

March 22, 2016 For Immediate Release 2016-05 TSX-V: JAG

PRESS RELEASE

Jaguar Reports Fourth Quarter and Full Year 2015 Operating and Financial Results,
Significantly Lower Costs, Positive Operating Cash Flow

Toronto, Canada, March 22, 2016 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX-V: JAG) today announced operational and financial results for the fourth quarter ("Q4 2015") and 2015 fiscal year-end ("FY 2015"). Full Financial Statements and Management Discussion & Analysis documents are available on SEDAR and the Company's website at www.jaguarmining.com. All figures are in US dollars unless otherwise expressed.

Q4 2015 Highlights

- Consolidated gold production of 23,169 ounces, up 3% compared to the fourth quarter of 2014 ("Q4 2014")
- Improved consolidated average head grade up 30% to 3.96 g/t in Q4 2015 from 3.04 g/t in Q4 2014
- Revenue of \$26.8 million, up 4% despite a 9% decrease in the average realized gold price, compared to Q4 2014
- 35% improvement in consolidated cash operating costs ("COC") to \$631 per ounce sold from \$965 in Q4 2014
- 26% improvement in consolidated all-in sustaining costs ("AISC") to \$991 per ounce sold from \$1,343 in Q4 2014
- Operating cash flow of \$6.8 million, up \$8.0 million compared to negative operating cash flow of \$1.2 million in Q4 2014
- Completed over-subscribed financing of Convertible Senior Secured Debentures (the "Debentures") for aggregate gross proceeds of \$21.5 million in October 2015

FY 2015 Highlights

- Consolidated gold production of 90,421 ounces exceeded revised 2015 guidance
- 23% improvement in consolidated COC to \$755 per ounce sold from \$980 in FY 2014
- 21% improvement in consolidated AISC to \$1,088 per ounce sold, down from \$1,378 in FY 2014, and below annual 2015 guidance of \$1,100 \$1,200 per ounce sold
- Revenue of \$106.5 million compared to \$116.4 million for FY 2014
- Operating cash flow of \$24.2 million for FY 2015, compared to negative operating cash flows of \$6.8 million in FY 2014, despite a 9% decrease in the average realized gold price
- Net loss for the year ended December 31, 2015 was \$11.2 million (year ended December 31, 2014 net income of \$130.9 million) due to the impact of the net impairment charge (\$4.3 million), the change in the fair value of the convertible debentures (\$4.8 million), and the increase in the legal provisions (\$10.4 million)
- Received a total of \$7.7 million of cash tax refunds in respect of its Federal VAT input tax credits for years 2009 through 2011, for its operating Brazilian subsidiaries during FY 2015 (FY 2014 – \$nil)
- Cash and gold bullion balance as of December 31, 2015 was \$15.3 million, up 71% compared to \$9.0 million as at December 31, 2014
- As at December 31, 2015, working capital improved to \$2.0 million, a significant achievement compared to the working capital deficiency of \$23.2 million as at December 31, 2014

Rodney Lamond, President and Chief Executive Officer of Jaguar commented, "We are very pleased with the continued progress of the Company, in terms of significantly lowering our unit costs by 23% and improving head grades by over 21%, while managing our tonnage and exceeding revised 2015 guidance. Going forward, with a strong and committed team in place, we are targeting achievable deliverables with a key focus on continuing to streamline company-wide operations. This focus will allow us to keep reducing our cash operating costs while optimizing operations. Furthermore, we are well positioned with a significantly improved balance sheet and working capital position to continue to invest in our current base of assets. Investments in our current operations via exploration and development will allow us to build confidence in our current mine models, and provide positive returns. These key focus areas will aid us in delivering a value-driven culture and deliver positive cash flows in the near term for all stakeholders."

Q4 & FY 2015 Financial & Operating Highlights

(\$ thousands, except where indicated)	For the three months ended December 31,		For the twelve months ended December 31,	
	2015	2014	2015	2014
Financial Data				
IFRS Measures				
Revenue	\$26,820	\$25,766	\$106,513	\$116,362
Cost of sales	17,561	30,286	83,846	120,952
Depreciation (included in cost of sales)	3,628	6,778	16,519	30,521
Gross margin	9,259	(4,520)	22,667	(4,590)
Gross margin (excluding depreciation) ¹	12,887	2,258	39,186	25,931
Net income (loss)	1,670	(90,530)	(11,212)	130,863
Per share ("EPS")	0.02	(0.81)	(0.10)	1.69
EBITDA ¹	1,948	(80,053)	14,010	177,653
Adjusted EBITDA ²	8,154	(4,305)	22,161	5,006
Non-IFRS Measures				
Average realized gold price (\$ per ounce) ¹	1,098	1,204	1,145	1,261
Cash operating costs (per ounce produced) ¹	574	894	694	940
Cash operating costs (per ounce sold) ¹	631	965	755	980
All-in sustaining costs (per ounce sold) ¹	991	1,343	1,088	1,378
Sustaining capital expenditures ¹	5,598	5,156	18,146	21,369
Non-sustaining capital expenditures ¹	334	225	715	1,052
Total capital expenditures ³	\$5,932	\$5,381	\$18,861	\$22,421
Operating Data				
Ore processed (t)	216,000	258,000	875,000	1,038,000
Average head grade (g/t)	3.96	3.04	3.67	3.03
Gold produced (ounces)	23,169	22,456	90,421	92,057
Gold sold (ounces)	24,416	21,400	92,988	92,264
Definition drilling (metres)	6,760	10,000	36,238	37,771

