



PRESS RELEASE

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Jaguar Mining Provides Update of Operations, Exploration and Certain Corporate Initiatives

Analyst Tour of Operations Will Showcase Jaguar's Tremendous Potential

Jaguar Mining Inc. (“Jaguar” or “the Company”) (JAG: TSX/NYSE Arca, JAG.NT: TSX) provided an update today of its operating performance in 3Q, as well as information about its current exploration program and certain corporate developments. The Company also provided a new corporate presentation which will be discussed with visitors attending Jaguar’s analyst trip in Brazil, which begins today. This presentation is available on the Company’s web site under the investor relations tab at www.jaguarmining.com.

Recent operating highlights include:

- During 3Q 2007, the Company produced 20,334 oz of gold at an average cash cost of \$346/oz compared to 12,044 oz at an average cash cost of \$373/oz during the same period last year;
- Gold production at Turmalina during 3Q 2007 totaled 13,502 oz at an average cash cost of \$280/oz. Turmalina was under construction during the same period in 2006 and did not produce gold until January, 2007. Costs for 3Q were higher than planned primarily due to higher energy costs and stronger-than-expected exchange rates for the Brazilian Real;
- The Company’s optimization program at Turmalina, which was completed during 3Q, successfully increased gold metallurgical recovery to 90% in September. Prior to the optimization effort, gold recovery at the Turmalina Plant had dipped below design rates due to the unexpected presence of trace elements, which required modifications to the leaching circuit. The optimization program is expected to benefit other Jaguar operations in the future;
- In a 30-day-period following the successful completion of the optimization program at Turmalina, the operation achieved internal targets for tonnes processed, metallurgical recovery and ounces produced;
- Management currently estimates gold production at Turmalina during 2007 will total approximately 51,500 oz at an average cash cost between \$260-270/oz.;
- Gold production from Sabará during 3Q 2007 totaled 6,832 oz at an average cash cost of \$473/oz compared to 8,106 oz at an average cash cost of \$288/oz. Lower ore grades during 3Q 2007, which were expected and previously announced, were primarily responsible for the reduced output and higher costs at Sabará compared to the prior year for this limited-life oxide operation;
- Management currently estimates gold production at Sabará during 2007 will total approximately 24,000 oz at an average cash cost between \$450-460/oz.
- Construction progress at the Paciência Project remains on budget and on schedule. The overall project is 70% complete and continues on track for a 1Q 2008 date to begin commissioning. Photos of the latest construction progress at Paciência can be viewed on the Company’s website under the Gold Projects tab <http://www.jaguarmining.com/s/PacienciaPhotos.asp>;

Daniel Titcomb, Jaguar's President and CEO stated, "After its people, Jaguar's most valuable asset is our exceptional exploration potential. We believe this is what analysts who are attending our site tour this week in Brazil will come to understand during their visit. With the start of our recently announced 'Go-Deep' drill program at Turmalina, Pilar and Roça Grande, the latter two of which will supply the Caeté Project, our exploration and operating teams remain excited about our prospects. At each location, we expect to significantly add resources and reserves and extend the lives of operations well beyond the periods estimated in the initial feasibility studies. Moreover, our preliminary third quarter production results continue to demonstrate our operating team's ability to identify, develop and produce gold competitively."

Exploration Update

Jaguar's aggressive drill program continues to produce very promising results at all of the current targets under consideration. A discussion of each region or area of focus follows:

Paciência Project

The Paciência Project represents the largest concession package in the Quadrilátero near Belo Horizonte, Brazil. Earlier this year, Jaguar successfully concluded a land swap agreement with another gold producer whereby Jaguar expanded the concession package at Paciência to a contiguous 20 km area adjacent to the São Vicente lineament. This land area was first mined in the 17th century by the Portuguese and the old works are highly visible, even from satellite photography. Jaguar's efforts today are along this same strike at depths deeper than the Portuguese could access without modern mining equipment.

The Paciência Project will initially draw ore from the St. Isabel mine, which Jaguar is in the final stages of developing. The ore produced at the St. Isabel mine will be transported to the above-ground CIP processing plant under construction. The Company has recently opened a second mine entrance approximately 2 km to the North of the St. Isabel mine entrance and has successfully breached the 'fresh rock' section where excavation will take place to connect to the ramp system at the St. Isabel mine at the second level. Exploration will be conducted along with the development effort to add additional tonnes vertically as well as horizontally and further increase the resource base for Paciência. Recent drill results for several concession areas are illustrated in the new corporate presentation available on the Company's web site. This information is further discussed below.

