

PRESS RELEASE

March 23, 2009 Concord, New Hampshire 2009-08 JAG - TSX/NYSE Area

Jaguar Mining Reports FY 2008 and Q4 Earnings Gross Profit of \$27.4 Million Up 91% Over 2007

Jaguar Mining Inc. ("**Jaguar**" or the "Company") (**JAG: TSX/NYSE Arca, JAG.NT: TSX**) reports its financial and operational results for the period ended December 31, 2008. All figures are in U.S. dollars unless otherwise indicated. Fiscal year ("FY") information is based on the year ending December 31, 2008.

FY 2008 Highlights

- FY 2008 net loss of \$4.3 million or \$0.07 per basic and fully diluted share compared to a net loss of \$27.7 million or \$0.52 per basic and fully diluted share in FY 2007.
- FY 2008 net income was impacted by net realized and unrealized charges for foreign exchange derivatives of \$2.6 million, stock-based compensation charges of an additional \$1.3 million and a pause in the development of the Caeté Project because of the retraction of anticipated credit due to global credit market conditions.
- FY 2008 revenue totaled \$93.7 million, up 96% over prior year.
- FY 2008 gold sales totaled 108,944 ounces at an average price of \$860 compared to FY 2007 gold sales of 67,350 ounces at an average price of \$710.
- FY 2008 gold production of 115,348 ounces of gold at an average cash operating cost of \$429 per ounce compared to gold production of 70,113 ounces at an average cash operating cost of \$346 per ounce compared to FY 2007.
- Cash operating costs in 2008 increased primarily due to the initial costs associated with the commissioning of the Paciência operation and less favorable exchange rates, with the Brazilian real ("R\$") reaching a record high against the U.S. dollar of R\$1.56 per US\$1.00 during the commissioning phase. The average exchange rate for the year ended December 31, 2008 was R\$1.84 per US\$1.00 compared to R\$1.95 per US\$1.00 for the year ended December 31, 2007.
- FY 2008 gross profit totaled \$27.4 million compared to \$14.3 million in FY 2007, an increase of 91%.
- Adjusted cash flows from operating activities totaled \$11.6 million in FY 2008 compared to \$4.1 million in FY 2007.

- Invested \$97.1 million in growth projects in FY 2008, a 36% increase from FY 2007.
- Bettered the Company's safety benchmark by 37%.
- Retained and continued training programs for key personnel.
- Increased proven and probable reserves 97% to 2.0 million ounces.
- Exploration: drilled 68,270 meters, an increase of 76% from 2007.
- Underground development: 12.7 kilometers added during 2008, over 30 kilometers in-place to achieve 2009 production targets.

Commenting on the 2008 results, Daniel R. Titcomb, Jaguar's President and CEO stated, "Our fourth quarter operating performance marked the 2008 achievements and was a real turning point. The Paciência processing circuit reached commercial design rates and sequencing issues in the mining technique at Turmalina were resolved and the project met plan in Q4. Exploration programs, conversion of resources to reserves and underground development were also on plan to prepare the mines to achieve our 2009 production objectives. Operations in early 2009 are on plan with costs favorably supported by improved exchange rates. With the recent financing now complete, we have re-taken the Caeté Project and detailed engineering and civil works are underway. The expansion at Turmalina remains on-track for completion during Q3 2009 and our production and cost guidance targets appear sound."

Q4 2008 Highlights

- Q4 2008 net loss of \$3.4 million or \$0.05 per basic and fully diluted share compared to a net loss of \$14.8 million or \$0.28 per basic and fully diluted share in Q4 2007.
- Net income for Q4 2008 was impacted by realized and unrealized charges for foreign exchange derivatives and foreign exchange losses totaling \$3.0 million, higher administration charges and stock-based compensation charges of \$0.6 million.
- Q4 2008 revenue totaled \$27.9 million, an increase of 87% from the same period last year.
- Q4 2008 gold sales totaled 35,138 ounces at an average price of \$793 compared to Q4 2007 figures of 18,742 ounces at an average price of \$796.
- Q4 2008 gold production of 37,916 ounces of gold at an average cash operating cost of \$396 per ounce compared to gold production of 20,463 ounces at an average cash operating cost of \$405 per ounce compared to Q4 2007.
- Gross profit for Q4 2008 totaled \$7.1 million compared to \$4.0 million for the same period in 2007, an increase of 77% from Q4 2007.
- Adjusted cash flows from operating activities totaled (\$3.4) million compared to \$4.0 million in Q4 2007.
- Jaguar invested \$13.9 million in growth projects in Q4 2008, down from the \$23.1 million invested in Q4 2007. The curtailment of the Caeté Project and brownfield exploration during Q4 2008 was largely the reason for the lower capital spending from the prior year.

