



NEWS RELEASE

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FOR IMMEDIATE RELEASE

TSX: JAG

Jaguar Mining Reports Q4 and Full Year 2017 Production and Provides 2018 Outlook

Toronto, Canada, January 17, 2018 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX:JAG) today announced preliminary fourth quarter 2017 ("Q4 2017") operating results for its core assets located in the Iron Quadrangle area of Minas Gerais, Brazil. All figures are in US dollars unless otherwise expressed. Detailed Q4 2017 financial results are expected to be released on or around March 28, 2018.

Rodney Lamond, President and CEO, Jaguar Mining commented: "In 2017, we made meaningful progress at our core producing assets Turmalina and Pilar mines in terms of production, exploration and managing cash costs company-wide. Turmalina delivered improved fourth quarter results compared to the previous two quarters in both head grade and gold production following accelerated development and stoping activities into new high-grade mining areas of Orebodies A and C. As head grades continue to increase at Pilar, we expect lower cash operating costs and increasing gold production in 2018, potentially at new record levels".

"Our core producing assets are benefitting from significant investments during 2017, including 48.5 kilometres of diamond drilling, 7.76 kilometres of underground development, sustaining capital expenditures and equipment purchases. The exploration success achieved during 2017 at Turmalina and Pilar will allow the Company to begin realizing the upside potential of creating long-term sustainable value through increasing near-mine Ore Reserves and Mineral Resources."

2017 Key Milestones and Exploration Success

- Invested total capital of approximately \$23M in 2017, which yielded positive results with approximately \$5M invested in exploration drilling. Increased definition, infill and exploration drilling metres by 28% to 48,498 m compared to 2016.
- Completed more than 48,000 m of targeted diamond drilling for exploration and growth programs across our core assets focusing on upgrading and converting resources and adding new resources. Currently 9 drills are in operation at Jaguar's core assets.
- Significantly increased exploration drilling year-over-year, 28.5 km (61% increase) drilled at Turmalina Mine ("Turmalina") and 18.8 km (68% increase) at Pilar Mine ("Pilar"). Secondary development at Pilar increased 64% year-over-year.
- Exploration success at Pilar (see press releases August 16 and September 20, 2017) and Turmalina (see press releases February 8 and November 28, 2017). Identified high-grade mineralization on the significant down plunge extensions to main producing ore bodies. Pilar drill results demonstrated expected continuity of high-grade mineralized structures well beyond current mine plans and provided the potential for adding substantial new resources to significantly extend mine life.
- Completed the rebuild and dry commissioning of the paste fill plant at Turmalina. Final commissioning and start-up of the plant to be completed in the beginning of 2018.
- Turmalina purchased 35.9 hectares of private land over its Zona Basal deposit, which the Company plans to test mine in 2018.

Fourth Quarter and Full Year 2017 Operating Highlights

- Total gold production in 2017 was 84,151 ounces, reflecting 22% increase year-over-year in production at Pilar to 34,017 ounces, the highest production since 2012.

- Increased total gold production to 21,311 ounces in Q4 2017, up 2.5% compared to 20,780 ounces in Q3 2017; however, lower compared to 25,408 ounces in Q4 2016. Improved progress at Turmalina: 12,245 ounces of gold produced in Q4 2017, 27% higher over Q3 2017.
- Turmalina average grade recovered significantly in Q4 2017, up 42% to 4.41 g/t Au over Q3 2017 reflecting mining from higher-grade area of Orebody A. Mining volumes continue to increase from higher grade Orebody A with more working stopes.
- Pilar average head grade of 3.46 g/t Au in FY 2017 was the highest annual average grade since the start-up of the mine. Year-over-year head grade increased 14% in Q4 2017 and 5% for full year 2017 (“FY 2017”).
- Completed 13,973 m or 41% more definition, infill and exploration drilling metres in Q4 2017, compared to 9,914 m in Q4 2016 and 21% more metres than Q3 2017.

Definitions: g/t Au – grams per tonne gold

Improving Cash Operating Costs

- Improved consolidated cash operating costs (“COC”) to \$743 per ounce sold during Q4 2017, compared to \$809 in Q3 2017, and \$735 in Q4 2016. COC for the second half of 2017 decreased to \$775 per ounce sold compared to \$895 in the first half of 2017.
- Lower unit costs are a result of a continued focus on profitable ounce production, waste reduction and solid progress made on company-wide cost reduction programs. The Company estimates that the Q4 2017 operating cash flow will be between \$5-6M.
- Preliminary cash balance of approximately \$18.6M as of December 31, 2017, compared to a cash balance of \$19.2M at September 30, 2017.

Mr. Lamond continued: “Our fourth quarter results demonstrate excellent progress made on our strategy of delivering profitable ounce production to generate operating cash flow for re-investment in sustaining and growth exploration projects and to pay down debt. With this focus, we continued to make operational and strategic improvements in all key areas including Geological Modeling, Block Modeling and Mine Design. Operational Excellence programs, both underground and in our processing facilities, have helped deliver the efficiencies and productivity needed to continue reducing cash operating costs. As a result, cash costs decreased to \$775 per ounce sold in the second half of 2017, compared to \$895 for the first half. During the fourth quarter, cash costs decreased 8% to \$743 per ounce sold compared to Q3 2017.

