



NEWS RELEASE

January 14, 2020
FOR IMMEDIATE RELEASE

TSX: JAG

Jaguar Mining Reports 20,029 Ounces Produced In Fourth Quarter Continues Sustainable Gold Production Growth Pays Down 100% of Gold Loan

Toronto, January 14, 2020 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) today announced interim production results for the fourth quarter of 2019 ("Q4 2019"). The Company is pleased to announce that it continues to achieve strong operational performances and sustainable gold production growth at the Pilar Gold Mine ("Pilar") and Turmalina Gold Mine ("Turmalina") located in Minas Gerais, Brazil. Financial results for Q4 2019 will be reported and filed on SEDAR on or before March 20, 2020. All figures are in US Dollars, unless otherwise expressed.

Q4 2019 Operating Highlights

Vern Baker, CEO, commented, "Jaguar is delighted to be able to report continuing progress toward our goal of 100,000 ounces per year with steady production increases quarter-over-quarter. Both Pilar and Turmalina mines continued producing mined tonnes at sustainable levels, as well as development metres at levels well above sustainable levels, allowing us to continue forecasting improved future production levels. Our sustainable production improvement was matched by safety performance with no lost-time accidents occurring in Q4 2019."

- Q4 2019 witnessed the third consecutive quarter of sustainable production growth: consolidated gold production increased by 18% with 20,029 ounces produced compared to 17,044 ounces in Q4 2018, and increased 4% and 9% compared with Q3 and Q2 production, respectively, and increased 22% from Q1 production levels;
- Pilar gold production increased 10% with 10,255 ounces produced compared to 9,301 ounces in Q4 2018;
- Turmalina gold production increased 26% with 9,774 ounces produced compared to 7,743 ounces in Q4 2018;
- Total development metres increased 52% to 2,278 metres compared to 1,508 metres in Q4 2018; and decreased 10% from 2,527 metres in Q3 2019;
- A total definition, infill and exploration drilling campaign achieved 12,196 metres in Q4 2019, as two additional rigs were mobilized at both operations to continue expanding the resource envelope;
- Strong liquidity as at December 31, 2019, with a cash and unsold bullion balance of \$11.7 million, as compared to \$12.2 million of cash and unsold bullion on September 30, 2019;
- By the end of Q4 2019, Jaguar paid down 100% of its outstanding gold loan to Auramet. The repayment of the loan provides more liquidity to the balance sheet and cash flow for 2020; \$1.1 million in finance payments were made during Q4 2019; the Company's remaining debt of \$4 million is now comprised of a number of short-term loans from Brazilian banks.

Vern continued: "Both mines continue to demonstrate the ability to handle the level of tonnes and development metres needed to be sustainable operations. While limitations on stoping options kept average mill head grades lower, development rates are now opening up options at both mines, and we expect to see the realized grades increasing over the next several quarters. At Turmalina, mining in the A12 block was initiated at the end of December, providing access to the mine's better grade reserves and a mining area that will be sequenced into the mine plan. Overall ore tonnes and grade at Turmalina continue to be restricted by developed stope availability. Pilar head grades were limited by a stoping sequence that included several lower grade blocks. Pilar

also initiated work on a new level with blasting of the first stopes on the 12 Level of the mine and expects to see grades moving back to reserve levels.”

The table below summarizes the gradual improvements of our consolidated operations for the 2019 financial year.