- The Company deemed the processing operations at Paciência reached commercial design rates in Q4 2008 and mining operations at the St. Isabel mine reached design rates in Q1 2009.
- All permits, energy contracts and key equipment needed for development of the projects underway have been granted, including those required for construction and further mine development at the Caeté Project.

Summary of Key Operating Results

A summary of key operating results follows:

	Three Months Ended December 31		Year E Decemb	
	2008	2007	2008	2007
(unaudited)				
(\$ in 000s, except per share amounts and shares outstanding)				
Gold sales	27,874	14,915	93,657	47,834
Ounces sold	35,138	18,742	108,944	67,350
Average sales price \$ / ounce	793	796	860	710
Gross profit	7,103	4,007	27,354	14,289
Net income (loss)	(3,443)	(14,825)	(4,256)	(27,660)
Basic and diluted earnings (loss) per share	(0.05)	(0.28)	(0.07)	(0.52)
Weighted avg. # of shares outstanding - basic	63,982,281	55,494,155	62,908,676	53,613,175
Weighted avg. # of shares outstanding - diluted	63,982,281	55,494,155	62,908,676	53,613,175

Additional details are available in the Company's filings on SEDAR and EDGAR, including Management's Discussion and Analysis of Financial Condition and Results of Operations and Interim Consolidated Financial Statements for the period ended December 31, 2008.

Non-GAAP Performance Measures

The Company has included the non-GAAP performance measures discussed below in this press release. These non-GAAP performance measures do not have any standardized meaning prescribed by Canadian GAAP ("GAAP") and, therefore, may not be comparable to similar measures presented by other companies. The Company believes that, in addition to conventional measures prepared in accordance with GAAP, these non-GAAP measures provide certain investors with additional information that will better enable them to evaluate the Company's performance. Accordingly, these Non-GAAP measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared with GAAP.

The Company has included cash operating cost per ounce processed because it believes these figures are a useful indicator of a mine's performance as they provide: (i) a measure of the mine's cash margin per ounce, by comparison of the cash operating costs per ounce to the price of gold; (ii) the trend in costs as the mine matures; and, (iii) an internal benchmark of performance to allow for comparison against other mines. The definitions for these performance measures and reconciliation of the non-GAAP measures to reported GAAP measures are set out in the following tables.

Cash Operating Cost per ounces Processed

Summary of Cash Operating Cost per oz of gold produced Production costs per statement of operations	Three Months Ended December 31, 2008 \$ 15,286,000		12 Months Ended December 31, 2008 \$ 50,355,000		
Change in inventory ¹	Ψ	(258,000)	Ψ	(871,000)	
Operational cost of gold produced ² divided by		15,028,000		49,484,000	
Gold produced (oz) equals		37,916		115,348	
Cost per oz of gold produced	\$	396	\$	429	
Sabará Cash Operating Cost per oz produced	Three Months Ended December 31, 2008		12 Months Ended December 31, 2008		
Production costs	\$	2,702,000	\$	12,143,000	
Change in inventory ¹		186,000		(4,000)	
Operational cost of gold produced ² divided by		2,888,000		12,139,000	
Gold produced (oz) equals		4,506		18,199	
Cost per oz of gold produced	\$	641	\$	667	
Turmalina Plant Cash Operating Cost per oz produced	Three Months Ended December 31, 2008		12 Months Ended December 31, 2008		
Production costs	\$	6,636,000	\$	28,608,000	
Change in inventory ¹		(40,000)		(2,056,000)	
Operational cost of gold produced ² divided by		6,596,000		26,552,000	
Gold produced (oz) equals		19,987		72,785	
Cost per oz of gold produced	\$	330	\$	364	
Paciência Plant Cash Operating Cost per oz produced	Three Months Ended December 31, 2008		12 Months Ended December 31, 2008		
Production costs	\$	5,948,000	\$	9,604,000	
Change in inventory ¹		(404,000)		1,189,000	
Operational cost of gold produced ² divided by		5,544,000		10,793,000	
Gold produced (oz) equals		13,423		24,364	
Cost per oz of gold produced	\$	413	\$	443	

¹ Under the Company's revenue recognition policy, revenue is recognized when legal title passes. Since total cash operating costs are calculated on a production basis, this change reflects the portion of gold production for which revenue has not been recognized in the period.

² The basis for calculating cost per ounce produced includes the change to gold in process inventory, whereas the cost per tonne processed does not.

