

## **NEWS RELEASE**

February 8, 2017 FOR IMMEDIATE RELEASE 2017 - 03 TSX:JAG

# Jaguar Mining Reports Continued High-Grade Intercepts at Turmalina Gold Mine Identifies New High-Grade Mineralization Within Orebody C

Toronto, Canada, February 8, 2017 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX:JAG) today announced multiple high-grade drill intercepts generated from 36 drill holes (5,393 metres) designed to convert and extend the currently reported mineral resource of Orebody A and Orebody C at the Company's Turmalina Gold Mine ("Turmalina") located in the Iron Quadrangle, Minas Gerais, Brazil.

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

## **Drilling Highlights and Key Intercepts**

- Drill intercepts completed confirmed the continuation of high-grade gold mineralization down-plunge of Orebody A (refer to news release July 13, 2016).
- Drill intercepts within lower portions of Orebody A (A-SE) confirm the widening of the mineralization below current workings, not previously identified at upper levels.
- Drill intercepts at Orebody C confirm a number of high-grade gold mineralized intercepts which suggests higher mineralization at depth, and could potentially increase mining production at Turmalina.
- Development of the new Growth Exploration drilling horizon in the hanging wall of Orebody A, is underway and is expected to be completed in the second quarter of 2017.
- Turmalina drill program continues to increase the confidence in the geological model of both orebodies through increased drill density.
- Drill results provide the potential to upgrade and increase the current resources to a higher category and include the following key intercepts:

# Orebody A

- Drill hole FTS-1324 intercepted 11.33 g/t Au over 17.1 m (ETW 14.6 m)
- Drill hole FTS-1325 intercepted 9.95 g/t Au over 14.2 m (ETW 10.8 m)
- Drill hole FTS-1306 intercepted 6.08 g/t Au over 22.3 m (ETW 10.4 m)

#### Orebody C

- Drill hole FTS-1355 intercepted 3.65g/t Au over 15.3 m (ETW 14.9 m)
  - o including an intercept of 6.39 g/t Au over 6.1 m (ETW 6.0 m)
- Drill hole FTS-1326 intercepted 2.89g/t Au over 16.6m (ETW 15.8 m)
  - o including an intercept of 9.27 g/t Au over 3.8 m (ETW 3.6 m)
- Drill hole FTS-1338 intercepted 3.93g/t Au over 10.3m (ETW 10.1 m)
  - o including an intercept of 7.04 g/t Au over 2.8 m (ETW 2.7 m)

Rodney Lamond, President and Chief Executive Officer of Jaguar, stated: "We are pleased to report that the results for the latest Turmalina exploration drilling campaign are significant for two reasons; firstly, infill drilling continues to confirm the high-grade mineralized extensions of the main Orebody A below current production levels. Reduced widths in the northwest section of Orebody A appear to be offset by the widening at depth in the southeast (A-SE) section, as demonstrated by drill hole FTS-1324 with 11.33 g/t Au over an ETW of 14.6 m. Additionally, I am very pleased to report that the deep exploration drill results completed on Orebody C have successfully confirmed the extensions of the more productive southeast (C-SE) section of the orebody. Within the confirmed large, true-width mineralized intersections, there are several high-grade intervals that have not been typically seen in the upper levels of the orebody, suggesting an increase in mineralization at depth. Furthermore, we are pleased to report that this newly confirmed nearer-to-surface mineralization at Orebody C, could augment and possibly increase Turmalina's overall underground mine production. These results continue to build confidence in the Company's ability to convert resources to reserves and have the potential to extend mine life at Turmalina. The Company continues to advance the development of the new Growth Exploration drilling horizon in the hanging wall of Orebody A, designed to test the deep down-plunge continuity of the main orebody."

#### Orebody A and C Drill Program

The Company has continued drilling the down-plunge extensions of Orebodies A and C to assess the growth potential for Measured and Indicated Mineral Resources. In addition, drilling has focused on providing increased definition and confidence in the near-term mine operation within the Indicated Mineral Resources.

Drill intercepts at Orebody A continued to confirm high-grade ore at depth and down-plunge beyond the current workings. Most importantly, reduced widths in the northwest (A-NW) section of Orebody A appear to be offset by the widening at depth in the southeast (A-SE) section, which previously had not been identified within the upper levels of Orebody A.