“Turning to 2018, we will continue to focus on increasing operating cash flow and investing capital in sustaining and growth projects, and reducing debt. The results of our 2017 exploration success will be summarized in the updated mineral resource and ore reserve statement for Pilar and an update mineral resource statement for Turmalina for Q1 2018. Our exploration strategy for 2018 will be to convert the newly reported resources into reserves through infill drilling and productive sub-level development. While this work will take 12 to 18 months to complete, the goal is to establish a large reserve base and convert the perception of a short life mine into a long-term sustainable asset.

“Based on our plan, the Company will be positioned to achieve strong production growth and increased mining flexibility by the end of 2018 and beyond. In 2018, we expect gold production of approximately 90,000–105,000 ounces.”

2018 Guidance

Guidance for FY 2018 for Turmalina, Pilar and Roça Grande (“RG”) mines is as follows:

2018 Production & Guidance cost	Turmalina		CCA				Consolidated	
			Pilar		RG			
	Low	High	Low	High	Low	High	Low	High
Gold production (ounces)	50,000	57,000	36,000	42,000	4,000	6,000	90,000	105,000
Cash Operating Cost (US\$/oz sold)	675	775	700	800	825	925	700	800
All-in sustaining cost (US\$/oz sold)	900	1,000	950	1,050	1,100	1,250	950	1,100
Sustaining Capex (US\$'000)	12,000	15,000	9,000	11,000	1,000	2,000	22,000	28,000
Development								
Primary waste (m)	2,200	2,800	2,000	2,200	300	400	4,500	5,400
Secondary ore (m)	1,800	2,100	1,000	1,150	200	250	3,000	3,500
Definition, infill and exploration drilling (m)	18,000	25,000	14,000	20,000	3,000	5,000	35,000	50,000

Preliminary Cash Balance

The Company had a preliminary cash balance of approximately \$18.6M as of December 31, 2017, compared to a cash balance of \$19.2M as at September 31, 2017. During the fourth quarter, the Company received an additional \$2M from Avanco for the second instalment of the Accelerated Earn-in Agreement signed for the Gurupi Project.

Capital investments and growth exploration in the second half of 2017 were primarily funded through operating cash flows. In addition to the continuing in capital expenditures, the Company also paid \$3M in debt principal and interest payments during the quarter.

Fourth Quarter and Full Year 2017 Operating Summary

Quarterly Summary	Q4 2017				Q4 2016			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	95,000	81,000	14,000	190,000	122,000	84,000	31,000	237,000
Average head grade (g/t)	4.41	3.53	2.19	3.87	4.39	3.11	1.93	3.61
Recovery %	91.2%	89.4%	89.5%	90.3%	92.5%	90.8%	90.8%	91.7%
Gold ounces								
Produced (oz)	12,245	8,156	911	21,311	16,101	7,569	1,738	25,408
Sold (oz)	12,142	7,880	819	20,841	16,024	7,326	1,760	25,110
Preliminary Financial Data								
Cash Operating Costs (\$/oz)	646	840	1,247	743	562	942	1,454	735
Avg. Realized gold price (\$/oz)				1,278				1,205
Avg. US\$: BRL Fx (US\$1:BRL)				3.25				3.30
Development								
Primary (m)	363	475	70	908	483	608	-	1,091
Secondary (m)	261	416	-	677	466	718	21	1,205
Definition, infill, and exploration drilling (m)	9,345	4,138	490	13,973	5,123	2,588	2,203	9,914

Annual Summary	FY 2017				FY 2016			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	427,000	338,000	68,000	833,000	502,000	290,000	89,000	881,000
Average head grade (g/t)	3.65	3.46	2.34	3.47	4.28	3.30	2.12	3.77
Recovery %	91.0%	90.2%	90.3%	90.6%	91.5%	90.6%	90.7%	91.2%
Gold ounces								
Produced (oz)	45,466	34,017	4,668	84,151	63,259	27,846	5,503	96,608
Sold (oz)	45,575	33,793	4,382	83,750	63,639	28,138	5,500	97,277
Cash Operating Costs (\$/oz)	706	939	1,404	837	566	926	1,425	719
Development								
Primary (m)	1676	1634	264	3,573	2,985	2,262	215	5,462
Exploration (m)	171	13	31	215	78	125	-	203
Secondary (m)	1,644	2,124	201	3,969	2,620	1,293	838	4,751
Definition, infill, and exploration drilling (m)	28,456	18,799	1,243	48,498	17,648	11,167	9,045	37,860