The following tables are included in Jaguar's audited financial statements as filed on SEDAR and readers should refer to those filings for the associated footnotes which are an integral part of the tables.

JAGUAR MINING INC.

Consolidated Balance Sheet (Expressed in thousands of U.S. dollars)

		December 31, 2008		December 31, 2007	
Assets					
Current assets:					
Cash and cash equivalents	\$	20,560	\$	45,711	
Cash in trust	Ψ	20,000	Ψ	837	
Inventory		19,946		10.724	
Prepaid expenses and sundry assets		5,351		11,897	
Unrealized foreign exchange gains		-		1,680	
Forward purchases derivative asset		-		924	
•		45,857		71,773	
Prepaid expenses and sundry assets		26,164		13,913	
Net smelter royalty		1,006		1,225	
Restricted cash		3,106		3,102	
Property, plant and equipment		148,422		82,945	
Mineral exploration projects		79,279		61,273	
	\$	303,834	\$	234,231	
Liabilities and Shareholders' Equity					
Current liabilities:					
Accounts payable and accrued liabilities	\$	13,416	\$	12,993	
Notes payable	Ψ	4,319	Ψ	11,699	
Income taxes payable		8,626		3,519	
Asset retirement obligations		1,337		269	
Forward sales derivative liability		- 1,007		9,844	
Unrealized foreign exchange losses		2,421		-	
S. Hodinasa Tol Sign Shortainings 100000		30,119		38,324	
Forward sales derivative liability		_		5,580	
Deferred compensation liability		434		-	
Notes payable		69,729		83,920	
Future income taxes		-		2,182	
Asset retirement obligations		6,828		2,706	
Total liabilities		107,110		132,712	
Shareholders' equity					
Common shares		245,067		141,316	
Warrants		-		245	
Stock options		19,059		19,218	
Contributed surplus		1,167		1,153	
Deficit		(68,569)		(60,413)	
Commitments		196,724		101,519	
Subsequent events					
Oubboddin overits	\$	303,834	\$	234,231	

JAGUAR MINING INC.

Consolidated Statements of Operations and Comprehensive Loss (Expressed in thousands of U.S. dollars, except per share amounts)

		Year Ended		Year Ended	Year Ended
		December 31, 2008	ı	December 31, 2007	December 31, 2006
Gold sales	\$	93,657	\$	47,834 \$	21,179
Production costs	•	(50,355)	•	(25,172)	(13,195)
Other cost of goods sold		(3,255)		(3,141)	(447)
Stock-based compensation		(24)		-	-
Depletion and amortization		(12,669)		(5,232)	(2,376)
Gross profit		27,354		14,289	5,161
Operating expenses:					
Exploration		3,536		2,365	183
Stock-based compensation		1,238		10,750	5,990
Administration		12,571		9,617	6,334
Management fees		854		747	739
Amortization		264		-	-
Accretion expense		490		138	27
Other Other		379		2,782	1,527
Total operating expenses		19,332		26,399	14,800
Income (loss) before the following		8,022		(12,110)	(9,639)
Loss on forward derivatives		318		9,908	6,823
Loss (gain) on forward foreign exchange derivatives		2,623		(3,690)	(1,555)
Foreign exchange gain		(2,477)		(2,280)	(1,871)
Amortization of deferred financing expense		· -		· -	698
Interest expense		11,584		11,170	270
Interest income		(3,850)		(4,601)	(1,582)
Gain on disposition of property		(452)		(381)	-
Other non-operating expenses		-		230	-
Total other expenses		7,746		10,356	2,783
Income (loss) before income taxes		276		(22,466)	(12,422)
Income taxes					
Current income taxes		6,172		3,519	591
Future income taxes (recovered)		(1,640)		1,675	(267)
Total income taxes		4,532		5,194	324
Net loss and comprehensive loss for the year		(4,256)		(27,660)	(12,746)
Basic and diluted net loss per share	\$	(0.07)	\$	(0.52) \$	(0.30)
Weighted average number of common shares outstanding		62,908,676		53,613,175	43,114,563

JAGUAR MINING INC.