The development of the new Growth Exploration drilling horizon positioned in the hanging wall of the mine at Level 10 is underway. An estimated 4,800 m of deep diamond drilling will be performed after the development of the 250 m long exploration drive is completed. The proposed drilling is intended to reach Levels 12, 13 and 14, up to 240 vertical m below the current development and 160 m below the current Inferred Resources.

Drill intercepts at Orebody C below the known resource confirm the extension of the envelope in the southeast section of the orebody. The Orebody C-SE down-plunge extension below the known resources, demonstrated new high-grade ore mineralization. Within the confirmed large, true-width mineralized intersections, there were several high-grade intervals which were confirmed and had not been previously identified in the upper levels of the orebody, suggesting a potential increase in mineralization at depth. The newly defined areas may be used to increase Turmalina's overall throughput, and is expected to positively impact unitary costs in the future.

The assessment of Turmalina's historical geological information and the rational use of state-of-the-art 3-D software are strongly contributing to the understanding of the gold emplacement and consequent target generation of new resources.

Figure 1 shows a schematic geological long section illustrating the structural positions of the Orebody A and C areas with respect to Orebody B (in the hanging wall of Orebody A) and the Faina and Pontal deposits. Figures 2 and 3 demonstrate the newly identified high-grade zones and intercepts below the current inferred resource envelope.

#### **Drill Intercepts**

The highlighted drilling intercepts contained in this news release (Table #1) are down-plunge of current underground workings at Orebody A and Orebody C. Table #1 comprises intersections drilled up to and including December 31, 2016. These drill results are not contained in the "Technical Report On The Turmalina Mine, Minas Gerais State, Brazil", released and filed on SEDAR on May 24, 2016 ("The Turmalina Technical Report").

With these latest results, the Company is expecting to replace the reserves being depleted in 2016 and confirm the down-plunge continuity and strength in grade and tonnage of the mineralization in both Orebodies A and C. The impact of these intercepts will be ascertained and quantifiable once a new 2016 Mineral Reserve and Mineral Resource model update is conducted, in early 2017, as additional data is gathered.

#### **Geological Information**

The Pitangui area, where Turmalina is located, is comprised of rocks of Archaean and Proterozoic age. Archaean units include a granitic basement, overlain by the Pitangui Group, a sequence of ultramafic to intermediate volcanic flows and pyroclastics and associated sediments. The Turmalina deposit is hosted by chlorite-amphibole schist and biotite schist units within the Pitangui Group. All units have been metamorphosed to the amphibolite grade.

The mineralization at Turmalina is typically epigenetic and consists of a number of tabular bodies that are spatially related to a banded iron formation ("BIF"). These tabular bodies are grouped together according to spatial configuration and gold content into Orebodies A, B, and C. Gold can occur within the BIF itself, but can equally occur in the other host lithologies.

Gold mineralization occurs in fine grains associated with sulphides in sheared schists (Orebody A) and BIF sequences (Orebody C). Gold particles average 10  $\mu$ m to 20  $\mu$ m and are mostly associated with arsenopyrite, quartz, and mica (sericite and biotite).

The main production of the mine comes from Orebody A, a steeply east dipping tabular deposit, located in a biotite schist host rock with a steep southeasterly plunge. The mineralization in this deposit has been outlined along a strike length of approximately 250 m to 300 m and to depths of approximately 700 m to 750 m below surface.

Orebody C is a series of 14 lenses that are located to the west in the structural footwall of Orebody A and are generally of lower grade than Orebody A. They strike northwest and dip steeply to the northeast. A minor amount of production has been achieved from these lenses to date. The mineralization in this deposit has been outlined along a strike length of approximately 800 m to 850 m and to depths of approximately 400 m to 450 m below surface.

#### **Qualified Person**

Scientific and technical information contained in this press release has been reviewed and approved by Geraldo Guimarães Vieira dos Santos, BSc Geo., MAIG-3946 (CP), Geology Manager, who is 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 Mining has implemented a quality-control program that includes insertion of blanks, commercial standards, and duplicate core samples in order to ensure best practice in sampling and analysis.

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 down hole deviations are surveyed using optical Reflex Maribor.

