

# **NEWS RELEASE**

August 16, 2017 FOR IMMEDIATE RELEASE **TSX: JAG** 

## Jaguar Mining Announces Significant, High Grade Intercepts Near-Mine at Pilar and Commences Growth Exploration Drilling at Turmalina; Land Acquisition Increases Pilar Footprint by 15%

Exploration success at Pilar includes a significant intercept grading 10.8 g/t Au over 29.3 m (ETW 22.5 m)
 Ongoing cost reduction initiatives enable continued capital investment in high priority growth exploration programs

**Toronto, Canada, August 16, 2017 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX:JAG)** today announced results from its investment in its near-mine high priority growth exploration drilling program, including 4 holes, involving 1,689 metres ("m") at the Company's emerging Pilar mine in Minas Gerais, Brazil. During the first half of 2017, the Company remained focused on reducing its cash costs, generating operating cash flow, and maintaining a disciplined approach to the allocation of sustaining capital which enabled the Company to continue deploying capital towards key growth exploration. The Company also announced it has successfully acquired a strategic Mineral Exploration License (the "License") over a prospective greenstone terrane adding approximately 15% to the Pilar Mine License footprint. At Turmalina, three diamond drill rigs commenced growth exploration drilling targeting projected down-plunge extensions, below current mining levels and infrastructure, on both Orebody A and Orebody C.

#### **Pilar Growth Exploration Drilling Highlights and Key Intercepts**

- Completed a series of deep drill holes targeting the down-plunge continuity of the principal mineralized Banded Iron Formation Orebodies between Levels 11 to 16, up to approximately 350 m vertically below the current development and 250 m below the current Inferred Resources at the Pilar mine (refer to Figure #1).
- Significant intercept grading **10.8 g/t Au over 29.3 m (estimated true width 22.5 m) reported in hole PPL449A** (refer to Table #1). This intercept along with the additional highly significant drill intercepts confirms the expected continuity of high grade gold mineralization within the principal Orebody package down-plunge over a considerable distance.
- Drilling successfully intersected deep extensions with the deepest mineralized interval in hole PPL449A intersecting
  well mineralized Banded Iron Formation between Levels 14 and 15, approximately 300 m vertically below the current
  deepest underground development at the mine.
- Drill intercepts confirm an expected increase in thickness of the mineralization with the widest intercept in hole PPL449A also the deepest to-date.
- Drill results provide the potential to add substantial new Inferred Resources at Pilar and include the following key intercepts:

#### **Banded Iron Formation Orebodies:**

- Drill hole PPL449A intercepted 10.8 g/t Au over 29.3 m (ETW 22.5 m)
- Including an intercept of 17.3 g/t Au over 10.2 m (ETW 7.8 m)
- Drill hole PPL449A intercepted 4.6 g/t Au over 34.2 m (ETW 26.2 m)
- Drill hole PPL449A intercepted 9.0 g/t Au over 7.6 m (ETW 7.0 m)
- Drill hole PPL441 intercepted 6.8 g/t Au over 29.0 m (ETW 7.2 m)
- Drill hole PPL441 intercepted 5.5 g/t Au over 6.5 m (ETW 6.4 m)

Definitions: ETW - estimated true width g/t Au - grams per tonne gold m - metres

Rod Lamond, President and CEO of Jaguar Mining commented: "Our employees' tremendous efforts to reduce and control costs across the Company in the first half of 2017 has enabled the Company to continue its investment in key growth exploration projects at Pilar and Turmalina. This investment has created sustainable value as today's drill results demonstrate the expected continuity of high grade mineralized structures well beyond current mine plans. The increased grade and thickness of mineralization at depth will build confidence in the potential for adding substantial new resources to the Pilar mine and to significantly extend its mine life. Plans for additional drilling at Pilar are being finalized. We are also optimistic that the drill program

commenced at Turmalina may deliver similar exploration success when we report drill results before year-end. Moving forward, we will continue to remain disciplined in deploying capital towards the highest priority targets across all of our operating mine sites."

Jon Hill, a senior Exploration Geologist and Jaguar's newly appointed Senior Expert Advisor to the Management Committee commented: "Today's results confirm the presence of increased gold mineralization and identify opportunities for the extension of additional gold mineralization and an expanded drill program at Pilar. These results are very encouraging and we are pleased to have commenced additional near-mine drilling at Turmalina targeting Orebody A and Orebody C. While growth exploration has initially been focused on consolidation of the resource base and demonstrating long-term sustainable production at both the Pilar and flagship Turmalina operations, these latest positive results now allow management to move forward confidently with aggressive, but focused and disciplined, growth exploration programs within the Company's greater tenement portfolio."

#### New Strategic Land Position at Pilar Mine Concession

- In July, the Company successfully acquired a new strategic exploration license contiguous to the Pilar Mine License package adding 436.62 hectares, or 15%, to the Pilar Mine License footprint. This area is underlain by prospective Archean greenstone geology including the same stratigraphic sequence and equivalent structural setting as the Pilar Mine Mineralized sequence (see Figure #2).
- The newly acquired License was originally staked in 1981 and became publicly available on July 24, 2017 when it was awarded to Jaguar under the ordinance number 831.233/2017 by the Departamento Nacional de Produção Mineral ("DNPM").

