

NEWS RELEASE

February 14, 2019 FOR IMMEDIATE RELEASE TSX: JAG

Jaguar Mining Reports Fourth Quarter and Full-Year 2018 Operating Results

Toronto, February 14, 2019 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) today announced operating results for the fourth quarter ("Q4 2018") and financial year ("FY 2018") ended December 31, 2018. All figures are in US dollars, unless otherwise expressed. Financial results for Q4 2018 will be reported and filed on SEDAR on or before March 30, 2019.

Q4 2018 Operating Highlights

- Gold production of 17,045 ounces (177,975 tonnes milled, average grade of 3.38 g/t) compared to 21,311 in Q4/17
- Pilar Gold Mine ("Pilar") production of 9,301 ounces, 12% above Q4 2017 (tonnes milled increased 21%, average grade decreased 9%, recovery decreased 3%)
- Turmalina Gold Mine ("Turmalina") production of 7,743 ounces 58% below Q4 2017 (tonnes milled decreased 26%; average grade decreased 24%)
- Preliminary consolidated cash operating costs of \$795 per ounce sold, up 6% year-over-year
- Preliminary cash balance of \$6.2 million at December 31, 2018, reflects approximately \$4-5 million in operating cash flow, \$5-6 million invested in growth activities during Q4 2018

FY 2018 Operating Highlights

- Gold production of 75,048 ounces, a decline of 10.8% from FY17 production of 84,152 ounces
- Pilar production increased 20% to 40,918 compared with FY17 production of 34,017 ounces (tonnes milled increased 7%; average grades were up 12%)
- Turmalina production declined 37% to 33,261 compared with FY17 (tonnes milled decreased 33% and average grades decreased 3%)
- Total primary development increased 28% to 4,568 metres
- Consolidated cash operating costs of \$732 per ounce, 14% lower than \$837 per ounce in 2017 in line with FY 2018 guidance
- Pilar cash operating costs improved 34% to \$702 per ounce sold

Ben Guenther, Interim President and Chief Executive Officer commented, "Production in the fourth quarter was disappointing and resulted in lower than anticipated gold production for 2018. Turmalina execution was below our expectations in Q4 and Pilar had lower grade and recoveries. At Turmalina, a new general manager and mine manager were appointed in October and technical staff were added during the quarter. The Turmalina mine lost 11 days of production from the higher grade production area to rehabilitate the mine ramp. Pilar is addressing the recent grade and recovery challenges."

Mr. Guenther concluded, "In 2018 we did see an improvement in our cost performance and Pilar delivered strong production of over 40,000 ounces. Consolidated cash costs improved 14% to approximately \$732 per ounce, in line with cost guidance reflecting a 34% decrease in cash costs at Pilar to approximately \$702 per ounce. The new Turmalina management team is in place and energized as it implements the turnaround plan. Management and the Board are focused on addressing the issues at Turmalina and Pilar to stabilize our production profile. We are also

prioritizing cost containment and operational execution across the organization to ensure continued lower costs and operating cash flow generation. We have made good progress on exploration initiatives to ensure sustainable production and expect to update our Mineral Reserves and Resources by the end of the first quarter of 2019."

Fourth Quarter and FY 2018 Operating Results

Quarterly Summary	Q4 2018				Q4 2017			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	75,391	102,584	-	177,975	94,938	81,022	14,468	190,428
Average head grade (g/t)	3.56	3.25	-	3.38	4.41	3.53	2.18	3.87
Recovery %	89.7%	86.9%	-	88.1%	91.2%	89.4%	89.4%	90.3%
Gold ounces								
Produced (oz)	7,743	9,301	-	17,045	12,245	8,156	911	21,311
Sold (oz)	8,207	9,416	-	17,623	12,142	7,880	819	20,841
Cash Operating Costs ("COC")	787	802	-	795	646	835	1,344	745
Development								
Primary (m)	506	279	-	785	363	475	70	908
Secondary (m)	155	564	-	719	261	416	-	677
Definition, infill, and exploration								
drilling (m)	9,642	2,651	-	12,293	9,345	4,138	490	13,973

Annual Summary	12M 2018 (YTD)				12M 2017 (YTD)				
	Roça				Roça				
	Turmalina	Pilar	Grande	Total	Turmalina	Pilar	Grande	Total	
Tonnes milled (t)	321,936	365,082	11,924	698,942	427,035	337,756	68,402	833,193	
Average head grade (g/t)	3.55	3.92	2.54	3.73	3.65	3.46	2.34	3.47	
Recovery %	90.4%	88.8%	89.2%	89.5%	91.0%	90.3%	90.3%	90.6%	
Gold ounces									
Produced (oz)	33,261	40,918	870	75,048	45,466	34,017	4,669	84,152	
Sold (oz)	32,838	40,798	894	74,530	45,575	33,748	4,427	83,750	
Cash Operating Costs ("COC")	758	702	1,093	732	707	938	1,421	837	
Development									
Primary (m)	2,674	1,895	-	4,568	1,676	1,634	264	3,574	
Secondary (m)	1,106	1,365	-	2,471	1,644	2,124	201	3,969	
Definition, infill, and exploration									
drilling (m)	29,012	12,501	697	42,210	28,455	18,799	1,243	48,498	

Qualified Persons

Scientific and technical information contained in this press release has been reviewed and approved by Jonathan Victor Hill, BSc (Hons) (Economic Geology - UCT), Senior Expert Advisor Geology and Exploration to the Jaguar Mining Management Committee, who is also 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 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 two gold mining complexes and a large land package with significant upside exploration potential from mineral claims covering an area of approximately 64,000 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 Mining Complex (Pilar Mine and Caeté Plant). The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012. The Roça Grande Mine has been on care and maintenance since April 2018. Additional information is available on the Company's website at www.jaguarmining.com.

For further information please contact:

Ben Guenther President & Chief Executive Officer Jaguar Mining Inc. bguenther@jaguarmining.com 416-847-1854 Hashim Ahmed Chief Financial Officer Jaguar Mining Inc. hashim.ahmed@jaguarmining.com 416-847-1854

Forward-Looking Statements and Cautionary Notes

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 is 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 involves 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, labour 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. procurement fraud and gold bullion thefts and losses (and the risk of inadequate insurance, or the inability to obtain insurance, to cover these risks). In addition, the Company's principal operations and mineral properties are located in Brazil and there are additional business and financial risks inherent in doing business in Brazil as compared to the United States or Canada. In Brazil, corruption represents a challenge requiring extra attention by those who conduct business there. Corruption does not only occur with the misuse of public, government or regulatory powers, it also can occur in a business's supplies, inputs and procurement functions (such as illicit rebates, kickbacks and dubious vendor relationships) as well as the inventory and product sales functions (such as inventory shrinkage or skimming). Employees as well as external parties (such as suppliers, distributors and contractors) have opportunities to commit theft, procurement fraud and other wrongs against the Company. While corruption, bribery and fraud and theft risks can never be fully eliminated, the Company reviews and implements controls to reduce the likelihood of these events occurring. The Company's present and future business operations face these risks. Accordingly, for all of the reasons above, 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 below 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 September 30, 2018, is set out in the Company's third quarter 2018 Management Discussion and Analysis (MD&A) filed on November 14, 2018 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 September 30, 2018, is set out in the Company's third quarter 2018 MD&A filed on November 14, 2018 on SEDAR at www.sedar.com.