

PRESS RELEASE

March 31, 2008 Concord, New Hampshire 2008-07 JAG – TSX/NYSE Arca

JAGUAR MINING ANNOUNCES AUTOMATIC SHARE PURCHASE PLAN

Jaguar Mining Inc. ("Jaguar" or the "Company") (JAG: TSX/NYSE Arca, JAG.NT: TSX) announced today that it has entered into an automatic share purchase plan with a broker in order to facilitate repurchases of its common shares under its previously announced normal course issuer bid. On August 28, 2007, Jaguar announced that it had received approval from the Toronto Stock Exchange ("TSX") to make a normal course issuer bid to purchase up to the lesser of 2,760,224 common shares, being 5% of the issued and outstanding common shares of Jaguar, and the number of common shares equal to a maximum aggregate purchase price of Cdn.\$5,250,000. The normal course issuer bid commenced on August 30, 2007 and will terminate on August 29, 2008, or such earlier date as the Company may complete repurchases under the bid.

Under the Company's automatic share purchase plan, the Company's broker may repurchase shares under the normal course issuer bid at times when the Company would ordinarily not be permitted to due to self-imposed blackout periods. Jaguar anticipates renewing the plan from time to time during the course of its normal course issuer bid to enable purchases of its common shares to be made during internal blackout periods. Purchases will be made by the Company's broker based upon the parameters prescribed by the TSX and applicable Canadian securities laws and the terms of the parties' written agreement. The automatic share purchase plan has been approved by the TSX and will be implemented effective as of March 31, 2008.

A total of 232,300 common shares have been repurchased for cancellation under the Company's current normal course issuer bid and Jaguar currently has 64,047,419 common shares outstanding.

Jaguar is engaging in a normal course issuer bid because it believes that, from time to time, the market price of its common shares may not fully reflect the underlying value of its business and its future business prospects. As a result, depending upon future price movements and other factors, Jaguar believes that its outstanding common shares may represent an attractive investment, since a portion of Jaguar's excess cash can be invested for an attractive risk adjusted return on capital through its normal course issuer bid.

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. 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 and on SEDAR at www.sedar.com.

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