



PRESS RELEASE

February 23, 2007
Concord, New Hampshire

2007-05
JAG – TSX

Jaguar Mining Announces Completion of Paciência Pre-Feasibility Study *Initial Gold Production from Paciência Expected Early-2008*

Jaguar Mining Inc. (“Jaguar” or “the Company”) (JAG-TSX) announced today it has completed a pre-feasibility study on its Paciência Project Santa Isabel Mine property located in the state of Minas Gerais in Brazil and is reclassifying mineral resources as mineral reserves. All figures are in U.S. dollars unless otherwise indicated.

Based on the findings of the pre-feasibility study, Jaguar is advancing its 100% owned Paciência Project toward production of approximately 75,000 ounces of gold per year at an average cash cost of \$221 per ounce over an estimated initial 5.1 year mine life. Jaguar believes it will bring additional resources into the mine plan as exploration results are evaluated. These additional resources are expected to increase the mine life and annual production rate beyond the present estimate. The Company is proceeding with development plans, finalizing the feasibility study and the filing of NI 43-101 independent technical reports. The process to obtain the necessary permits is underway. The Installation License (LI) is expected to be issued in March 2007 and the initial production slated for Q2 2008.

Daniel Titcomb, Jaguar’s President and CEO stated, “We believe the Paciência Region could yield several operations similar to the Santa Isabel Mine. During our next phase of exploration in this region, we will continue with underground development and drill several mineralized structures adjacent to the Santa Isabel ore body. If we are successful, these additional resources would likely be processed through an expansion of the facility we are now building for the Santa Isabel Mine.”

Mining Plan, Reserves and Project Economics

A gold price of \$550 per ounce was used in the evaluation of the Project’s viability. The pre-tax net cash flow over the initial life of the project is estimated at \$116.5 million using the following estimates:

Mineral Reserves:	2,714,000 tonnes @ 4.52 g/t Au, containing approximately 394,450 oz of gold
Mill Feed Grade:	4.39 g/t Au
Mining Rate:	275,000 tonnes for 2008; 600,000 tonnes per year 2009 forward
Process Recovery:	93%
Annual Average Production:	75,000 oz per year
Mine Life:	5.1 years
Start Production:	Q2 2008
Capital Cost:	\$42.0 million
Average Cash Cost:	\$221 per oz
Total Production Cost:	\$333 per oz, including invested capital
Assumed Exchange Rate:	Construction Period: R\$2.2=US\$1 Operating Period: R\$2.5=US\$1
IRR Gold @ US\$550/oz:	27.5%
NPV @ 8%:	\$18.7 million after tax
NPV @ 0%:	\$50.8 million after tax

Jaguar intends to use a cut and fill method at the Santa Isabel Mine, which contemplates a treated tailings backfill system. As part of the Santa Isabel mine development, approximately 2.8 km of access ramps, stopes and cross cuts have been developed, along with 36,000 m of drilling by Jaguar and previous owners. A total of 2 km of underground development work is planned during 2007. Of the \$42 million capital cost noted above, Jaguar has invested approximately \$10 million for exploration, infrastructure and mine development at Santa Isabel.

The processing facilities will include crushing and grinding circuits followed by a gravity separation circuit, which is expected to recover approximately 40 percent of the available gold, along with a leaching and carbon-in-pulp adsorption/desorption/recovery (CIP-ADR) plant to process the downstream gravity-removed ore pulp. Civil works for the CIP-ADR processing facility is planned to begin in March 2007. The Company anticipates major systems will be substantially completed by the end of this year.

Mineral Resources

The Santa Isabel Mine pre-feasibility study identified measured and indicated resources of 430,260 ounces and inferred resources of 73,580 ounces to a depth of 300 m from surface. The resource estimates in table 1 below were determined using a capping grade of 95 g/t and a low cut-off grade of 1.5 g/t.

Table 1 - Paciência Region, Santa Isabel Mine – Estimated Resources

Category	Tonnage (mt)	Grade (g Au/t)	Ounces (oz Au)
Measured (M)	871,170	5.59	156,590 36.4%
Indicated (I)	1,702,230	5.00	273,670 63.6%
(M + I)	2,573,400	5.20	430,260
Inferred	420,700	5.44	73,580

Table 2 below presents estimated gold resources for properties along the 12 km concessions in the Paciência Region that Jaguar controls. These are not included in the pre-feasibility study for the Santa Isabel Mine presented in Table 1.

Table 2 - Paciência Region, Other – Estimated Resources

Category	Tonnage (mt)	Grade (g Au/t)	Ounces (oz Au)
Measured (M)	1,642,000	3.68	194,295 49.3%
Indicated (I)	1,567,000	3.97	200,000 50.7%
(M + I)	3,209,000	3.82	394,040
Inferred	500,000	5.00	80,380

The measured and indicated gold resources presented in table 2 are based on a NI 43-101 technical report prepared by TechnoMine Services, LLC on the Quadrilátero Gold Project filed on SEDAR on December 20, 2004.

Geologic Setting

Jaguar's Paciência Project is located in a prolific geological setting known as the Iron Quadrangle which has hosted and continues to host several world class gold mines.

The Santa Isabel Mine is located within the São Vicente Trend. This trend was discovered and intensively mined in the 17th and 18th centuries and is now recognized by large surface excavations of old mines. Mineralization within the ore body is variable, with grades between 100 to 500 g/t common due to the existence of coarse visible gold.

The pre-feasibility study was prepared by Ivan C. Machado, M.Sc., P.E., P.Eng., Principal of Salt Lake City based TechnoMine Services, LLC. Mr. Machado serves as Jaguar's independent Qualified Person in accordance with NI 43-101. The Company will file a technical report in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101 within 45 days.

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. Additional information is available on the Company's website at www.jaguarmining.com.

For Information:

Investors and analysts:

Bob Zwerneman
Director of Investor Relations
603-224-4800
bobz@jaguarmining.com

Media inquiries:

Valéria Rezende DioDato
Director of Communication
603-224-4800
valeria@jaguarmining.com

Forward Looking Statements

This press release contains forward-looking statements concerning Jaguar's objectives in the years ahead, the measured and indicated resources, their average grade, the commencement period of production, cash operating costs and completion dates of feasibility studies, gold production and sales targets, capital expenditure costs, future profitability and growth in reserves. Forward-looking statements can be identified by the use of words, such as "are expected", "is forecast", approximately 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 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. 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, 2005 filed on System for Electronic Document Analysis and Retrieval ("SEDAR") and available at <http://www.sedar.com>.