Average realized gold price, sustaining and non-sustaining capital expenditures, COC and AISC, EBITDA and Adjusted EBITDA, and gross margin (excluding depreciation) are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

Cash and Gold Bullion

	December	December
(\$ thousands)	31, 2015	31, 2014
Cash and cash equivalents	\$15,319	\$7,161
Gold bullion	-	1,801
Total cash and gold bullion	\$15,319	\$8,962

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.

Q4 2015 and FY 2015 Financial Highlights

Revenue for Q4 2015 increased 4%, compared to the same period in 2014, mainly due to a 14% increase in ounces sold, offset by a 9% reduction in the average realized gold price. The 8% reduction in revenue for FY 2015 as compared to FY 2014 was mainly due to the \$116 per ounce decrease in the average realized gold price.

Positive Operating Cash Flow, Significantly Lower COC and AISC Lower than Annual Guidance

Cash operating costs ("COC") per ounce of gold produced during Q4 2015 were \$574 compared to \$894 during Q4 2014, a decrease of \$320 per ounce, or 36%. The decrease in costs was a result of an improvement in the average head grade by 30% and favourable foreign exchange as the Brazilian Real, the currency of our ongoing operations, weakened 51% against the US dollar (Q4 2015 average exchange rate was R\$3.84 per US dollar compared to Q4 2014 average exchange rate of R\$2.54 per US dollar).

The decreases in COC per ounce noted above were partially offset by the following cost increases: higher electricity tarrifs (\$34 per ounce), an increase in the cost of materials due to inflation (\$21 per ounce), and the allocation of all mine-site fixed overheads to mining activity at the Caeté Gold Complex due to the suspension of primary development at the Pilar and Roça Grande gold mines (\$68 per ounce).

Operating cash flow during Q4 2015 of \$6.8 million, increased \$8.0 million, from negative operating cash flow of \$1.2 million in Q4 2014, mainly due to lower costs due to improved grade, lower tonnage, and the benefit realized from the decline in the value of Brazilian Reais as compared to the US dollar.

For the full year 2015, operating cash flow was positive at \$24.2 million, compared to negative operating cash flows of \$6.8 million in FY 2014, despite a 9% decrease in the average realized gold price.

In FY 2015, AISC decreased 21%, or \$290, to \$1,088 per ounce of gold sold, compared to \$1,378 per ounce sold in FY 2014. Sustaining capital expenditures in FY 2015 were \$18.1 million, which were 15% or \$3.2 million lower than FY 2014, mainly due to the suspension of development at Pilar.

AISC decreased 26%, or \$352, to \$991 per ounce of gold sold in Q4 2015, compared to \$1,343 per ounce sold during Q4 2014. In Q4 2015, sustaining capital expenditures increased by \$0.4 million, or 9%, to \$5.6 million compared to \$5.2 million during Q4 2014, primarily due to the restart of capital refurbishment activities for the mining fleet, following the completion of the financing (see below).

Adjusted EBITDA (excluding non-cash items and impairment) for Q4 2015 and FY 2015 was \$8.2 million and \$22.2 million respectively, mainly due to lower COC and cash refunds of tax credits during the year.

Net loss for the year ended December 31, 2015 was \$11.2 million (year ended December 31, 2014 – net income of \$130.9 million) due to the impact of the net impairment (\$4.3 million), the change in the fair value of the convertible debentures (\$4.8 million), and the increase in the legal provisions (\$10.4 million).

Financial Position

As at December 31, 2015, the Company had cash and unsold gold bullion on hand of \$15.3 million (\$9.0 million as at December 31, 2014). In 2015, the Company significantly improved its working capital and ended the year with positive working capital of \$2.0 million compared to a working capital deficiency of \$23.2 million as at December 31, 2014. The improvement was mainly due to the successful completion of the oversubscribed financing of the Debentures.

The Company continues to review and implement cost control measures across the operations and corporate offices to improve operating cash flow and enhance the Company's working capital position.

