

PRESS RELEASE

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Concord, New Hampshire

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JAG – TSX/NYSE

Jaguar Mining Kicks-Off Tour of Brazilian Operations, Provides Details of Exploration, Operations and Development Program Tour Showcases New Caeté Plant and Conglomerates Zone

Jaguar Mining Inc. (“Jaguar” or “the Company”) (JAG: TSX/NYSE) is conducting its annual tour of operations near Belo Horizonte April 14-16. A copy of the presentation that will be provided to participants in the tour (the "Presentation") can be found on the Company’s web site under Investor Relations, Webcasts and Presentations at www.jaguarmining.com.

Reserve Grade Reconciliation to Jaguar’s Mine Plan

The Company has prepared the table set out below in response to questions it has received since updating its Resource and Reserve Estimates in its 2009 Annual Information Form and Management’s Discussion and Analysis, as filed on SEDAR on March 22, 2010. The table is being offered to assist shareholders and interested parties compare the current reserve estimates against Jaguar’s average run of mine (“ROM”) grades and to clarify a misconception that Jaguar’s reserve grades are declining, which will lead to higher operating costs in future periods. Such a general conclusion was misleading in management’s opinion as it failed to take into account the detailed mine plan, which is based upon extensive in-fill drilling and sampling of the exposed ore faces, which produces a detailed block model. This information serves as the primary basis for Jaguar’s underground mine plans which are the foundation for the Company’s growth objectives.

As presented in the table below, Life-of-Mine to-date grades from various ore bodies are compared against average ROM grades which the Company expects to mine in the 2010 and 2011 periods and against the reserve grade as filed. As can be seen from the information, grades related to ore mined thus far and those to be mined during the 2010 and 2011 time period are generally and significantly higher than the December 31, 2009 reconciled reserve grades. One major factor causing this difference is the conservative model’s cut-off grades achieved during the Reconciliation versus the mining plan grades.

Due to the global financial crisis which began in late-2008, Jaguar’s management sharply curtailed exploration and the preparation of feasibility studies during the first half of 2009. This caused a delay in adding new resources and reserves under the existing mining plan, particularly at the Turmalina mine. Although the Company was able to confirm new resources and reserves for the Ore Body C at Turmalina, which has lower grades on average than Ore bodies A and B, the delay in exploration during 2009 caused a hold-up in the resource generation for those ore bodies. Illustrations covering the Deep Drift Drill Project at Turmalina, which is expected to convert higher grade resources, is contained in the Presentation. Jaguar’s management is confident the underground development (as planned), in addition to the Deep Drift Drill Project, will enable the Company to achieve the mining plan, production and cash cost expectations as previously released.

Jaguar Mining Inc.
Reserves Comparative

Operation	Life-of-Mine To-Date (2009)			Two Year 2010 - 2011 Mine Plan			Current Stated Reserve Grade		
	Tonnes	Avg Grade	Ounces	Tonnes	Avg Grade	Ounces	Tonnes	Avg Grade	Ounces
Turmalina (A,B & C Ore bodies)									
Sub-Total	1,424,791	5.07	232,449	1,480,810	5.25	250,184	4,460,210	3.87	555,460
Paciência									
St. Isabel	782,030	3.15	79,238	953,940	4.00	122,776	4,096,717	3.07	405,038
NW1 and Others	10,515	4.96	1,677	432,500	3.79	52,769			
Palmital	22,637	5.24	3,814	179,500	5.64	32,534			
Ouro Fino				100,000	4.30	13,826			
Sub-Total	815,182	3.23	84,729	1,665,940	4.14	221,905	4,096,717	3.07	405,038
Caeté									
Pilar	127,348	4.29	17,549	476,000	4.46	68,197	3,400,620	3.93	430,153
RG-01/07 *				275,000	3.46	30,594	4,611,090	3.46	512,742
RG-02*				175,000	4.50	25,322			
RG-OXIDE				214,000	3.32	22,818	1,232,966	2.83	112,291
Sub-Total	127,348	4.29	17,549	1,140,000	4.01	146,931	9,244,676	3.55	1,055,186
Total	2,367,321	4.40	334,727	4,286,750	4.49	619,020	17,801,603	3.52	2,015,684

* - Current reserve grades for RG-01/07 and RG-02 combined for Tonnes, Avg Grade and Ounces

Questions concerning the interpretation of the information contained in the presentation or the table presented herein should be directed to one of the contact persons noted below.

Notice of Release Date for Q1 Update of Operations

The Company will release its Preliminary Update of Operations for Q1 2009 after the market close on Thursday April 15, 2010. That press release will present production, cash operating costs and sales information for the period ending March 31, 2010.

About Jaguar Mining

Jaguar is one of the fastest growing gold producers in Brazil with operations in a prolific greenstone belt in the state of Minas Gerais and has plans to develop the Gurupi Project in northern Brazil in the state of Maranhão. Jaguar is actively exploring and developing additional mineral resources at its approximate 575,000-acre land base in Brazil. 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 average ROM grades that the Company expects to mine in 2010 and 2011 and its ability to add higher grade resources to achieve previously announced results. These forward-looking statements can be identified by the use of the words "expects" 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 geological 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, 2009 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, 2009 filed with the United States Securities and Exchange Commission and available at www.sec.gov.

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