazilian real remained steady at the R\$2.08 per \$1.00 in Q3 2009, average cash operating costs would have been reduced to \$406 per ounce compared to the reported \$451 per ounce.
- In September, the Company completed the construction of the Phase I expansion at Turmalina to boost annual gold production capacity from 80,000 ounces per year to 100,000 ounces per year. The new components are expected to reach design levels during October 2009.
- Underground mine development at operations in the Iron Quadrangle during Q3 2009 reached an
 all-time high record of 4.0 km in a quarter, bringing year-to-date development to 10.7 km and
 total in-place development to nearly 40 km. This amount of development helps ensure the
 Company's ability to convert resources into reserves on-schedule, as well as provide at least 18
 months of advanced mine access.

• Management currently estimates FY 2009 gold production will range between approximately 165,000 to 170,000 ounces at average cash operating costs of between \$444 and \$452 per ounce. The decision to idle Sabará in Q1 and most of Q3 2009 accounts for the reduction from the topend of management's initial guidance of between 165,000 to 175,000 ounces. The idling of Sabará for approximately half of the year also benefits Jaguar's overall cost performance.

Turmalina Operations – On Plan for Q3

In Q3 2009, Turmalina produced 22,249 ounces of gold at an average cash operating cost of \$411 per ounce compared to 19,321 ounces at an average cash operating cost of \$358 per ounce in Q3 2008.

The following was achieved at Turmalina during Q3 2009:

- Mine production totaled 177,459 tonnes of ore at an average run-of-mine ("ROM") grade of 5.11 grams per tonne compared to 128,354 tonnes of ore at an average ROM grade of 5.20 grams per tonne in Q3 2008.
- Ore processed through the mill totaled 153,324 tonnes at an average feed grade of 5.27 grams per tonne compared to 128,041 tonnes at an average feed grade of 5.42 grams per tonne in Q3 2008.
- The plant recovery rate averaged 89%.
- Mine development totaled 1.25 km.
- Installed underground development within the Turmalina mine is adequate to achieve the mine plan for a period of 18 months.
- Construction of the Phase I expansion circuit to boost annual gold production from 80,000 ounces per year to 100,000 ounces per year was completed on-schedule. The new circuit was placed into operation on October 5, 2009.

Paciência Operations – On Plan for Q3

In Q3 2009, Paciência produced 17,927 ounces of gold at an average cash operating cost of \$468 per ounce compared to 10,640 ounces at an average cash operating cost of \$523 per ounce during Q3 2008.

The following was achieved at Paciência during Q3 2009:

- Steps initiated in Q3 2009 to increase ore output and limit dilution at the St. Isabel mine yielded positive results with ore production rising to 131,909 tonnes at an average ROM grade of 3.54 grams per tonne compared to 107,862 tonnes at an average ROM grade 3.19 grams per tonne in Q2 2009.
- Ore shipments from the Pilar mine continued during Q3 2009 at approximately the same level as Q2 2009 (40,912 tonnes at an average ROM grade of 4.32 grams per tonne versus 40,458 tonnes at an average ROM grade of 4.36 grams per tonne in Q2 2009).

- The initial shipments of ore from the Palmital mine (conglomerates) near the Paciência plant began in Q3 2009 where ore production totaled 6,745 tonnes at an average ROM grade of 6.99 grams per tonne.
- Consolidated ore production for the Paciência mining complex totaled 179,566 tonnes at an average ROM grade of 3.84 grams per tonne compared to ore production of 96,020 tonnes at an average ROM grade of 3.32 grams per tonne in Q3 2008.
- Ore processed through the mill totaled 167,193 tonnes with an average feed grade of 3.55 grams per tonne.
- The plant recovery rate averaged 93%.
- Mine development at the St. Isabel mine totaled 1.0 km, 0.4 km at the Pilar mine, 0.3 km at Palmital and 0.5 km at the NW1 zone.

Management plans to continue ore shipments from the Pilar mine during Q4 2009. However, during the latter part of Q1 2010, management intends to divert ore from Pilar to the Caeté Plant under construction, which is expected to begin commissioning during Q2 2010. Gold production at Paciência should not be materially affected as increases in ore production from the St. Isabel mine, Palmital mine and NW1 zone are expected to offset the re-direction of Pilar ore and lead to lower cash operating costs.