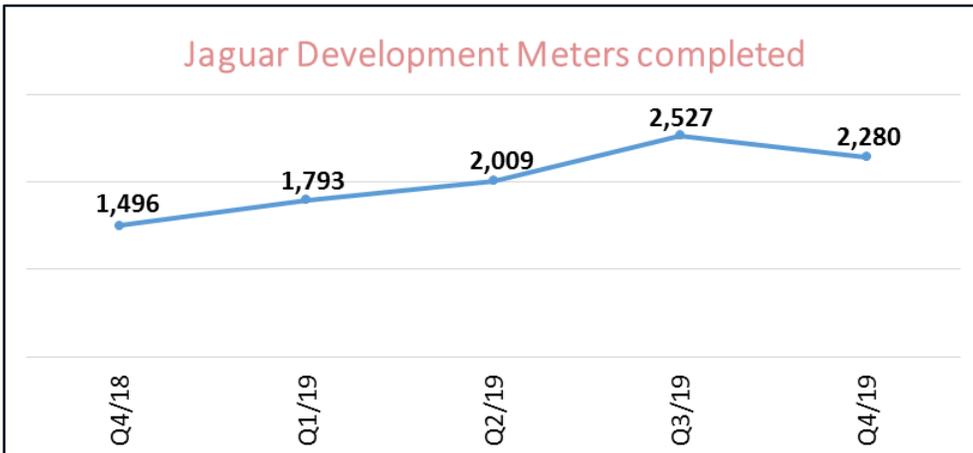
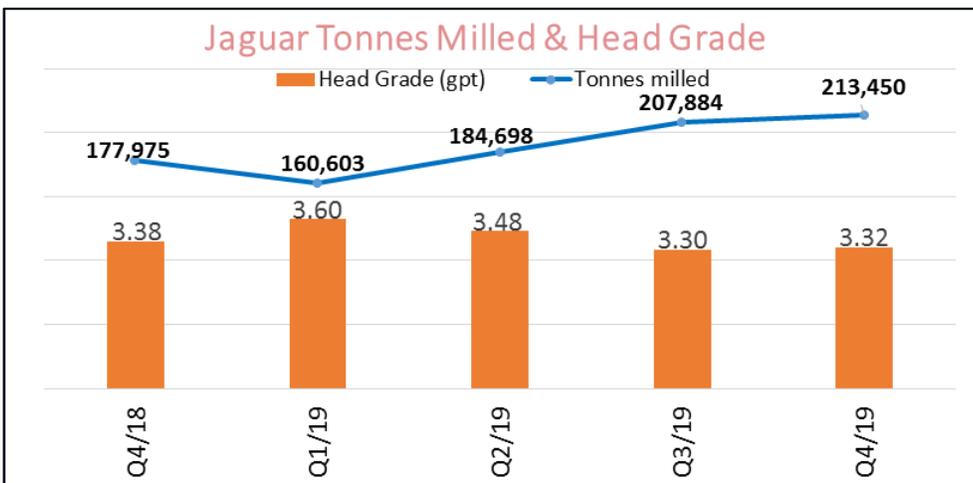
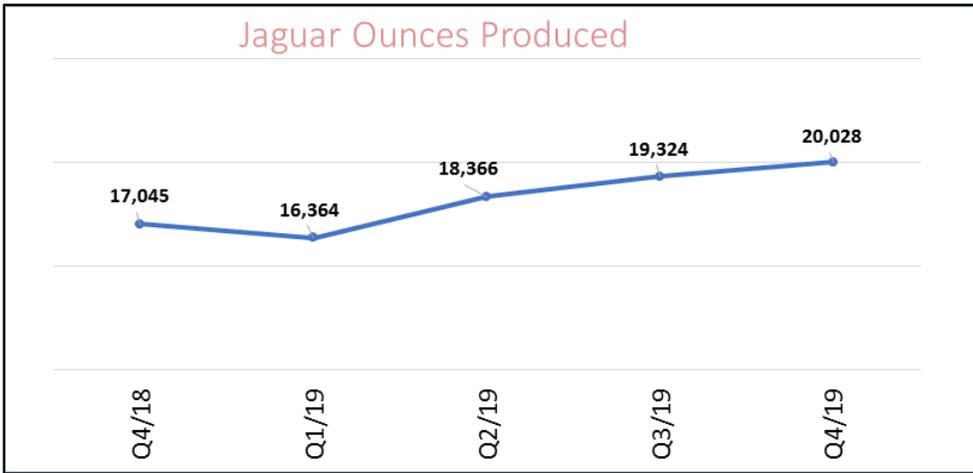
Quarterly Summary	2019				
	Q1	Q2	Q3	Q4	FY ¹
Tonnes milled (t)	160,000	184,000	208,000	214,000	767,000
Average head grade (g/t)	3.59	3.48	3.30	3.32	3.41
Recovery %	87.7%	88.6%	87.8%	87.9%	88.0%
Gold ounces					
Produced (oz.)	16,364	18,366	19,324	20,028	74,082
Sold (oz.)	16,821	18,598	17,417	21,060	73,897
Primary Development (m)					
Turmalina	573	783	1,001	936	3,293
Pilar	588	569	515	517	2,189
Secondary Development (m)					
Turmalina	321	330	436	455	1,542
Pilar	310	369	575	370	1,624

