

PRESS RELEASE

January 19, 2016 For Immediate Release 2016-01 TSX-V: JAG

Jaguar Reports Fourth Quarter and Annual 2015 Gold Production, Releases Annual 2016 Guidance

All dollar amounts are in thousands of U.S. dollars unless stated otherwise

Fourth Quarter 2015 ("Q4 2015") Highlights

- Consolidated gold production of 23,169 ounces up 3.4% compared to 22,456 ounces of gold in the fourth Quarter 2014 ("Q4 2014")
- Average grade profile continues to improve with 216,000 tonnes processed at average grade of 3.96 g/t compared to 258,000 tonnes at an average head grade of 3.02 g/t in Q4 2014
- Turmalina gold production of 14,449 ounces, up 20%, compared to 12,067 ounces of gold in Q4 2014, on increasing grade at 4.79 g/t and higher recovery at 91%
- Caeté gold production of 8,720 ounces, compared to 10,389 ounces of gold in Q4 2014, on higher grade of 2.59 g/t, significant improvement in recovery at 90%

Fiscal Year End 2015 Highlights

- Consolidated gold production of 90,421 ounces, compared to 92,057 ounces of gold in 2014, on increasing average grade profile of 3.67 g/t and strong recovery of 90%
- Turmalina gold production of 50,659 ounces, up 5.6% compared to 47,968 ounces of gold in 2014, on higher grade of 4.25 g/t and higher recovery at 91%
- Caeté gold production of 39,762 ounces on higher grade of 2.92 g/t and strong recovery of 89%
- Gold sales of 92,988 ounces up slightly compared to 92,264 ounces of gold in 2014
- Preliminary Cash and bullion at fiscal year end, December 31, 2015, approximately \$15.3 million

Toronto, Canada – January 19, 2016 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSXV: JAG) is pleased to report consolidated annual gold production of 90,421 ounces in 2015 (2014 – 92,057 ounces). A total of 875,000 tonnes was processed in 2015 (2014 – 1,038,000 tonnes) at an average grade of 3.67 grams per tonne (2014 – 3.03 grams per tonne). Mill recoveries for the year 2015 averaged 90% (2014 - 90%).

In the fourth quarter of 2015, the Company reported gold production of 23,169 ounces (Q4 2014 - 22,456 ounces). Mill throughput during the fourth quarter totaled 216,000 tonnes at an average grade of 3.96 grams per tonne.

Rodney Lamond, President and CEO of Jaguar, commented, "In 2015 Jaguar performed well on many measures and delivered slightly higher gold sales of 92,988 ounces. Our team achieved a significant improvement in the average grade profile from our assets and demonstrated the underlying strength of the deposits at Turmalina and also at Caeté. Our continued focus on grade control resulted in an 18.1% improvement in grade to 4.25 g/t at Turmalina and helped drive higher recoveries of 91%. The upside

potential at Turmalina at the end of the fourth quarter was impacted by the unanticipated maintenance shutdown of Mill #2 (reported on December 21, 2015) however, the improved grades and recovery helped to offset the lower than expected production compared to 2015 guidance. Looking ahead, we are on track to deliver an updated Mineral Reserve and Resource statement by the end of the first quarter 2016, which we expect will improve the geological understanding of our assets and will demonstrate substantial resource growth potential. Our current top priority is to build confidence in our mine plans and to review opportunities for delivering improved operational performance to achieve safe, sustainable and profitable physical performance in 2016 and beyond."

The consolidated production for the quarter and year ended December 31, 2015 is as follows:

Production	Q4 2015			Q4 2014			Annual 2015			Annual 2014		
	Turmalina	Caeté	Total	Turmalina	Caeté	Total	Turmalina	Caeté	Total	Turmalina	Caeté	Total
Tonnes milled	100,000	116,000	216,000	117,000	141,000	258,000	406,000	469,000	875,000	442,000	596,000	1,038,000
Recovery	91%	90%	90%	90%	88%	89%	91%	89%	90%	90%	89%	90%
Head grade (grams/tonne)	4.79	2.59	3.96	3.60	2.57	3.02	4.25	2.92	3.67	3.65	2.56	3.03
Gold ounces:												
Produced	14,449	8,720	23,169	12,067	10,389	22,456	50,659	39,762	90,421	47,968	44,089	92,057
Sold	15,527	8,889	24,416	11,243	10,157	21,400	51,819	41,169	92,988	47,947	44,317	92,264
Exploration and definition												
drilling (meters)	6,760	-	6,760	4,132	5,868	10,000	25,603	10,635	36,238	17,901	19,871	37,772
Average realized gold price												
(US\$/ounce)			\$ 1,100			\$ 1,204			\$ 1,145			\$ 1,261

Details of the Company's financial performance, including capital and operating costs, will be included in its fourth quarter 2015 financial results expected to be released on March 24, 2016.

