PRESS RELEASE

July 12, 2016 **2016-17**
For Immediate Release **TSX-V: JAG**

Jaguar Reports Strong Second Quarter Production of 24,222 Ounces of Gold

Toronto, Canada, July 12, 2016 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX-V: JAG) today announced operational results for the second quarter ended June 30, 2016 ("**Q2 2016**"). All figures are in US dollars unless otherwise expressed. Full Q2 2016 financial results will be released on or before August 15, 2016.

Second Quarter 2016 Production Highlights

- Consolidated gold production for Q2 2016 increased 17% to 24,222 ounces year-over-year and is on track to achieve 2016 full year guidance of 90,000 to 95,000 ounces of gold production.
- Average consolidated mill head grade increased 10% to 3.76 g/t year-over-year.
- Turmalina Q2 2016 gold production increased 45% to 15,083 ounces at an average head grade of 4.10 g/t, up 5% year-over-year.
- Primary development investment increased 95% year-over-year to 1,857 metres completed in Q2 2016.
- Total definition, infill, and exploration drilling of 9,219 metres completed during Q2 2016 focused on key targets at Turmalina and Caeté. A total of 21,111 metres of drilling has occurred in the first half of 2016.
- To support future growth, the Company remains committed to completing its 2016 capital investment program, which includes investing in development and exploration activities, a newly designed paste-fill plant, the rebuild of Mill #3 at Turmalina, and the upgrading of the Caeté tailings capacity.
- Cash balance of $17.5 million as at June 30, 2016, after capital investment programs and payments on debt facility and convertible debentures interest.

Rodney Lamond, President and Chief Executive Officer of Jaguar commented, *"In the first half of 2016 we have accomplished our quarterly production targets and are on track to achieve our full year guidance of 90,000 - 95,000 ounces of gold production. Our second quarter results were solid with increased gold production of 24,222 ounces, up 17% year-over-year, improved average head grades, strong throughput levels, and higher mill recoveries. Our focus on near-term mine plans has taken hold and is driving positive physical results, particularly at Caeté, which increased gold production 68% compared to Q1 2016. Notably, we have made excellent progress with our development program. In the first half of 2016, we invested in development at Turmalina and Caeté, completing more than three kilometres of primary development as we position our assets for future growth. In addition, we completed over 2.3 kilometres of secondary ore development to increase the number of available underground working areas across all mines."*

"Also during Q2 2016, we made excellent progress managing our capital position, ending the quarter with a cash balance of $17.5 million, while continuing to carry out our capital investment program and after paying the interest on the convertible debentures. In the first half of 2016, we reinstated our capital investment program at Caeté to complete the Pilar Gold Mine development objectives of accessing the high grade BFII Orebody, and to complete testing and feasibility work for an XRF Ore Sorting system expected to reduce haulage costs. Capital was also spent at the Roça Grande Mine for definition drilling and development during Q2 2016 in an effort to extend mine life. Additionally, at Turmalina, we invested in advancing a newly

designed paste-fill plant while also initiating a significant rebuild of Mill #3 that will provide additional capacity going forward. With our strong cash balance and the cash flow generated from our operations, we are well-positioned to execute on the future capital investment program which remains a key driver to growing our sustainable production profile in 2017."

Q2 2016 Operating Summary

	Q2 2016			Q2 2015		
	Turmalina	**Caeté**	**Total**	**Turmalina**	**Caeté**	**Total**
Tonnes milled (t)	124,000	93,000	217,000	94,000	116,000	210,000
Average head grade (g/t)	4.10	3.30	3.76	3.91	3.00	3.41
Recovery rate (%)	91	91	91	90	90	90
Gold ounces						
Produced (oz)	15,083	9,139	24,222	10,420	10,262	20,682
Sold (oz)	15,035	8,935	23,969	9,610	9,574	19,184
Development						
Primary (m)	1,166	691	1,857	885	66	951
Exploration drift (m)	-	44	44	24	-	24
Secondary (m)	693	624	1,317	467	-	467
Definition, infill, and exploration drilling (m)	5,011	4,208	9,219	6,104	5,312	11,416