1. Totals may not add due to rounding differences

Fourth Quarter Comparative Operating Results

Quarterly Summary	Q4 2019				Q4 2018			
	Turmalina	Pilar	Roça Grande	Total	Turmalina	Pilar	Roça Grande	Total
Tonnes milled (t)	99,000	115,000	-	214,000	75,000	103,000	-	178,000
Average head grade (g/t)	3.44	3.21	-	3.32	3.56	3.25	-	3.38
Recovery %	89.2%	86.7%	-	87.9%	89.7%	86.9%	-	88.1%
Gold ounces								
Produced (oz.)	9,772	10,255	-	20,028	7,743	9,301	-	17,044
Sold (oz.)	10,063	10,997	-	21,060	8,207	9,416	-	17,623
Development								
Primary (m)	936	517	-	1,453	506	279	-	785
Secondary (m)	455	370	-	825	155	564	-	719
Definition, infill, and exploration drilling (m)								
	7,192	5,004	-	12,196	9,642	2,651	-	12,293

The following graphs demonstrate Jaguar's steady trend back to sustainability compared to previous quarters.



2020 Guidance

The Company is also pleased to disclose expected production and cost guidance for the financial year 2020.

Production & Cost Guidance	Consolidated	
	Range	
Gold production (ounces)	84,000	94,000
Cash operating costs (per ounce sold)	\$700	\$800
All-in sustaining costs (per ounce) ¹	\$1,075	\$1,200

1. FX rate R\$4.0 BRL = \$1 USD

Vern commented on the Company's outlook: "Jaguar is moving into 2020 with confidence and in a much stronger operating position than over the past few years. We continue to build on our excellent operating teams at both operations and have stayed the course in the execution of our sustainable plans during some very difficult and challenging quarters. The corporate structure is now lean and able to make appropriate decisions quickly. We expect to continue to improve across all sectors over the next year, and we look forward to reaching and reporting on sustainable 100,000 gold ounce production levels in the near future. It is management's belief that we will continue to improve across all sectors over the next two quarters and we expect to be at our sustainable production rate within the second half of 2020. We would like to thank our shareholders for their ongoing support. We now have a robust cash balance, and we expect Jaguar to be in a positive free cash flow position this financial year."

Exploration Status Update

In Q4 Jaguar not only continued its in-house diamond drilling program to maintain and extend reserves but initiated an expansion of its exploration program. Within the quarter two contractor drills were mobilized and began drilling. One drill in each mine. These drills are focused on exploration targets to expand the resource base and test new opportunities at each mine. Jaguar's drive for sustainable production continues with this increased expenditure on exploration. Commitments for exploration in 2020 are significantly higher than 2019, and Jaguar expects to pursue geologic opportunities identified by its core geology team over the last year.

Corporate Update

The Company also announces the resignation of Mr. Robert Getz from the Board of Directors. Rodney Lamond, Chairman of Jaguar Mining, commented, "Robert's growing commitments to other professional endeavours was the basis for his decision to resign. We thank Robert for his invaluable contributions to the Board since 2016. This resignation also aligns with the Company's strategy to reduce the number of total Board members, and therefore Jaguar will not be filling this vacancy".

Qualified Persons

Scientific and technical information contained in this press release has been reviewed and approved by Jonathan Victor Hill, BSc (Hons) (Economic Geology - UCT), FAUSIMM, 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 17th 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 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 two 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 Mining Complex (Pilar Mine and Caeté Plant). The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012. The Roça Grande Mine has been on care and maintenance since April 2018. Additional information is available on the Company's website at www.jaguarmining.com.

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Forward-Looking Statements and Cautionary Notes

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 involves 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, procurement fraud and gold bullion thefts and losses (and the risk of inadequate insurance, or the inability to obtain insurance, to cover these risks). In addition, the Company's principal operations and mineral properties are located in Brazil and there are additional business and financial risks inherent in doing business in Brazil as compared to the United States or Canada. In Brazil, corruption represents a challenge requiring extra attention by those who conduct business there. Corruption does not only occur with the misuse of public, government or regulatory powers, it also can occur in a business's supplies, inputs and procurement functions (such as illicit rebates, kickbacks and dubious vendor relationships) as well as the inventory and product sales functions (such as inventory shrinkage or skimming). Employees as well as external parties (such as suppliers, distributors and contractors) have opportunities to commit theft, procurement fraud and other wrongs against the Company. While corruption, bribery and fraud and theft risks can never be fully eliminated, the Company reviews and implements controls to reduce the likelihood of these events occurring. The Company's present and future business operations face these risks. Accordingly, for all of the reasons above, 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.