On October 27, 2015, the Company closed an over-subscribed financing of the Debentures. Aggregate gross proceeds of \$21.5 million were raised, of which approximately \$8.4 million was used to repay Renvest Global Resources Fund ("Renvest") in order to transfer its interest in its credit facility with the Company to the convertible debenture subscribers. The Company plans to use the remainder of the proceeds to advance

asset optimization plans in conjunction with the Company's ongoing development and production activities and for general corporate purposes.

In addition to the repayment of \$8.4 million to Renvest on closure of the financing, the Company repaid \$9.9 million of principal plus interest on the Renvest debt during FY 2015. The Company also had net repayments of \$2.3 million of principal on a portion of loans from Brazilian banks during the year. As at December 31, 2015, total debt was \$41.2 million, compared to \$31.0 million as at December 31, 2014.

The Company received a total of \$7.7 million of cash tax refunds in respect of its Federal VAT input tax credits for years 2009 through 2011, for its operating Brazilian subsidiaries during FY 2015 (FY 2014 – \$nil).

Q4 2015 and FY 2015 Operating Highlights

Strong Gold Production

- Consolidated gold production during Q4 2015 and FY 2015, was 23,169 and 90,421 ounces respectively, compared to 22,456 and 92,057 ounces in the corresponding 2014 periods.
- Turmalina Gold Mine increased production by 20% in Q4 2015 resulting in 14,449 ounces of gold produced compared to 12,067 ounces in the corresponding 2014 period. The increase in ounces produced was a result of a 33% increase in the average head grade. The higher grades were partially offset by lower tonnes processed during December 2015, primarily due to the unexpected shut down of Mill #2 for unscheduled repairs and maintenance (refer to press release dated December 21, 2015). Turmalina Mill #2 returned online in early January 2016 and continues to perform well.
- Caeté Gold Complex produced 8,720 ounces of gold in Q4 2015 compared to 10,389 ounces in Q4 2014, due to lower grades, for a total of 39,762 ounces in FY 2015, exceeding 2015 annual guidance of 36,000 ounces.

Improving Grades with Lower Tonnage

- A total of 216,000 tonnes were processed in Q4 2015 (Q4 2014 258,000 tonnes) at an average head grade of 3.96 g/t (Q4 2014 3.04 g/t), a 30% increase in average head grade compared to the prior year. Total tonnes processed in Q4 2015 decreased 16%, compared to the same period in 2014, primarily due to an increased focus on mining higher grade.
- A total of 875,000 tonnes were processed during the twelve months of 2015 (FY 2014 1,038,000 tonnes) at an average head grade of 3.67 g/t (FY 2014 3.03 g/t), an increase in grade of 21% compared to the same period of 2014.
- At Turmalina Gold Mine, 100,000 tonnes (Q4 2014 117,000 tonnes) were processed in Q4 2015 at an average head grade of 4.79 g/t (Q4 2014 3.60 g/t).
- Caeté Gold Complex processed 116,000 tonnes in Q4 2015 (Q4 2014 141,000 tonnes) at an average head grade of 2.59 g/t (Q4 2014 – 2.57 g/t).

Increase in Pilar Reserves of 310%

During 2015, the Company completed a strategically targeted drilling campaign at the Pilar and Turmalina gold mines with the goal of gaining increased confidence in the mineral resources and reserves, to facilitate better mine planning for 2016.

The exploration drilling results enabled the Company to announce a 310% increase in total Mineral Reserves to 172,000 ounces at Pilar, with a 63% increase in grade to 4.39 g/t Au, in its 2015 year-end mineral resource and mineral reserve estimate announced March 4, 2016. Based on the strong exploration drilling results and increased reserves and resources, primary and secondary development that had been suspended in Q4 2014, has been reinitiated at Pilar during Q1 2016.

Pilar Gold Mine Mineral Resource and Reserve Estimates as of December 31, 2015:

Proven & Probable Reserves: 1,220 million tonnes grading 4.39 g/t Au, containing 172,000 oz Au

- Proven Reserves: 164 million tonnes grading 3.15 g/t Au, containing 17,000 oz Au
- Probable Reserves: 1,056 million tonnes grading 4.58 g/t Au, containing 156,000 oz Au

Measured & Indicated Resources: 3,479 million tonnes grading 4.59 g/t Au, containing 514,000 oz Au

- Measured Resources: 709 million tonnes grading 4.25 g/t Au, containing 97,000 oz Au
- Indicated Resources: 2,770 million tonnes grading 4.68 g/t Au, containing 417,000 oz Au

Inferred Resources: 1,208 million tonnes grading 5.45 g/t Au, containing 212,000 oz Au