Mean grades are calculated using a variable lower grade cut-off (generally 2 g/t Au). No top cutting 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 to the Jaguar in-house laboratory located at the Caeté Mine Complex in Minas Gerais. Some samples are also sent for check assaying to the independent SGS Geosol Laboratory located in Vespasiano, Minas Gerais. The preparation and analysis are all conducted at the respective facilities. The Caeté Mine Complex laboratory does not carry an ISO certification. The SGS Geosol Laboratory is ISO 9001 accredited. As part of in-house QA/QC, the Caeté Mine Complex laboratory inserts certified gold standards, blanks, and pulp duplicate samples.

For a complete description of Jaguar's sample preparation, analytical methods, and QA/QC procedures, please refer to the Turmalina Technical Report filed on Jaguar's 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 black 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 world-class 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 191,000 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 ("Mineração Turmalina Ltda" or "MTL") and Caeté Gold Mine Complex ("Mineração Serras do Oeste Ltda" or "MSOL") 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 <a href="https://www.jaguarmining.com">www.jaguarmining.com</a>.

### For further information please contact:

Rodney Lamond President & Chief Executive Officer rodney.lamond@jaguarmining.com 416-847-1854 Joanne Jobin Vice President, Investor Relations joanne.jobin@jaguarmining.com 416-847-1854

#### 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", "could", "would", "might", or "will" be taken, occur or be achieved. This news release contains forward-looking information regarding potential and expected production, grades, tonnes milled, recovery rates, cash operating costs, and definition/delineation drilling at the Turmalina Gold Mine. The Company has made numerous assumptions with respect to forward-looking information contained herein, including, among other things, assumptions about the timeline and development of the drill program at the Turmalina Gold Mine; 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

Table #1

Turmalina Gold Mine Drill Results										
Hole ID	Date	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	Orebody			
FTS-1242	2016-04-11	85.2	99.4	14.3	8.2	8.71	A-SE			
	INCLUDING	130.5	135.2	4.7	2.7	10.39	A-SE2			
FTC 1056	2016 01 14	05.0	01.9	6.6	4.7	2.04	A NIVA/			
FTS-1256	2016-01-14	85.2	91.8	6.6	4.7	3.94	A-NW			
FTS-1306	2016-07-14	130.5	152.8	22.3	10.4	6.08	A-NW			
FTS-1307	2016-02-08	133.3	156.5	23.2	6.5	6.23	A-NW			
FTS-1308	2016-06-20	105.9	109.6	3.6	2.1	2.07	A-NW			
FTS-1311	2016-06-07	134.6	142.1	7.5	4.2	7.09	A-NW			
FTS-1312A	2016-10-08	120.2	125.8	5.6	3.8	8.50	A-NW			
FTS-1313	2016-08-18	123.0	125.8	2.8	2.3	1.77	A-NW			
FTS-1314	2016-05-07	119.8	127.0	7.2	7.2	8.89	A-NW			
FTC 4220	2016-04-08	38.5	46.0	7.5	5.0	3.33	A-SE			
FTS-1320	INCLUDING	61.2	69.9	8.7	3.9	5.08	A-SE1			
	INCLUDING	91.8	94.7	2.9	2.3	16.54	A-SE2			
FTS-1321	2016-08-15	31.1	50.7	19.6	9.2	7.58	A-SE			
FTS-1322	2016-10-28	48.7	57.2	8.4	3.8	2.65	A-SE			
FTS-1323	2016-01-11	32.0	60.0	28.0	5.4	1.76	A-SE			
		106.3	108.0	1.8	2.0	1.85	A-SE1			
FTS-1324	2016-12-14	35.8	52.9	17.1	14.6	11.33	A-SE			
FTS-1325	2016 02 00	21.2	35.4	14.2	10.8	9.95	A-SE			
F13-1323	2016-02-09	21.2	35.4	14.2	10.0	9.95	A-3E			
FTS-1326	2016-09-19	134.5	151.1	16.6	15.8	2.89	C-SE			
	INCLUDING	147.3	151.1	3.8	3.6	9.27	C-SE			
FTS-1327	2016-08-24	120.7	124.5	3.8	2.7	1.93	A-NW			
-										
FTS-1328	2016-08-29	146.6	154.6	8.1	3.5	7.05	A-NW			
FTS-1331	2016-11-30	63.9	79.6	15.7	13.1	4.14	A-NW			
FTS-1332	2016-12-14	86.9	95.5	8.6	7.5	4.32	A-NW			
FTS-1333	2016-12-19	76.6	90.4	13.8	11.4	4.30	A-NW			
FTS-1334	2016-12-20	56.3	101.2	44.9	15.1	4.04	A-NW			
F 13-1334	2010-12-20	JU.3	101.2	44.9	13.1	4.04	M-INVV			

