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For Immediate Release	**TSX: JAG**

PRESS RELEASE

Jaguar Announces Second Quarter Financial Results; Achieves Strong Q2 2016 Gold Production and Development Success, Increased Operating Cash Flow to US$10.4 million

Toronto, Canada, August 9, 2016 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) today announced details of the Company's financial and operating results for the second quarter ("Q2 2016") ended June 30, 2016. All figures are in US dollars unless otherwise expressed.

Rodney Lamond, President and Chief Executive Officer of Jaguar commented, *"We ended the second quarter achieving strong gold production of 24,222 ounces, $10.4 million in operating cash flow, and development and exploration success. We are well positioned to deliver on our 2016 production guidance of 90,000 – 95,000 ounces and we are pleased with the progress we have made over the last few months with our development and exploration initiatives. As we continue to generate significant operating cash flow, we will also continue to prudently accelerate capital investment to strengthen and enhance our current operating assets and priority exploration targets. Executing our capital investment program remains a key driver to the growth of our sustainable production profile in 2016 and will enable us to realize the exciting future potential of our assets. We are pleased to end the quarter with a cash balance of $17.5 million after capital investment of $9.1 million, reflecting a 95% increase in primary development, a 182% increase in secondary development, and $0.6 million of interest payments on the convertible debentures and $0.9 million in debt principal and interest payments."*

Q2 2016 Key Financial Highlights

- Revenue increased 31% to $30.0 million, compared with $22.8 million in Q2 2015, due to a 25% increase in ounces sold and a 5% increase in the average realized gold price to $1,251 in Q2 2016 compared with $1,190 in Q2 2015.
- Strong operating cash flow of $10.4 million (excluding cash tax refunds) compared to $0.3 million in Q2 2015.
- Consolidated cash operating costs ("COC") decreased 13% to $758 per ounce sold, compared to $876 per ounce sold for Q2 2015.
- Consolidated all-in sustaining costs ("AISC") of $1,203 per ounce sold, reflecting a significant increase in sustaining capital expenditures, consistent with AISC in Q2 2015.
- Sustaining capital expenditures of $7.9 million reflects higher investment in development and exploration, compared to $2.5 million in Q2 2015.
- Cash and cash equivalents of $17.5 million as at June 30, 2016 after capital investment programs and payments on debt facility and convertible debentures interest, compared to a cash balance of $18.0 million as at March 31, 2016.
- On August 3, 2016, the Company's common shares and senior secured convertible debentures commenced trading on the Toronto Stock Exchange ("TSX").

Q2 2016 Key Operating Highlights

- Strong consolidated gold production of 24,222 ounces based on a 10% increase in average head grade to 3.76 g/t compared to 20,682 ounces produced and average head grade of 3.41 g/t in Q2 2015.
- Favourable market conditions and strong operating cash flow enabled accelerated investment in significant development to position the Company for growing gold production; completed over 3,018 metres ("m") of primary and 2,363 m of secondary ore development during the first half of 2016 ("H1 2016").
- Primary development increased 95% to 1,857 m for Q2 2016 (compared to 951 m for Q2 2015) to increase the number of working areas across all mines to support near term production and 1,317 m of secondary development for Q2 2016 (compared to 467 m in Q2 2015) in support of stope planning, preparation, and design for future growth.
- Total development metres increased 121% for H1 2016 to 5,381 m compared to 2,430 m for H1 2015.
- Advanced a newly designed paste-fill plant and initiated a significant rebuild of Mill #3 at Turmalina, to be completed in Q4 2016.
- Total definition, infill, and exploration drilling of 9,486 m completed during Q2 2016 focused on key targets at Turmalina and Caeté. A total of 21,377 m of drilling has occurred for H1 2016.
- On July 13, 2016, positive drill results from Turmalina were announced showing significant high-grade intercepts. The drill program was designed to test the current indicated and inferred resource envelope of Orebody A at Turmalina.

Complete Financial Statements and Management Discussion and Analysis are available on SEDAR and on the Company's website at www.jaguarmining.com.