2015 Results Compared to Guidance:

	2015 Revised	2015
	Guidance	Actual
Consolidated		
Brazilian Reais vs US dollar foreign exchange rate	2.5	2.2
Gold production (ounces)	89,500	90,421
Average head grade (g/t)	3.30-3.75	3.67
Ore processed (t)	925,000	875,000
Recovery rate (%)	90%	90%
Cash operating costs (per ounce produced) ¹	\$800-\$900	\$694
All-in sustaining costs (per ounce sold) ¹	\$1,100-\$1,200	\$1,088
Definition/delineation drilling (metres)	34,000	36,238
Turmalina		
Gold production (ounces)	53,500	50,659
Average head grade (g/t)	4.00-4.25	4.25
Ore processed (t)	475,000	406,000
Recovery rate (%)	90%	91%
Cash operating costs (per ounce produced) ¹	\$640-\$700	\$540
All-in sustaining costs (per ounce sold) ¹	\$900-\$1,000	\$890
Definition/delineation drilling (metres)	25,000	25,603
Caeté		
Gold production (ounces)	36,000	39,762
Average head grade (g/t)	2.40-2.90	2.92
Ore processed (t)	450,000	469,000
Recovery rate (%)	90%	90%
Cash operating costs (per ounce produced) ¹	\$1,075-\$1,175	\$891
All-in sustaining costs (per ounce sold) ¹	\$1,200-\$1,300	\$1,027
Definition/delineation drilling (metres)	9,000	10,635

COC and AISC are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

Outlook for 2016

Jaguar remains strongly 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 and represents achievable results from operations:

2016 Annual Guidance

	Low	High
Gold production (ounces)	90,000	95,000
Ore processed (t)	875,000	900,000
Recovery rate (%)	90%	90%
Cash operating costs (per ounce produced) ^{1,2}	\$700	\$750
All-in sustaining costs (per ounce sold) ^{1,2}	\$950	\$1,000
Sustaining capital expenditures (\$'000)	\$23,000	\$25,000
Definition/delineation drilling (metres)	28,000	32,000

COC and AISC are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS
Financial Performance Measures section of the MD&A.

Qualified Person

Scientific and technical information contained in this press release has been reviewed and approved 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 205,000 hectares. The Company's principle 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 ("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 Hashim Ahmed
President & CEO Vice President Finance, Interim CFO
rodney.lamond@jaguarmining.com hashim.ahmed@jaguarmining.com

FORWARD-LOOKING STATEMENTS

Certain statements in this press release constitute "Forward-Looking Statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and applicable Canadian securities legislation. Forward-looking statements include, but are not limited to, management's assessment of Jaguar's future plans and operation. Certain statements throughout this press release constitute forward-looking statements (forecasts) under applicable securities laws relating to future events or future performance. 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. Forward-Looking Statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results or performance to be materially different from any future results or performance expressed or implied by the Forward-Looking Statements. 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. The actual results of Jaquar will likely vary from the amounts set forth in the financial outlooks and such variation may be material. Jaguar and its management believe that the financial outlooks have been prepared on a reasonable basis, reflecting the best estimates and judgments, and represent, to the best of management's knowledge and opinion, the Company's expected production, grades, tones milled, recovery rates, cash operating costs, and definition/delineation drilling, in addition to overall expenditures and results of operations during 2016. However, because this information is highly subjective and subject to numerous risks,

^{2. 2016} cost guidance has been prepared on the basis of a foreign exchange rate of 3.8 Brazilian Reais vs. the US dollar.

including the risks discussed below, it should not be relied on as necessarily indicative of future results. Forward-looking information is based on current expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by Jaguar and described in the forward-looking information. The forward-looking information contained in this press release is made as of the date hereof and Jaguar undertakes no obligation to update publicly or revise any forward-looking information, whether as a result of new information, future events or otherwise, unless required by applicable securities laws. The forward-looking information contained in this press release is expressly qualified by this cautionary statement.

Forward-Looking Statements involve known and unknown risks, uncertainties and other factors may cause the actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Such risk factors include, among others the risk of Jaguar's not meeting the forecast plans regarding its operations and financial performance, as well as those factors disclosed in the Company's current Annual Information Form and Management's Discussion and Analysis, as well as other public disclosure documents, available on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate. The forward-looking statements contained herein are presented for the purposes of assisting investors in understanding the Company's plan, objectives and goals and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking statements.

These Forward-Looking Statements represent the Company's views as of the date of this press release. The Company anticipates that subsequent events and developments may cause the Company's views to change. Factors, which could cause results or events to differ from current expectations, include, among other things, actions taken against the Company by governmental agencies and securities and other regulators and other factors not currently viewed as material that could cause actual results to differ materially from those described in the Forward-Looking Statements. The Company does not undertake to update any Forward-Looking Statements, either written or oral, that may be made from time to time by or on behalf of the Company subsequent to the date of this discussion except as required by law.

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 costs 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 year ended December 31, 2015 is set out in the Company's fourth quarter 2015 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 year ended December 31, 2015 is set out in the Company's fourth quarter 2015 MD&A filed on SEDAR at www.sedar.com.