

JAGUAR MINING REPORTS FOURTH QUARTER AND FULL YEAR 2023 PRODUCTION RESULTS AND PROVIDES OUTLOOK FOR 2024

Toronto, January 16, 2024 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG, OTCQX:JAGGF) today announced preliminary production results for the fourth quarter and full year 2023. Full financial results for the quarter and full year will be reported and filed on SEDAR+ on or before March 28, 2024. All figures are in US Dollars, unless otherwise expressed.

Fourth Quarter and Full Year 2023 Operating Highlights

- Fourth quarter production increased 6.7% over the previous quarter continuing the positive trend of increasing production established in the third quarter, as modifications to mining methods and an emphasis on efficient operation continued to take effect.
- Fourth quarter consolidated gold production was 18,481 ounces, compared to 17,316 ounces produced in the third quarter, and 21,116 ounces produced in the fourth quarter of 2022. Annual consolidated gold production for 2023 was 70,702 ounces compared to 2022 production of 80,968 ounces.
- Fourth quarter consolidated tonnage processed was 195,595 tonnes at 3.35 grams per tonne (g/t) compared to 209,000 tonnes at 3.61 g/t in the fourth quarter of 2022. Annual consolidated tonnage processed was 812,954 tonnes at 3.09 g/t, compared to 837,000 tonnes at 3.43 grams g/t in 2022.
- In the fourth quarter, the Company completed primary development of 1,123 metres, secondary development of 1,157 meters, and exploration development of 513 metres; totalling 2,793 metres compared to the fourth quarter of 2022 where development totalled 3,103 metres. For the full year 2023, development completed was 4,959 metres of primary, 5,219 metres of secondary, and 1,655 metres of exploration for a total of 11,833 metres, compared to the full year 2022 total development of 11,570 metres. These development rates provide sustainable progress on the ramp, ore development, as well as exploration drives.
- Diamond drilling completed during the fourth quarter was 10,271 metres compared to the fourth quarter of 2022 drilling of 11,570 metres. Diamond drilling completed in 2023 was 44,843 metres compared to 88,150 metres drilled in 2022. The reduction in drilling year-over-year was the result of reduced contracted diamond drill meters, as several major drilling programs (including Faina surface drilling) were finished, and prudent cash management resulted in the Company minimizing then eliminating underground contractor diamond drilling.
- The Company's cash position as at December 31, 2023 was \$22.3 million compared to cash of \$20.0 million as at September 30, 2023. During the fourth quarter, the Company benefitted from higher realized gold prices which was the main driver of the increase in cash.

Quarterly Summary	Q4 2023			Q4 2022		
	Turmalina	Pilar	Total	Turmalina	Pilar	Total
Tonnes milled (t)	99,293	96,302	195,595	101,000	108,000	209,000
Average head grade (g/t)	3.02	3.68	3.34	3.50	3.71	3.61
Recovery (%)	88	88	88	86	88	87
Gold ounces						
Produced (oz)	8,457	10,025	18,482	9,803	11,313	21,116
Sold (oz)	8,455	9,643	18,098	9,269	11,671	20,940
Development						
Primary (m)	697	426	1,123	642	341	983
Secondary (m)	558	599	1,157	833	705	1,538
Exploration Development (m)	513	-	513	374	208	582
Definition, infill and exploration drilling (m)	6,063	4,208	10,271	6,061	5,509	11,570

Annual Summary	2023			2022		
	Turmalina	Pilar	Total	Turmalina	Pilar	Total
Tonnes milled (t)	408,378	404,576	812,954	383,000	444,000	827,000
Average head grade (g/t)	2.92	3.27	3.09	3.28	3.57	3.44
Recovery (%)	86	88	87	87	88	88
Gold ounces						
Produced (oz)	33,117	37,585	70,702	36,166	44,802	80,968
Sold (oz)	33,449	37,017	70,466	35,852	44,197	80,049
Development						
Primary (m)	3,122	1,837	4,959	2,309	1,350	3,659
Secondary (m)	2,615	2,604	5,219	3,009	2,254	5,263
Exploration Development (m)	1,655	-	1,655	1,510	1,138	2,648
Definition, infill and exploration drilling (m)	22,963	21,880	44,843	53,971	34,179	88,150

Vern Baker, President and CEO of Jaguar, stated: "I am pleased to report our fourth quarter and full year production results for 2023. With almost 18,500 ounces produced in the quarter, we are seeing the benefits from adjustments and work that started earlier in the year. Increases in production over the last two quarters and a higher realized gold price in the fourth quarter resulted in a strong year end cash position of over \$22 million.

In 2023, we funded the continued development to access the Faina Resource. That focus on the development of Faina will continue in 2024 as both infrastructure and ore development will continue throughout the year. Our first stoping at Faina is expected to occur in the second half of the year and ounce production will begin increasing at that point. We are confident in our ability to continue current production levels and to generate cash while we develop Faina and expect to see production increases beginning in the second half of the year."

2024 Outlook

In 2024, the Company expects production levels at Turmalina and Pilar to be consistent with the fourth quarter of 2023. It is expected that Faina will contribute to production in the second half of the year, resulting in an increase in overall production from 2023 levels. All-in costs are expected to improve throughout 2024, with higher production

in the second half pushing unit costs per ounce down. The Company expects to provide more formal guidance once it has further visibility on the timing and ramp-up of production at Faina.

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), FAUSIMM, Vice President Geology and Exploration, 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 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 third largest gold land position in the Iron Quadrangle with over 50,000 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. 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 and Roça Grande Mines, 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 temporary care and maintenance since April 2019. 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, the anticipated impact of planned changes in mining systems and cost cutting initiatives on the Company's future performance and production results, information related to 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). 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.sedarplus.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.