Turmalina Gold Mine Drill Results											
Hole ID	Date	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	Orebody				
FTS-1335	2016-12-27	60.1	70.4	10.3	2.1	4.95	A-SE				
1 10-1000		110.6	113.4	2.8	3.3	10.72	A-SE2				
			1-0-								
FTS-1337	2016-09-29	145.0	153.7	8.7	8.6	0.88	C-SE				
FTS-1338	2016-05-10	133.1	143.4	10.3	10.1	3.93	C-SE				
	INCLUDING	1331.0	135.9	2.8	2.7	7.04	C-SE				
					'						
FTS-1339	2016-10-14	153.3	164.8	11.5	9.6	2.14	C-SE				
FTS-1340	2016-10-28	136.7	157.5	20.9	18.2	1.61	C-SE				
FTS-1341	2016-10-11	140.8	147.2	6.4	5.9	2.96	C-SE				
1 10 1041	2010 10 11	140.0	177.2	0.4	0.0	2.00	0 02				
FTS-1343	2016-03-01	148.9	154.6	5.7	4.1	0.87	C-SE				
FTS-1344	2016-12-16	112.3	123.5	11.3	5.5	3.08	A-NW				
FTS-1345	2016-12-21	83.3	87.9	4.6	2.9	1.62	A-NW				
F13-1343	2010-12-21	03.3	67.9	4.0	2.9	1.02	A-INVV				
FTS-1346	2016-12-21	122.8	131.3	8.5	5.7	4.87	A-NW				
FTS-1347	2016-12-30	111.0	117.3	6.3	4.2	1.94	A-NW				
	0040 40 00	100.1	447.4	45.0	110	0.05	0.05				
FTS-1355	2016-12-26 INCLUDING	132.1 140.3	147.4 <b>146.4</b>	15.3 <b>6.1</b>	14.9 <b>6.0</b>	3.65 <b>6.39</b>	C-SE C-SE				
	INCLUDING	140.3	140.4	0.1	0.0	0.33	U-3E				
FTS-1356	2016-12-26	124.8	140.1	15.4	14.1	2.26	C-SE				
					-	'					
FTS-1357	2016-12-26	126.0	135.6	9.6	9.5	3.17	C-SE				

Figure #1
Orebody A and Orebody C location placement

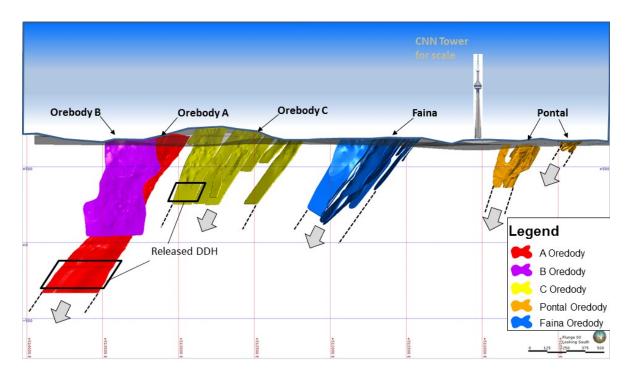


Figure #2

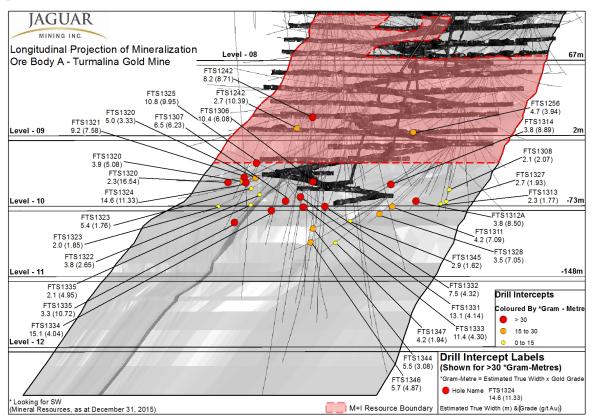


Figure #3