Q2 2016 Financial & Operating Highlights

($ thousands, except where indicated)	For the three months ended June 30,		For the six months ended June 30,	
	2016	2015	**2016**	2015
Financial Data				
Revenue	**$29,996**	$22,820	**$56,660**	$51,567
Operating expenses	**17,887**	16,808	**35,466**	36,941
Depreciation	**8,389**	3,233	**16,091**	9,637
Gross margin	**3,720**	2,779	**5,103**	4,989
Gross margin (excluding depreciation)[1]	**12,109**	6,012	**21,194**	14,626
Loss on conversion option embedded in convertible debt	**25,189**	-	**45,944**	(3)
Net loss	**(26,866)**	(4,383)	**(41,867)**	(17,328)
Per share ("EPS")	**(0.24)**	(0.04)	**(0.38)**	(0.16)
EBITDA[1]	**(18,044)**	(137)	**(23,904)**	(1,646)
Adjusted EBITDA[1,2]	**8,859**	2,208	**14,075**	7,277
Adjusted EBITDA per share[1]	**0.08**	0.02	**0.13**	0.07
Cash operating costs (per ounce sold)[1]	**758**	876	**750**	850
All-in sustaining costs (per ounce sold)[1]	**1,203**	1,203	**1,134**	1,174
Average realized gold price ($ per ounce)[1]	**1,251**	1,190	**1,209**	1,188
Cash generated from operating activities	**10,435**	1,638	**19,961**	13,815
Sustaining capital expenditures[1,3]	**7,864**	2,518	**12,877**	7,307
Non-sustaining capital expenditures[1,3]	**1,245**	678	**1,629**	1,270
Total capital expenditures[3]	**9,109**	3,196	**14,506**	8,577
Operating Data				
Gold produced (ounces)	**24,222**	20,682	**45,419**	42,018
Gold sold (ounces)	**23,970**	19,184	**46,851**	43,412
Primary development (metres)	**1,857**	951	**3,018**	1,657
Secondary development (metres)	**1,317**	467	**2,363**	773
Definition, infill, and exploration drilling (metres)	**9,486**	11,416	**21,377**	20,384

[1] Average realized gold price, sustaining and non-sustaining capital expenditures, cash operating costs and all-in sustaining costs, EBITDA and Adjusted EBITDA, Adjusted EBITDA per share, and gross margin (excluding depreciation) are non-IFRS financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

[2] Adjusted EBITDA excludes non-cash items such as impairment and write downs. For more details refer to the Non-IFRS Performance Measures section of the MD&A.

[3] These amounts are presented on accrual basis. Capital expenditures are included in our calculation of all-in sustaining costs.

Cash and Gold Bullion

($ thousands)	**June 30, 2016**	December 31, 2015
Cash and cash equivalents	**$17,535**	$15,319
Gold bullion	**-**	-
Total cash and gold bullion	**$17,535**	$15,319

Q2 2016 Financial Highlights

Revenue, Net Income (Loss), and External Factors

- Gold ounces sold for the three and six months ended June 30, 2016 were 23,970 and 46,851 ounces, respectively, compared with 19,184 and 43,412 ounces sold for the comparative 2015 periods.
- Revenue increased 31% to $30.0 million, compared with $22.8 million in Q2 2015, due to a 5% increase in average realized gold price to $1,251 in Q2 2016 compared with $1,190 in Q2 2015, and a 25% increase in ounces sold.
- Net loss for the six months ended June 30, 2016 was impacted negatively due to the change in the fair value of the convertible debentures ($45.9 million) based on the significant increase in the share price from December 31, 2015 to June 30, 2016, which was partially offset by a decrease in the litigation provision amounting to $7.9 million primarily due to a change in the estimate.
- The convertible debentures cumulative inception-to-date non-cash valuation loss of $50.8 million will reverse on conversion or redemption.
- Adjusted EBITDA (excluding non-cash items) for Q2 2016 was $8.9 million compared to $2.2 million for Q2 2015, while adjusted EBITDA for the first half of 2016 was $14.1 million compared to $7.3 million for the first half of 2015.

Cash Operating Costs, Capital Expenditures, and All-In-Sustaining Costs ("AISC")

- Cash operating costs decreased 13% to $758 per ounce of gold sold, compared to $876 per ounce sold in Q2 2015, and have decreased 12% to $750 per ounce on a year-to-date basis.
- AISC remained consistent at $1,203 per ounce of gold sold, compared to $1,202 per ounce sold in Q2 2015.
- Sustaining capital expenditures totaled $7.9 million and focused on increasing primary development and exploration drilling across all three mines compared to $2.5 million in Q2 2015.
- Operating cash flow (excluding cash tax refunds) was $10.4 million, compared to $0.3 million in Q2 2015. For H1 2016, operating cash flow (excluding cash tax refunds) was $19.0 million compared to $6.5 million for H1 2015.
- Free cash flow was $1.3 million, based on operating cash flow (excluding cash tax refunds) less total capital expenditures, compared to negative $2.9 million in Q2 2015.

Cash Position, Working Capital, TSX Listing, and Operational Excellence

- The Company's cash position at June 30, 2016 was $17.5 million, 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.
- Working capital declined to $0.9 million, compared to $2.0 million as at December 31, 2015, reflecting a year-to-date increase of 82% in primary development and a 206% increase in secondary development.
- On August 3, 2016, the Company's common shares and senior secured convertible debentures commenced trading on the TSX.