Sabará Operations

The Company is conducting a strategic review of the Sabará mining concessions and leaching facility, which could include divesting the operation in its entirety before the end of 2010. As part of this strategic review, and to maximize cash flow from this operation until new higher-grade oxide resources are available, the crushing and leaching operations were idled during most of the quarter. Curtailing this operation was unplanned at the beginning of the quarter. Management determined the profitability of the operation was significantly reduced running at lower throughput rates with limited quantities of ore from the Serra Paraiso mine. With the addition of ore from a new oxide zone in development at the Roça Grande deposit in the Caeté region, management intends to re-start crushing and leaching operations at the Sabará plant during the fourth quarter of 2009.

Mining operations at the Zone A mine were terminated as expected in Q2 2009 due to exhaustion of mineral resources. Ore shipments from the Serra Paraíso mine to the Sabará leaching and processing site continued during Q3 2009 and will continue to be stockpiled until leaching operations recommence. Serra Paraíso produced 15,035 tonnes at an average ROM grade of 2.48 grams per tonne.

Caeté Project

Construction of Jaguar's new Caeté Project is on-schedule for completion in March/April 2010. The following milestones have been achieved per the project's schedule.

- Basic engineering is 100% complete with detailed engineering 68% concluded.
- All major equipment required for the project, including crushing and milling components, have been acquired.

- Crushing and Storage
 - Civil works for the crushing circuit is 100% complete.
 - Civil works for storage of crushed ore is scheduled to be completed late October.
 - Steel fabrication for the primary and secondary crushing circuits is underway and will be completed by the end of the year.
- Milling
 - Mill equipment is on-site.
 - Installation is scheduled for Q1 2009.
- Carbon-in-pulp ("CIP")Processing Plant
 - Major components are on-site.
- Tank fabrication for the leaching circuit is underway and will continue through year-end. Tailings Storage
 - Construction began on July 1st and is expected to be completed by year-end.
 - The liner for this structure will be installed in Q1 2010.
- All permits, licenses and power contracts necessary for mine development, and construction and commissioning of the operation have been received.

Cash Position

As of September 30, 2009, the Company held cash and cash equivalents of approximately \$233.2 million. Approximately 40% of the Company's current cash position is held in Brazil and earns approximately 8.5% interest. The Company received net proceeds of \$159.1 million during September from the issuance of senior convertible notes bearing a 4.5% coupon. Jaguar intends to redeem the outstanding Cdn.\$86.25 million of 10.5% notes issued in 2007 before the end of Q1 2010.

2009 Outlook

The Company's 2009 production and cost estimates are as follows:

	Actual	Estimated	Actual	Estimated
Operation	Y-T-D 2009	FY 2009	Y-T-D 2009	FY 2009
	Production	Production	Cash Operating Cost	Cash Operating Cost
	(oz)	(oz)	(\$/oz)	(\$/oz)
Turmalina	60,887	87,000-90,000	\$389	\$389-396
Paciência	47,965	68,000-70,000	\$482	\$479-487
Sabará	<u>6,360</u>	10,000	\$680	\$650-666
Total	115,211	165,000-170,000	\$444	\$444-452

Note: Estimated cash operating costs based on R\$1.75 to R\$1.85 per \$1.00.

O3 Conference Call Details

The Company will release its Q3 2009 financial and operating results after the market close on November 9, 2009. The Company will hold a conference call the following morning, November 10 at 10:00 a.m. ET, to discuss the results.

From North America: 800-218-5691 International: 213-416-2192

Replay:

From North America: 800-675-9924 International: 213-416-2185 Replay ID: 111009

Webcast: <u>www.jaguarmining.com</u>

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 93,000-acre land base in Minas Gerais and on an additional 182,000 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.

For Information:

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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 objectives, such as estimated 2009 gold production and cash operating costs, the build-out of the Caeté Project and lowering cash operating costs at Paciência. 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. 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 except as required by law. 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, 2008 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, 2008 filed with the United States Securities and Exchange Commission and available at www.sec.gov.

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