- Consolidated gold production increased 3% to 21,311 ounces in Q4 2017 compared to 20,781 ounces in Q3 2017, though lower than 25,408 ounces in Q4 2016. Consolidated gold production for 2017 was 84,151 ounces compared to 96,608 ounces in 2016, mainly due to challenges experienced at Turmalina in the first half of 2017, which deferred approximately 12,000 ounces.
- Pilar achieved a record in production in FY 2017 with 34,017 ounces, the highest production since 2013 at a head grade of 3.46 g/t Au, an annual record for the mine. Pilar continued to see improvement in advancing ore development into the higher-grade Orebodies BF II and BF.
- Turmalina improved production in Q4 2017 to 12,245 ounces, up 27% compared to the Q3 2017, reflecting increasing grade from mining deeper in Orebody A. Full year 2017 production of 45,466 ounces was lower than 63,259 ounces in 2016 mainly due to mining issues encountered at level 9 during Q1 and Q2 2017.
- In December 2017, Turmalina produced 4,930 ounces, the highest production since Q1 2017 when geotechnical issues were encountered at level 9. Turmalina is currently mining on level 10 and 11 below the area of geotechnical issues and with the current mining practices should not encounter this problem in the future.
- The Company completed 908 m and 3,573 m of primary development during the fourth quarter and full year 2017, respectively, compared to 1,091 m and 5,463 m in the comparative 2016 periods.
- Ore processed was 190,000 tonnes in Q4 2017 (Q4 2016 - 237,000 tonnes) at a higher average head grade of 3.87 g/t Au (Q4 2016 - 3.61 g/t Au). In Q4 2017, Turmalina processed 95,000 tonnes (Q4 2016 - 122,000 tonnes) and continued to see an increased average head grade of 4.41 g/t Au (Q4 2016 - 4.39 g/t Au) as mining now has access to lower Orebody A containing higher grades.
- Caeté plant processed 95,000 tonnes in Q4 2017 (Q4 2016 - 115,000 tonnes) at an average head grade of 3.33 g/t Au (Q4 2016 – 2.79 g/t Au).
- Pilar Gold Mine grade of 3.53 g/t Au increased compared to Q4 2016 grade of 3.11 g/t Au as mining activity increased into the higher-grade BF II Orebody. Additionally, total production at Pilar declined, quarter over quarter in Q4 2017 to 8,156 ounces due to equipment availability issues in October and operational issues caused by a blast next to a zone of weakness on level 9 sublevel 3 causing a delay in the drilling cycle in November.

- The higher average head grade and lower tonnage reduced consolidated CoC per ounce sold in Q4 2017.
- Roça Grande Mine ("Roça Grande") contributed to 911 ounces of gold production in Q4 2017 and 4,668 ounces in FY 2017 with improving grade compared to FY 2016. Improved performance and operational efficiencies, including optimization of working shifts, resulted in lower cash operating costs.
- Total 2017 ore processed by all the operating assets was 833,000 tonnes (average head grade of 3.47 g/t Au), as compared to 881,000 tonnes processed in 2016 (average head grade of 3.77 g/t Au).

Operational Excellence Initiatives

- The Company continues to make meaningful progress on cost reductions and operational excellence. All sites have established operational excellence teams responsible for reviewing business processes to identify efficiency and productivity opportunities as well as direct cost reduction opportunities.
- Excellence teams have lowered operating costs and improved operational efficiency across the Company. During 2018, the cost savings and efficiencies are expected to continue effective cost reduction and containment. The initiatives include:
 - Reducing energy consumption by optimizing the main ventilation fans during shift changes after the blast clearance, as well as finding and reducing unnecessary electrical consumption;
 - Improving the metres per blast during development;
 - Optimizing underground haulage by improving the average haul truck loads closer to the optimum load per trip; and,
 - Drilling efficiency with the fandrills, equipment utilization and preventive maintenance to improve equipment availability, improving tire life on underground equipment, warehouse inventory controls, reduction and optimization of plant consumables.
- Turmalina commenced an initiative to improve the quality of drilling and blasting focused on improving the fragmentation of the blasts, which is expected to decrease overall drilling and blasting costs and with additional cost savings in crushing also anticipated.

In 2017, the road used to haul ore from the Pilar Mine to the Caeté plant was interrupted by a slope failure. During the first half of 2017, Jaguar incurred higher haulage costs by using a longer and more restricted route through the town of Rancho Novo. During this period, a long-term right-of-way was purchased and a new route constructed allowing for an overall shorter haulage between the Pilar mine and the Caeté plant. This has resulted in overall lower haulage cost per tonne for moving ore between the sites.

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 Geology and Exploration 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").

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 64,000 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. 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 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 made 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," "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. All statements, other than statements of historical fact, may be considered to be or include forward-looking information. This news release contains forward-looking information regarding, among other things, expected sales, production statistics, ore grades, tonnes milled, recovery rates, cash operating costs, definition/delineation drilling, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of projects and new deposits, success of exploration, development and mining activities, currency fluctuations, capital requirements, project studies, mine life extensions, restarting suspended or disrupted operations, continuous improvement initiatives, and resolution of pending litigation. 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; 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 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; uncertainties with respect to the price of gold, labour 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 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). 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 news 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 September 30, 2017, is set out in the Company's third quarter 2017 Management Discussion and Analysis (MD&A) filed on SEDAR at www.sedar.com.*