Q2 2016 Operational Highlights

Strong Gold Production, Recovery, and Primary and Secondary Development

- Consolidated gold production increased 17% to 24,222 ounces compared to 20,682 ounces in Q2 2015 and is on track to achieve 2016 production guidance of 90,000 to 95,000 ounces of gold.
- Gold recovery increased to 91.4% compared to 90.0% in Q2 2015.
- Turmalina production increased 45% to 15,083 ounces compared to 10,420 ounces in Q2 2015, while average head grade increased 5% to 4.10 g/t. Turmalina production has increased 39% to 30,855 ounces in H1 2016.
- Primary development increased 95% with 1,857 m completed compared to 951 m in Q2 2015. A total of 3,018 m has been completed in H1 2016, an increase of 82% compared to 1,657 m in the first six months of 2015.
- Secondary development increased 182% with 1,317 m completed compared to 467 m in Q2 2015. A total of 2,363 m has been completed in H1 2016, an increase of 206% compared to 773 m in H1 2015.

Improving Consolidated Grades

- Consolidated average head grade increased 10% to 3.76 g/t compared to 3.41 g/t in Q2 2015, and has improved 13% to 3.77 g/t in the first half of 2016 compared to 3.33 g/t in the first half of 2015.
- Total processing was 217,000 tonnes (Q2 2015 – 210,000 tonnes) at an average head grade of 3.76 g/t (Q2 2015 – 3.41 g/t).
    - Turmalina processed 124,000 tonnes (Q2 2015 – 94,000 tonnes) at an average head grade of 4.10 g/t (Q2 2015 – 3.91 g/t).
    - Caeté processed 93,000 tonnes (Q2 2015 – 116,000 tonnes) at an average head grade of 3.30 g/t (Q2 2015 – 3.00 g/t).
- Total processing for H1 2016 was 413,000 tonnes, a 5% decrease from 436,000 tonnes processed in H1 2015.

Positive Drill Results at Turmalina

- On July 13, 2016, the Company announced multiple high-grade drill intercepts from 46 infill drill holes (7,310 m from a total 7,842 m program) designed to test the current indicated & inferred resource envelope of Orebody A. Significant drill intercepts include 21.66 g/t Au over 8.48 m (estimated true width ("ETW") – 7.1 m), 18.26 g/t Au over 8.39 m (ETW – 5.9 m), and 12.87 g/t Au over 20.70 m (ETW – 17.5 m), including 29.48 g/t Au over 6.64 m (ETW – 5.6 m) and 22.24 g/t Au over 2.94 m (ETW – 2.5 m).
- The Company completed a total of 9,486 m of definition, infill, and exploration drilling in Q2 2016 (Q2 2015 – 11,416 m), for a total of 21,377 m of drilling in H1 2016, an increase of 5% over 20,333 m in H1 2015.

Outlook

Looking ahead, the Company continues to be focused on delivering positive and sustainable physical performance, profitability, and cost optimization. The Company has established the following consolidated production and cost guidance for 2016 which represents achievable results from operations:

2016 Guidance

	Turmalina Complex		Caeté Complex		Consolidated	
Operations	**Low**	**High**	**Low**	**High**	**Low**	**High**
Gold production (ounces)	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 (metres)	3,000	3,300	1,700	1,900	4,700	5,200
Secondary (metres)	3,200	3,400	2,500	2,700	5,700	6,100
Definition, infill, and exploration drilling (metres)	18,000	20,000	10,000	12,000	28,000	32,000

1. Cash operating costs and All-in sustaining costs are non-GAAP 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.

2016 Key Growth Drivers

- Completing 2016 capital investment program to increase number of available working areas through increased development and exploration to grow sustainable production across all operating mines. Capital investments funded through operating cash flow during first half of 2016 with capital spending set to reduce in Q3 and Q4 2016.
- Growing mine production, increasing throughput and reducing cash operating costs towards lower end of 2016 cost guidance.
- Commencing mine-wide Operational Excellence Program ("OEP") at Turmalina Gold Mine to identify and eliminate waste, lower costs, and improve productivity to create and deliver results, which will drive future growth.
- Reviewing alternatives for the Company to exercise its right to provide notice of redemption of the convertible debentures on the anniversary date of October 27, 2016.

Qualified Person

Scientific and technical information contained in this press release has been reviewed and verified by Marcos Dias Alvim, BSc Geo., MAusIMM (CP), Project Development Manager, who is an employee of Jaguar Mining Inc., and is a "qualified person" as such term is defined by National Instrument 43-101 ("NI 43-101").

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 Caeté Gold Mine Complex ("Mineração 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.

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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 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, tonnes milled, recovery rates, cash operating costs, and definition/delineation drilling, in addition to overall expenditures and results of operations during 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.

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 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 June 30, 2016 is set out in the Company's second 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 June 30, 2016 is set out in the Company's second quarter 2016 MD&A filed on SEDAR at www.sedar.com.