Cash Balance

Cash balance was $17.5 million as at June 30, 2016, compared to a cash balance of $18.0 million as at March 31, 2016. Capital investments in Q2 2016 have been primarily funded through operating cash flow during the first half of 2016, a trend expected to continue into Q3 2016. In addition to the increase in capital expenditures, Jaguar also paid $0.6 million of interest on the convertible debentures and $0.9 million in debt principal and interest payments during the second quarter.

2016 Guidance

Jaguar remains strongly focused on delivering positive and sustainable physical performance, profitability, and cost optimization. The Company's established consolidated production and cost guidance for 2016 continues to represent achievable results from operations:

	Turmalina Complex		Caeté Complex		Consolidated	
2016 Guidance	**Low**	**High**	**Low**	**High**	**Low**	**High**
Gold production (oz)	62,000	65,000	28,000	30,000	90,000	95,000
Cash operating costs (per ounce sold)[1]	600	650	925	975	700	750
All-in sustaining costs (per ounce sold)[1]	850	900	1,150	1,200	950	1,000
Recovery	90%	90%	90%	90%	90%	90%
Development						
Primary (m)	3,000	3,300	1,700	1,900	4,700	5,200
Secondary (m)	3,200	3,400	2,500	2,700	5,700	6,100
Definition, infill, and exploration drilling (m)	18,000	20,000	10,000	12,000	28,000	32,000

1. Cash operating costs and all-in sustaining costs are non-IFRS financial performance measures with no standard definition under IFRS. Refer to Non-IFRS Financial Performance Measures below. 2016 cost guidance has been prepared on the basis of a foreign exchange rate of 3.8 Brazilian Reais vs. the US dollar and a gold price of US$1,150 per ounce.

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 approximate 191,000 hectares. The Company's principal operating assets are located in a prolific greenstone belt in the state of Minas Gerais and include the Turmalina Gold Mine Complex ("Mineração Turmalina Ltda" or "MTL") and the Caeté Gold Mine Complex ("Mineracao Serras do Oeste Ltda" or "MSOL") which combined produce more than 90,000 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:

Rodney Lamond
President & Chief Executive Officer
rodney.lamond@jaguarmining.com
416-628-9601

Hashim Ahmed
Chief Financial Officer
hashim.ahmed@jaguarmining.com
416-628-9601

FORWARD-LOOKING STATEMENTS

Certain statements in this news release constitute "forward-looking information" within the meaning of applicable Canadian securities legislation. 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. This news release contains forward-looking information regarding expected production, grades, tones milled, recovery rates, cash operating costs, and definition/delineation drilling, in addition to overall expenditures and results of operations for 2016. 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; and 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, the uncertainties with respect to the price of gold, labor disruptions, mechanical failures, increase in costs, environmental compliance and change in environmental legislation and regulation, procurement and delivery of parts and supplies to the operations, uncertainties inherent to capital markets in general 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. 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.

Neither the TSX Venture Exchange nor its Regulations Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Non-IFRS Measures

This press 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 sold and are calculated by dividing cash operating costs by commercial gold ounces sold; US$ cash operating costs per ounce sold are derived from the cash

operating costs per ounce sold 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 March 31, 2016 is set out in the Company's first quarter 2016 MD&A filed on SEDAR at www.sedar.com.

2. All-in sustaining costs 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 costs definition as set out by the World Gold Council in its guidance note dated June 27, 2013. The Company defines all-in sustaining costs 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 costs exclude growth capital, reclamation cost accretion related to current operations, interest and other financing costs and taxes. A reconciliation of all-in sustaining costs to total production costs for the most recent reporting period, the quarter ended March 31, 2016 is set out in the Company's first quarter 2016 MD&A filed on SEDAR at www.sedar.com.