Outlined below is the Company's cash and gold bullion position as at December 31, 2015.

Cash and gold bullion, as at	December 31, 2015				
Cash	15,320				
Gold bullion	-				
Total cash and gold bullion	15,320				

2016 Consolidated Guidance

2016 Consolidated Guidance	Low	High		2015
Au Production (ounces)	90,000		95,000	90,421
Cash Operating Costs ¹	\$ 700	\$	750	
All-in-Sustaining-Costs ²	\$ 950	\$	1,000	
FX Assumptions (R\$ per USD)	3.80		4.00	

About Jaguar Mining Inc.

Jaguar Mining Inc. is engaged in the acquisition, exploration, development and operation of gold producing properties in Brazil. The Company holds mineral concessions comprising 23,777 hectares in the Iron Quadrangle mining district of Brazil, a prolific greenstone belt located near the city of Belo Horizonte in the State of Minas Gerais, where the Company's current operating mines are located. In addition, Jaguar holds mineral concessions totaling 131,332 hectares in the State of Maranhão, where the Company's Gurupi Project is located and 34,223 hectares in the State of Ceará, where the Company's Pedra Branca Project is located. The Company may consider the acquisition, exploration, development and operation of other gold properties.

The Company currently produces gold at its Turmalina and Caeté operations in Minas Gerais, while the Company's Paciência operation, also located in Minas Gerais, has been on care and maintenance since 2012. Total Proven and Probable Mineral Reserves as at December 31, 2014 for Caeté and Turmalina (Southern Brazil) include 1,871,000 tonnes at 4.43 g/t of gold, containing 267,000 ounces of gold. Total Proven and Probable Mineral Reserves as at December 31, 2014 for the Gurupi Project (Northern Brazil) include 63,757,000 tonnes at 1.14 g/t of gold, containing 2,328,000 ounces of gold. Total Probable Mineral Reserves as at December 31, 2014 for both Southern Brazil and Northern Brazil include 65,628,000 tonnes at 1.23 g/t of gold, containing 2,595,000 ounces of gold. Notes for the Company's Reserves and Resources can be found in the most recent Annual Information Form.

Potential for an increase in gold production exists through further exploration and development of the Company's existing brownfield land package around its existing mines and through the development of the Company's Gurupi Project, with potential for an open-pit gold mining operation. The Company is led by a proven executive management team with extensive gold operations and development experience in South America.

FOR FURTHER INFORMATION PLEASE CONTACT:

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FORWARD-LOOKING STATEMENTS

Certain statements in this press 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. In this press release, forward-looking information includes estimates, projections and statements as to the Company's reasonable expectations of production and sales volumes, capital expenditure and mine production costs, the impact of ore grades on future production, the potential of production disruptions, the outcome of mine permitting, the outcome of legal proceedings which involve the Company, the future price of gold and foreign exchange ratios, tonnes milled, recovery rates and definition/delineation drilling. With respect to forward-looking information contained herein, the Company has made numerous assumptions including among other things, assumptions about the price of gold, anticipated costs and expenditures and the ability to achieve the Company's forecast plans regarding its operations and financial performance. Management does not have firm commitments for all of the costs. expenditures, prices or other financial assumptions used to prepare the financial outlooks or assurance that such results will be achieved. Forward-looking information contained in forward-looking statements is based on assumptions that involve a number of known and unknown risks and uncertainties, including among others the uncertainties with respect to the price of gold, labour disruptions, mechanical failures, procurement and delivery of parts and supplies to the operations, and uncertainties inherent to capital markets in general, which, if incorrect, may cause actual results to differ materially from those anticipated by Jaguar and described herein.

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements made in this press 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 Jaguar's expectations as at the date of this press 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 press 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 below stated footnotes where the Company expanded on its use of non-IFRS measures.

Footnotes

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 three months ended September 30, 2015 is set out in the Company's third quarter 2015 MD&A filed on SEDAR at <u>www.sedar.com</u>.

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 three months ended September 30, 2015 is set out in the Company's third quarter 2015 MD&A filed on SEDAR at <u>www.sedar.com</u>.

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