

NEWS RELEASE

April 12, 2017 FOR IMMEDIATE RELEASE 2017 - 06 TSX:JAG

Jaguar Mining Produces 22,291 Ounces of Gold in the First Quarter of 2017; Pilar Gold Mine Production Up 86% On Strong Operating performance

Toronto, Canada, April 12, 2017 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX:JAG) today announced first quarter 2017 ("Q1 2017") operational results for its core assets located in the Iron Quadrangle area of Minas Gerais, Brazil. All figures are in US dollars unless otherwise expressed. Full financial results are expected to be released after May 9, 2017.

First Quarter 2017 Highlights

- Consolidated gold production of 22,291 ounces, up 5% year-over-year, with 214,000 tonnes of ore processed.
- Strong operating performance at Pilar Gold Mine resulted in an 86% increase in gold production to 8,485 ounces, a 17% improvement in average grade to 3.39 g/t, and higher recovery of 91%. Strong gold production reflects the advancing ore development into the higher-grade Orebodies BF and BFII.
- Turmalina Gold Mine produced 12,736 ounces of gold, lower than Q1 2016 and Q4 2016 production levels, due to lower throughput and grade. Mining activities in one section of Orebody A were temporarily interrupted during the quarter to conduct ground control rehabilitation work. Previously scheduled high-grade mining blocks from this area were deferred later into the mining schedule.
- Turmalina increased Measured & Indicated Mineral Resources by 22% to 540,000 ounces of gold (grade of 4.93 g/t Au), and Proven & Probable Mineral Reserves for Orebody C by 167% to 80,000 ounces of gold (grade of 4.10 g/t Au)
- Growth exploration programs advanced during the quarter with 1,889 metres of diamond drilling being completed from surface and 966 metres from underground. Over 150 metres of exploration development also advanced during the quarter for new deep drilling horizon platforms at Pilar and Turmalina
- Preliminary cash balance of approximately \$18.1 million as of March 31, 2017, compared to a cash balance of \$26.3 million at December 31, 2016.

Rodney Lamond, President and Chief Executive Officer of Jaguar commented, "Jaguar Mining commenced 2017 performing well, building on the positive trends established in 2016, to deliver total gold production of 22,291 ounces in Q1 2017. In particular, strong operating performance at Pilar resulted in an 86% increase in gold production to 8,485 ounces, and a 17% improvement in grade to 3.39 g/t compared to Q1 2016. Pilar's strong performance reflects the advancing of ore development (614 metres) into the high-grade Orebodies BF and BFII. Turmalina's mining activities in a high-grade section of Orebody A were temporarily interrupted during the quarter due to ground control rehabilitation. We are confident that a revised mining schedule at Turmalina will recover the gold production shortfall during the second quarter."

"Looking ahead, we remain on track to achieve 2017 production guidance of between 100,000 – 110,000 ounces. Additionally, performance is expected to continue to improve as we remain focused on growing our sustainable production profile through ongoing strategic exploration and development programs. As previously reported, strong exploration results during 2016 drove a 22% increase in Measured & Indicated Mineral Resources at Turmalina, to 540,000 ounces of gold with average grade of 4.93 g/t Au. The growth in M&I Mineral Resources at Turmalina has positively impacted the mine life at Turmalina and we expect our growing sustainable production profile to have a positive impact on unitary costs in the near term."

"We look forward to the development and advancement of our growth exploration programs in the first half of 2017 and reporting the results from the deep drilling programs at Turmalina and Pilar later this year."

Operating Summary	Q1 2017				Q1 2016			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	113,000	84,000	17,000	214,000	128,000	56,000	12,000	196,000
Average head grade (g/t)	3.79	3.39	2.12	3.50	4.29	2.89	2.53	3.91
Recovery %	91%	91%	91%	91%	90%	90%	90%	90%
Gold ounces								
Produced (oz)	12,736	8,485	1,070	22,291	15,772	4,552	873	21,197
Sold (oz)	13,536	9,422	1,076	24,034	16,635	5,369	877	22,881
Development								
Primary (m)	366	470	74	910	731	312	118	1,161
Exploration (m)	104	13	34	151	-	-	-	-
Secondary (m)	754	614	14	1,382	838	24	184	1,046
Diamond drilling (m)	4,164	5,218	567	9,949	4,691	2,508	4,693	11,892
Avg. realized gold price (\$/oz)				\$1,215				\$1,165

2017 Guidance

Jaguar remains strongly focused on delivering positive and sustainable physical performance, profitability, and cost optimization. The Company has established the following consolidated production and cost guidance for 2017 and represents achievable results from operations:

2017 Guidance	Turmalina Complex		Caeté Complex		Consolidated	
2017 Guidanios	Low	High	Low	High	Low	High
Gold production (ounces) Cash operating costs (per ounce sold) ¹ All-in sustaining costs (per ounce sold) ¹	60,000 \$600 \$800	65,000 \$650 \$850	40,000 \$ 900 \$1,020	45,000 \$1,000 \$1,180	100,000 \$720 \$900	110,000 \$755 \$1,000
Development Primary (m) Secondary (m)	2,500 2,200	2,900 2,700	2,200 3,400	2,600 3,850	4,700 5,600	5,500 6,550
Diamond drilling (m)	16,000	18,000	10,000	13,000	26,000	31,000
Growth exploration investment (core assets) (\$million)					\$7.5	\$8.0

¹ Cash operating costs and all-in sustaining costs are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Measures section below. 2017 cost guidance has been prepared on the basis of a foreign exchange ratio of 3.5 Brazilian Reias vs. the US dollar.

Preliminary Cash Balance

Preliminary cash balance of approximately \$18.1 million as at March 31, 2017, compared to a cash balance of \$26.3 million at December 31, 2016. Q1 2017 cash balance reflects impact of a stronger foreign Brazilian currency, accelerated exploration, and approximately \$2.0 million in principal and interest repayments towards debt facilities.

2017 Exploration and Mineral Resources Highlights

• An incremental \$8.0 million is targeted to be spent on a major growth exploration program in 2017 and 2018. Approximately \$6.0 million has been dedicated to core assets to test the down-plunge continuities of Orebodies A, B, and C at Turmalina and Orebodies BFII and BF at Pilar to increase identified Mineral Resources, including the discovery of new resources at the high priority Pacheca and Cubas targets near Pilar. The remaining \$2.0 million will be distributed towards other growth targets in and around the existing core assets.

- Drilling and exploration success at Turmalina during 2016 resulted in upgraded Inferred Resources at Orebodies A and C to Measured and Indicated ("M&I") Mineral Resources, announced March 30, 2017:
 - M&I Mineral Resources increased 22% to 540,000 ounces of gold, after production depletion in 2016, with grade of 4.93 g/t Au.
 - o Orebody C Proven and Probable Mineral Reserves increased 167% during 2016 to 80,000 ounces of gold grading 4.10 g/t Au, up 12%, reflecting the newly discovered high-grade core within larger mineralized intersections.

Qualified Person

Scientific and technical information contained in this press release has been reviewed and approved by Geraldo Guimarães Vieira dos Santos, BSc Geo., MAIG-3946 (CP), Geology Manager, who is an employee of Jaguar Mining Inc., and is a "qualified person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

The Iron Quadrangle

The Iron Quadrangle has been an area of mineral exploration dating back to the 16th century. The discovery in 1699-1701 of black gold contaminated with iron and platinum-group metals in the southeastern corner of the Iron Quadrangle gave rise to the name of the town Ouro Preto (Black Gold). The Iron Quadrangle contains world-class multi-million-ounce gold deposits such as Morro Velho, Cuiabá, and São Bento. Jaguar holds the second largest gold land position in the Iron Quadrangle with just over 25,000 hectares.

About Jaguar Mining Inc.

Jaguar Mining Inc. is a Canadian-listed junior gold mining, development, and exploration company operating in Brazil with three gold mining complexes, and a large land package with significant upside exploration potential from mineral claims covering an area of approximately 191,000 hectares. The Company's principal operating assets are located in the Iron Quadrangle, a prolific greenstone belt in the state of Minas Gerais and include the Turmalina Gold Mine Complex and Caeté Gold Mine Complex (Pilar and Roça Grande mines, and Caeté Plant) which combined, produce more than 95,000 ounces of gold annually. The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012. Additional information is available on the Company's website at www.jaguarmining.com.

For further information please contact:

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FORWARD-LOOKING STATEMENTS

Certain statements in this news release constitute "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking statements and information are provided for the purpose of providing information about management's expectations and plans relating to the future. All of the forward-looking information made in this news release are qualified by the cautionary statements below and those made in our other filings with the securities regulators in Canada. Forward-looking information contained in forward-looking statements can be identified by the use of words such as "are expected", "is forecast", "is targeted", "approximately", "plans", "anticipates" "projects", "anticipates", "continue", "estimate", "believe" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. All statements, other than statements of historical fact, may be considered to be or include forward looking information. This news release contains forward-looking information regarding, among other things, expected sales, production statistics, ore grades, tonnes milled, recovery rates, cash operating costs, definition/delineation drilling, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of projects and new deposits, success of exploration, development and mining activities, currency fluctuations, capital requirements, project studies, mine life extensions, restarting suspended or disrupted operations, continuous improvement initiatives, and resolution of pending litigation. The Company has made numerous assumptions with respect to forward-looking information contained herein, including, among other things, assumptions about the estimated timeline for the development of its mineral properties; the supply and demand for, and the level and volatility of the price of, gold; the accuracy of reserve and resource estimates and the assumptions on which the reserve and resource estimates are based; the receipt of necessary permits; market competition; ongoing relations with employees and impacted communities; political and legal developments in any jurisdiction in which the Company operates being consistent with its current expectations including, without limitation, the impact of any potential power rationing, tailings facility regulation, exploration and mine operating licenses and permits being obtained an renewed and/or there being adverse amendments to mining or other laws in Brazil and any changes to general business and economic conditions. Forward-looking information involve a number of known and unknown risks and uncertainties, including among others: the risk of Jaguar not meeting the forecast plans regarding its operations and financial performance; uncertainties with respect to the price of gold, labor disruptions, mechanical failures, increase in costs, environmental compliance and change in environmental legislation and regulation, weather delays and increased costs or production delays due to natural disasters, power

disruptions, procurement and delivery of parts and supplies to the operations; uncertainties inherent to capital markets in general (including the sometimes volatile valuation of securities and an uncertain ability to raise new capital) and other risks inherent to the gold exploration, development and production industry, which, if incorrect, may cause actual results to differ materially from those anticipated by the Company and described herein. In addition, there are risks and hazards associated with the business of gold exploration, development, mining and production, including environmental hazards, tailings dam failures, industrial accidents and workplace safety problems, unusual or unexpected geological formations, pressures, cave-ins, flooding, chemical spills, and gold bullion thefts and losses (and the risk of inadequate insurance, or the inability to obtain insurance, to cover these risks). Accordingly, readers should not place undue reliance on forward-looking information.

For additional information with respect to these and other factors and assumptions underlying the forward-looking information made in this news release, see the Company's most recent Annual Information Form and Management's Discussion and Analysis, as well as other public disclosure documents that can be accessed under the issuer profile of "Jaguar Mining Inc." on SEDAR at www.sedar.com. The forward-looking information set forth herein reflects the Company's reasonable expectations as at the date of this news release and is subject to change after such date. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law. The forward-looking information contained in this news release is expressly qualified by this cautionary statement..

Non-IFRS Measures

This news release provides certain financial measures that do not have a standardized meaning prescribed by IFRS. Readers are cautioned to review the above stated footnotes where the Company expanded on its use of non-IFRS measures.

- 1. Cash operating costs and cash operating cost per ounce are non-IFRS measures. In the gold mining industry, cash operating costs and cash operating costs per ounce are common performance measures but do not have any standardized meaning. Cash operating costs are derived from amounts included in the Consolidated Statements of Comprehensive Income (Loss) and include mine-site operating costs such as mining, processing and administration as well as royalty expenses, but exclude depreciation, depletion, share-based payment expenses, and reclamation costs. Cash operating costs per ounce are based on ounces produced and are calculated by dividing cash operating costs by commercial gold ounces produced; US\$ cash operating costs per ounce produced are derived from the cash operating costs per ounce produced translated using the average Brazilian Central Bank R\$/US\$ exchange rate. The Company discloses cash operating costs and cash operating costs per ounce as it believes those measures provide valuable assistance to investors and analysts in evaluating the Company's operational performance and ability to generate cash flow. The most directly comparable measure prepared in accordance with IFRS is total production costs. A reconciliation of cash operating costs per ounce to total production costs for the most recent reporting period, the quarter ended December 31, 2016 is set out in the Company's fourth quarter 2016 MD&A filed on SEDAR at www.sedar.com.
- 2. All-in sustaining cost is a non-IFRS measure. This measure is intended to assist readers in evaluating the total costs of producing gold from current operations. While there is no standardized meaning across the industry for this measure, except for non-cash items the Company's definition conforms to the all-in sustaining cost definition as set out by the World Gold Council in its guidance note dated June 27, 2013. The Company defines all-in sustaining cost as the sum of production costs, sustaining capital (capital required to maintain current operations at existing levels), corporate general and administrative expenses, and in-mine exploration expenses. All-in sustaining cost excludes growth capital, reclamation cost accretion related to current operations, interest and other financing costs, and taxes. A reconciliation of all-in sustaining cost to total production costs for the most recent reporting period, the quarter ended December 31, 2016 is set out in the Company's fourth quarter 2016 MD&A filed on SEDAR at www.sedar.com.