NW01 Target (Marzagão) – A total of 24 holes have been drilled to depths of 200 m in the NW 01 target just to the North of the new mine entrance with gold intersections ranging from 2.5 g/t to 15.6 g/t. The intervals for these holes range from 0.8 to 4.4 m. The size and characteristics of this mineralized zone are similar to the St. Isabel mine where we currently have identified 428,000 oz of resources. Jaguar plans to drill additional holes at this target with the intent of delineating a resource to meet National Instrument 43-101 standards.

Conglomerates - A second zone of mineralization at the Paciência Project, not related to the São Vicente lineament where Jaguar has a resource and reserve base, is referred to as the Conglomerates. The zone entails several concessions, which are located approximately 5 km to the East of the St. Isabel mine main entrance. In 1989 and 1990, two previous concession owners conducted exploration drilling consisting of 75 underground and surface drill holes and underground development. These efforts gave rise to a third-party-estimated resource of over 200,000 oz based on an average grade of 5.72 g/t. These resources are not included in Jaguar's latest mineral inventory of gold resources as these efforts pre-dated the NI 43-101 standards. In order to estimate the resources held in the conglomerates consistent with NI 43-101 standards, Jaguar is conducting in-fill drilling inside the target zones.

Conglomerates represent a very large portion of production in certain countries, particularly South Africa, and are also found in some parts of Brazil. At these operations, the deposits are generally homogenous across the mineralized horizon and can extend along strike for considerable distances. If such a condition exists at the Paciência (conglomerates), Jaguar's management believes the resource potential could be quite large.

Caeté Project

The Company continues to advance the Caeté Project feasibility study, which is expected to be completed by the end of 1Q 2008. As part of that effort, the Company is planning to drill 22,000 m between the Roça Grande and Pilar targets by the end of the year. Most of that effort will be conducted at Roça Grande, where seven drill rigs are currently in operation. At the Pilar target, two drill rigs are operating and will also conduct deep drilling to define the continuity of the structure. The new corporate presentation includes new intercept data from the latest drilling results.

Management believes the current drilling program will initially identify approximately one million ounces of gold resources as part of the feasibility study. This estimate is based on a total tonnage of approximately 7.0 million tonnes at an average grade of 5.1 g/t.

Turmalina Expansion

Jaguar recently completed the underground crosscut to access the Satinoco ore body through the existing ramp developed by the Company to mine the Main and Northeast ore bodies at Turmalina. This can be seen graphically in the presentation referenced earlier. Within the cross cut section of the Satinoco mineralized zone, economic grades of gold were discovered from channel samples. The Company is now starting development inside the structure and will be drilling additional holes along strike.

Earlier in the year, the Company completed approximately 12,000 m of surface in-fill drilling and provided information compliant with NI 43-101 standards on measured, indicated and inferred resources for the Satinoco zone. Further work, including block modeling, is being performed to bring the resources into the mine plan for the Turmalina Expansion announced in September by the Company. The results are expected to be completed by the end of 2007.

Company Signs Confidentiality Agreements with Gold Producers

Over the past few months, the Company has signed confidentiality agreements with several gold producers to provide such companies access to information concerning the Company's exploration program, operations, financial, legal and other pertinent information. The Company emphasizes that entering into agreements of this nature is quite common in the industry and investors should not consider the presence of such agreements as an indication that the Company is undertaking any efforts to sell the Company or that any takeover of the Company may be forthcoming.

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

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Satinoco and Caeté drill results and resource estimation were reviewed 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. SGS Geosol Laboratories of Belo Horizonte, Minas Gerais provided independent sample preparation and assay services, using standard industry practices

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. The potential quantities and grades noted for the NW01 Target are conceptual in nature as there has been insufficient exploration to define a mineral resource and it is uncertain whether further exploration will result in the target being delineated as a mineral resource. The Company also relied on information concerning the Conglomerates at the Paciência as accurate and reliable from the previous concession owners and does not warrant that the information supplied reflects a potential resource. 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, 2006 filed on System for Electronic Document Analysis and Retrieval ("SEDAR") and available at <http://www.sedar.com>.