JAGUAR
MINING INC.

NEWS RELEASE

April 17, 2018 **TSX: JAG**
FOR IMMEDIATE RELEASE

Jaguar Mining Reports Q1 2018 Operating Performance and Improving Costs; On Track to Achieve 2018 Gold Production of 90,000–105,000 Ounces

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Toronto, April 17, 2018 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) today announced operating results for the first quarter ("Q1 2018") ended March 31, 2018. All figures are in US dollars, unless otherwise expressed. Detailed financial results for Q1 2018 will be reported and filed on or before May 10, 2018.

Q1 2018 Summary

- Consolidated gold production of 18,864 ounces (174,000 tonnes milled at 3.67 g/t) was in line with the Company's 2018 production plan; Q1 2018 production was lower than the 22,291 ounces (214,000 tonnes milled at 3.50 g/t) in Q1 2017.
- Pilar Gold Mine ("Pilar") production increased 13% to 9,553 ounces compared to Q1 2017, and 17% compared to Q4 2017 on average grade of 4.08 g/t, which increased 20% year-over-year. Pilar continues to deliver improved grade and tonnes milled. Pilar's lower cost per ounce production replaces the higher cost Roça Grande Mine ("RG") production, also improving operating cash flow.
- Turmalina Gold Mine ("Turmalina") production of 8,442 ounces was 34% lower year-over-year due to a focus on increasing primary (waste) development to facilitate increased ore production for the balance of 2018. This resulted in lower secondary ore development and lower tonnes milled for the quarter which reduced ore production, which was in line with the Company's projected annual mine plan. Production levels are expected to increase in Q2 2018 and significantly increase in H2 2018 as accelerated primary waste development advances.
- Turmalina primary waste development increased 77% during the quarter to 648 metres compared to 366 metres in Q1 2017 and 363 metres in Q4 2017. The focus in Q1 2018 was to extensively advance accelerated development to access higher-grade mineralization in Level 11 at Orebody A and Level 4 at Orebody C. A new total of four production sublevels are expected to contribute to production in Q2 2018.
- Consolidated cash operating costs ("COC") decreased to $814 per ounce sold, a 12% improvement from Q1 2017 and 10% increase from Q4 2017. Company on track to deliver 2018 COC annual guidance between $700–$800 per ounce sold.
- Strengthened operations and project management teams to drive increased productivity and overall performance. Placed orders for new mining equipment to increase capacity and productivity at Turmalina and Pilar.
- Cash balance of approximately $14.3 million as of March 31, 2018, compared to a cash balance of $18.6 million at December 31, 2017. Cash outflow during the quarter includes $3 million financing repayments reducing total bank debt to approximately $12.3 million at quarter end. Company generated approximately $4–5 million in operating cash flow with approximately $6 million spent in investing and growth activities.

Rodney Lamond, President and Chief Executive Officer commented, "We have successfully established a large mineral resource at Pilar and Turmalina as a direct result of our strategic investments in Growth Exploration programs, underground mine development and upgrading mining equipment. These investments demonstrate our commitment to growing sustainable gold production over the long-term. Through our investments, we have unlocked significant value at Pilar and its performance is increasing our ability to grow operating and free cash flow. Based on Pilar's performance to date, we believe there continues to be excellent upside potential. We are taking the same approach to unlocking the deep value that we believe exists at Turmalina, which is also supported by its mineral resource."

"Pilar's first quarter operating results, including a 13% year-over-year increase in gold production driven by a 20% increase in head grade, are positively impacting our overall profitability and generating increased returns. This performance was achieved through targeted exploration programs, development and training of operations teams, disciplined capital allocation and operational excellence. The confidence in delivering increased gold production supported the Company's decision to place Roça Grande temporarily on care and maintenance. This decision will further decrease the Company's COC by displacing high gold ounces with Pilar's lower COC ounces."

Mr. Lamond continued, "In addition to the excellent ongoing work completed by our operations teams, during the quarter we successfully transitioned to a new mining contractor to increase high speed development at Turmalina. We completed key development objectives to access higher grade pay-shoots in Orebodies A and C. Primary waste development increased 77% during the quarter, the highest level since Q2 2016. The extensive accelerated development will continue to increase as key access drives are advanced into higher-grade mineralization in Level 11 at Orebody A and Level 4 at Orebody C. A new total of four production sublevels are expected to contribute to production in Q2 2018. To further support production and drive increased annual production, we have purchased two new underground loaders and one 30-tonne underground haulage truck for Turmalina."

Mr. Lamond concluded, "Looking ahead, we are positioned to deliver stronger production in the second half of 2018 as we expect to see higher production at Turmalina, as well as higher production at Pilar. Ongoing infill drilling on Orebody A and C at Turmalina has demonstrated continued high-grade mineralization in upcoming sublevels for mining, which is expected to significantly increase production. Our strategy for sustainable production, which starts with a fundamental understanding of our geological models, aims to extend the reserve mine life at all of our operations by replacing depleted Mineral Resources in a timely manner through the execution of targeted exploration programs. We have also made important staffing changes at our sites to ensure we deliver on our productivity and efficiency targets to achieve our 2018 objectives. We continue to focus on mining quality ounces to generate cash flow, sustain future growth and reduce our bank debt."