## Turmalina Mine

- Commenced drilling in July at Turmalina with three diamond drills targeting down-plunge depth extensions to the high grade Orebody A at depth, to approximately 300 m below current development and resource limits, while also targeting extensions of Orebody C at shallower depths.
- Orebody A drilling is being undertaken from a hanging wall development specifically prepared and completed for this program on Level 10-1. Drilling is intended to reach Levels 12 – 16, up to 420 m vertically below the current development and 300 m below the current Inferred Resources (refer to Figure #3).
- At shallower levels, drilling will target projected down-plunge extensions to Orebody C which, once confirmed, will allow access for mining from existing infrastructure between Levels 4 and 10 (see Figure #4).
- Regular updates on progress with results will be released over the coming months prior to reporting updated Mineral Reserves and Mineral Resources in March 2018.

#### **Qualified Person**

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 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").

## **Quality Control**

Jaguar continues to use a quality-control program that includes insertion of blanks and commercial standards in order to ensure best practice in sampling and analysis.

HQ, NQ, and BQ size drill core is sawn in half with a diamond saw. Samples are selected for analysis in

standard intervals according to geological characteristics such as lithology and hydrothermal alteration contents. All diamond drill hole collars are accurately surveyed using a Total Stations instrument and downhole deviations are surveyed using non-magnetic equipment with Icefield Tools' Gyro Path® NSG equipment and SPT Stockholm Precision Tools with GyroMaster<sup>™</sup> Solid State [North Seeker].

Mean grades are calculated using a variable lower grade cut-off (generally 0.5 g/t Au). No upper gold grade cut has been applied to the data. However, the requirement for assay top cutting will be assessed during future resource work.

Half of the sawed sample is forwarded to the analytical laboratory for analysis while the remaining half of the core is stored in a secure location. The drill core samples are transported in securely sealed bags and sent for physical preparation to the independent ALS Brasil (subsidiary of ALS Global) laboratory located in Vespasiano, Minas Gerais. The analysis is conducted at ALS Global's respective facilities (fire assay are conducted by ALS Global in Lima, Peru and multi-elementary analysis are conducted by ALS Global in Vancouver). ALS have accreditation in global management system that meets all requirements of international standards ISO/IEC 17025:2005 and ISO 9001:2015. All major ALS geochemistry analytical laboratories are accredited to ISO/IEC 17025:2005 for specific analytical procedures.

For a complete description of Jaguar's sample preparation, analytical methods, and QA/QC procedures, please refer to the "Technical Report on the Roça Grande and Pilar Operations, Minas Gerais State, Brazil", a copy of which is available on the Company's SEDAR profile at www.sedar.com.

#### 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 worldclass 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 192,000 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 Gold Mine Complex, which combined produce more than 95,000 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:

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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 set forth 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

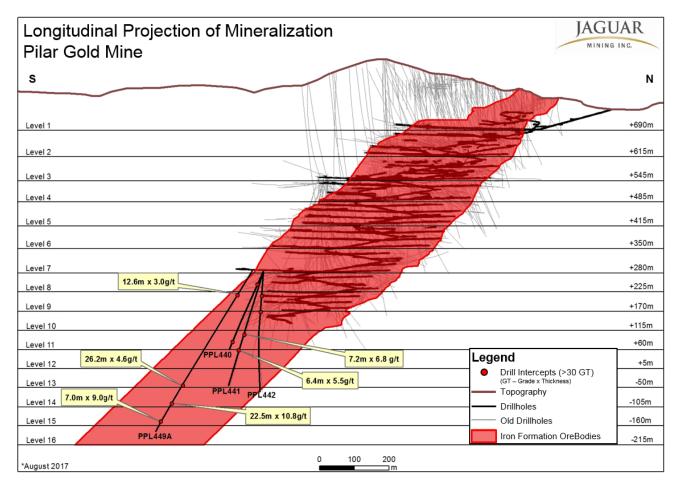
targeted", "approximately", "plans", "anticipates", "projects", "continue", "estimate", "believe" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. All statements, other than statements of historical fact, may be considered to be or include forward-looking information. These forward-looking statements are made as of the date of this news release and the dates of technical reports, as applicable. This news release contains forward-looking information regarding potential and, among other things, expected future mineral resources, potential mineral production opportunities, geological and mineral exploration statistics, ore grades, current and expected future assay results, and definition/delineation/exploration drilling at the Pilar Gold Mine and the Turmalina Gold Mine in Brazil, as well as forward-looking information regarding costs of production, capital expenditures, costs and timing of the development of projects and new deposits, success of exploration, development and mining activities, capital requirements, project studies, mine life extensions, and continuous improvement initiatives. The Company has made numerous assumptions with respect to forward-looking information contained herein, including, among other things, assumptions about the estimated timeline and for the development of the drill program at the Pilar Gold Mine (and its expanded exploration footprint) and the Turmalina Gold Mine; 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 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 and 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 its plans regarding its operations and financial performance; uncertainties with respect to the price of gold, labor 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 without limitation environmental hazards, tailings dam failures, industrial accidents and workplace safety problems, unusual or unexpected geological formations, pressures, cave-ins, flooding, chemical spills, and gold bullion thefts and losses (and the risk of inadequate insurance, or the inability to obtain insurance, to cover these risks). Although we have 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, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information.