Consolidated Statements of Cash Flows (Expressed in thousands of U.S. dollars)

		Year Ended	Year Ended	Year Ended	
	De	ecember 31,	December 31,	December 31,	
		2008	2007	2006	
Cash provided by (used in):					
Operating activities:					
Net loss and comprehensive loss for the year	\$	(4,256)	\$ (27,660)	\$ (12,746)	
Items not involving cash:	·	(, ,	. (, ,	. (, , ,	
Unrealized foreign exchange (gain) loss		(3,471)	7,907	(97)	
Stock-based compensation		1,262	10,750	5,990 [°]	
Amortization of deferred financing costs		, -	· -	698	
Non-cash interest expense		1,982	2,953	-	
Accretion expense		490	138	27	
Future income taxes (recovered)		(1,640)	1,675	(267)	
Depletion and amortization		12,933	5,232	2,376	
Amortization of net smelter royalty		219	310	-	
Interest on loans receivable		_	_	(102)	
Unrealized loss on forward sales derivatives		_	4,284	6,823	
Unrealized loss (gain) on foreign exchange contracts		4,102	(972)	(709)	
Gain on disposition of property		, -	(381)	-	
Reclamation expenditure		_	(157)	(105)	
Change in non-cash operating working capital			(- /	(/	
Accounts receivable		_	1,742	(1,161)	
Inventory		(4,361)	(2,624)	(2,193)	
Prepaid expenses and sundry assets		(14,200)	(11,659)	(8,041)	
Accounts payable and accrued liabilities		423	6,991	1,269	
Current taxes payable		5,107	2,928	591	
		(1,410)	1,457	(7,647)	
Financing activities:		(, - ,	, -	(, - ,	
Issuance of common shares, special					
warrants and warrants, net		105,803	30,138	56,102	
Shares purchased for cancellation		(6,381)	(2,089)	(4)	
Settlement of forward derivatives		(14,500)	-	-	
Increase in restricted cash		(4)	2,925	(6,027)	
Repayment of debt		(18,654)	(6,086)	(2,078)	
Increase in debt		3,848	64,604	14,965	
		70,112	89,492	62,958	
Investing activities		-,	,	, , , , , , ,	
Mineral exploration projects		(37,087)	(27,233)	(24,663)	
Purchase of property, plant and equipment		(52,210)	(35,859)	(25,422)	
7/1		(89,297)	(63,092)	(50,085)	
Effect of foreign exchange on non-U.S. dollar denominated					
cash and cash equivalents		(4,556)	3,095	-	
Increase (decrease) in cash and cash equivalents		(25,151)	30,952	5,226	
Cash and cash equivalents, beginning of year		45,711	14,759	9,533	
Cash and cash equivalents, end of year	\$	20,560	\$ 45,711	\$ 14,759	

Conference Call Details

The Company will hold a conference call tomorrow, March 24 at 10:00 a.m. EDT, to discuss the results.

From North America: 800-218-5691 International: 213-416-2975

Replay:

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

Replay ID: 32409

Webcast: www.jaguarmining.com

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 65,500 acre land base in Minas Gerais and on an additional 186,600 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. www.jaguarmining.com.

For Information:

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The Company uses the financial measure "adjusted cash flows from operating activities" to supplement its consolidated financial statements. The presentation of adjusted cash flows from operating activities is not meant to be a substitute for cash flows from operating activities presented in the statement of cash flows in accordance with GAAP, but rather should be evaluated in conjunction with such GAAP measures. Adjusted cash flows from operating activities is calculated as operating cash flow excluding the change in non-cash operating working capital. The term adjusted cash flows from operating activities does not have a standardized meaning prescribed by Canadian GAAP, and therefore the Company's definitions are unlikely to be comparable to similar measures presented by other companies. The Company's management believes that the presentation of adjusted cash flows from operating activities provides useful information to investors because it excludes certain non-cash changes and is a better indication of the Company's cash flow from operating activities, which are included in the Statements of Cash Flows prepared in accordance with Canadian GAAP, are items that the Company does not consider to be meaningful in evaluating the Company's past financial

performance or the future prospects and may hinder a comparison of its period to period cash flows.

Forward Looking Statements

Certain statements in this press release constitute "Forward-Looking Statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities legislation. This press release contains Forward-Looking Statements, including statements concerning expected date of completion of the Turmalina expansion and use of proceeds from the Company's March 2009 equity financing. Forward-Looking Statements involve known and unknown risks, uncertainties and other factors, which may cause the actual timing of commissioning, completion dates or use of proceeds 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 labour and equipment, the possibility of labour 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 the Company's views as of the date hereof. Subsequent events and developments could 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, 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.edgar.com.

This press release presents estimates of "total cash cost per ounce" that are not recognized measures under generally accepted accounting principles ("GAAP"). This data may not be comparable to data presented by other gold producers. A reconciliation of the Company's total cash cost per ounce to the most comparable financial measures calculated and presented in accordance with GAAP for the Company's historical results of operations is set forth in the management discussion and analysis filed with the United States Securities and Exchange Commission as well as the Company's most recent annual financial statements filed with the Canadian Securities Administrators.

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