2018 First Quarter Operating Results Summary

Quarterly Summary	Q1 2018				Q1 2017			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	81,000	81,000	12,000	**174,000**	113,000	84,000	17,000	**214,000**
Average head grade (g/t)	3.43	4.08	2.52	**3.67**	3.79	3.39	2.12	**3.50**
Recovery %	91%	89%	89%	**90%**	91%	91%	91%	**91%**
Gold ounces								
Produced (oz)	8,442	9,553	870	**18,864**	12,736	8,485	1,070	**22,291**
Sold (oz)	8,414	9,929	894	**19,237**	13,536	9,422	1,076	**24,034**
Preliminary Financial Data								
Cash Operating Costs[1] ($/oz)	777	809	1,216	**814**	738	1,092	1,787	**924**
Development								
Primary (metres)	648	422	84	**1,154**	366	470	74	**910**
Exploration (metres)	-	-	-	**-**	104	13	34	**151**
Secondary (metres)	91	356	-	**447**	754	614	14	**1,382**
Definition, infill, and exploration drilling (metres)	5,544	3,197	613	**9,354**	4,164	5,218	567	**9,949**

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1. Cash Operating Cost is a non-IFRS reporting measure.

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Cash Position and Working Capital

- Cash balance of approximately $14.3 million as of March 31, 2018, compared to a cash balance of $18.6 million at December 31, 2017. Cash outflow during the first quarter includes $3 million for financing repayments reducing total bank debt to approximately $12.3 million at the end of Q1 2018.
- Company generated approximately $4–$5 million in operating cash flow with approximately $6 million spent in investing activities. Working capital expected at $11–$12 million as March 31, 2018.

First Quarter Operating and Project Update

- Operational excellence programs continue to be adopted Company wide. A key focus has been to improve data collection processes to deliver real time data that facilitates timely analysis and decision making.
- Turmalina management changes have been completed and the focus is on operational efficiency, productivity and cost reduction on projects, including improving preventative maintenance and equipment availability.
- At Pilar and Turmalina, operational excellence teams are focused on increasing haulage tonnes moved in the mine and development metres utilizing equipment within the same shift to improve recovery and increase productivity.
- Restructured projects group to streamline the management of Growth and Capital Projects.
- Turmalina paste fill plant completed final commissioning tests and is expected to be operational in Q2 2018.

First Quarter 2018 Exploration Highlights

- Growth exploration at Turmalina has focused on depth extension drilling of Orebody C below level 4. Drilling completed to date includes approximately 4,826 metres (20 drill holes) representing approximately 53% completion of the 9,050 metres planned growth program.
- Additional exploration activities are focused on advancing key near mine targets including the Zona Basal Target at Turmalina, the Torre, Pacheca North and Pilarzinho Targets contiguous to the Pilar mining operation and at Pedra Branca in Ceara State.
- Subsequent to the temporary halt of mining activities at the RG Mine, exploration potential is being reviewed aimed at prioritizing future activities targeting extensions to the known RG orebodies and the Company's highly prospective greater tenement package supported by the CCA Plant.

2018 Guidance

- Pilar production guidance of 39,200–47,000 ounces reflects the Company's reforecast for increased mineral resources reported in March 2018. The Pilar production is expected to offset the temporary halted production ounces from RG.
- RG performance reflects production from January 1–March 21, 2018. RG temporarily on care and maintenance.
- Turmalina positioned and expected to deliver significantly higher production in second half of 2018.

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2018 Production & Guidance cost	Turmalina		CCA				Consolidated	
			Pilar		RG			
	Low	High	Low	High	Low	High	Low	High
Gold production (oz.)	50,000	57,000	39,200	47,000	800	1,000	90,000	105,000
Cash Operating Cost[1] ($/oz. sold)	675	775	650	800	1,000	1,100	660	800
All-in sustaining cost[1] ($/oz. sold)	900	1,000	900	1,050	1,050	1,200	920	1,100
Sustaining Capex ($'000)	12,000	15,000	9,000	12,000	100	500	21,000	28,000
Development								
Primary waste (metres)	2,200	2,800	2,000	2,600	N/A	N/A	4,500	5,400
Secondary ore (metres)	1,800	2,100	1,000	1,150	N/A	N/A	3,000	3,500
Definition, infill and exploration drilling (metres)	18,000	25,000	14,000	20,000	200	300	32,000	45,000

1. Cash Operating Cost and All-in Sustaining Cost are non-IFRS reporting measures.

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 three 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 and Roça Grande Mines, 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 temporary care and maintenance since April 2018. Additional information is available on the Company's website at www.jaguarmining.com.

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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 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). 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.

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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 December 31, 2017, is set out in the Company's fourth quarter 2017 Management Discussion and Analysis (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, 2017, is set out in the Company's fourth quarter 2017 MD&A filed on SEDAR at www.sedar.com.*

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