## Table #1

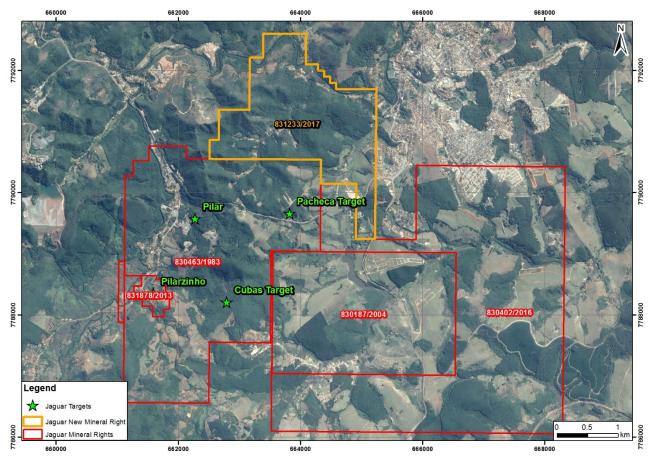
Tabulation of drilling results from the Growth Exploration Program at Pilar Mine which targeted the principal Banded Iron Formation Hosted Mineralization from Levels 11 to 16 up to 350 m vertically below current development and 250 m below the current Inferred Resources.

Pilar Gold Mine Drill Results										
Hole ID	Date	From (m)	To (m)	Down Hole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	ETW Grade (g/t Au)			
		45.7	53.1	7.4	6.9	1.4	9.5			
PPL440	April 14, 2017	99.8	102.5	2.7	2.3	1.7	3.9			
		277.8	279.3	1.5	1.4	4.5	6.2			
	June 3, 2017	64.8	68.4	3.6	3.2	7.1	22.9			
		72.9	74.4	1.6	1.4	2.2	3.0			
		115.7	123.6	7.9	6.4	2.3	14.5			
		127.6	132.4	4.8	4.6	6.1	28.1			
PPL441		185.8	189.2	3.4	2.3	1.6	3.7			
		204.7	233.7	29.0	7.2	6.8	48.3			
		248.4	252.9	4.5	1.1	3.9	4.2			
		276.1	282.7	6.5	6.4	5.5	35.1			
		288.2	298.4	10.3	9.4	2.1	19.6			
PPL442	May 30, 2017	71.3	80.9	9.6	8.0	2.3	18.5			
PPL44Z		132.3	134.0	1.6	1.4	1.4	1.9			
	June 5, 2017	9.6	12.6	3.0	2.9	4.4	12.7			
PPL449A		72.0	86.9	14.9	12.6	3.0	37.3			
		95.0	97.0	2.0	2.0	3.5	6.8			
		368.5	373.2	4.7	4.3	6.7	28.8			
		376.7	410.9	34.2	26.2	4.6	120.2			
		440.8	470.0	29.3	22.5	10.8	243.2			
		498.6	506.9	8.3	7.6	1.6	12.3			
		510.7	513.2	2.5	2.2	4.9	10.7			
		517.7	525.3	7.6	7.0	9.0	63.0			

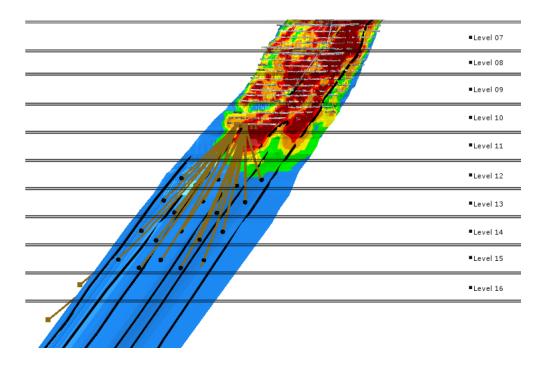
Figure showing the location of growth exploration diamond drill holes reported relative to the current mine infrastructure and the projected down-plunge position of the principal Pilar Mine Orebodies. The program targeted mineralization between Levels 11 to 16, up to 350 m vertically below current development and 250 m below the current Inferred Resources.



The recently acquired Mineral Exploration License increases the total registered area of the Pilar Mine License area by 15% (436.62 hectares).



This figure shows the planned drilling configuration for targeting the down-plunge extensions of Orebody A at Turmalina and the current GT contours.



This figure shows a longitudinal section (SE to NW) of Orebody C at Turmalina highlighting the south-east portion of the orebody and the planned layout of drill holes for the recently started program targeting projected down-plunge extensions to the orebody between Levels 7 and 16.

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