

October 11, 2022 NEWS RELEASE FOR IMMEDIATE RELEASE

TSX:JAG, OTCQX:JAGGF

JAGUAR MINING REPORTS THIRD QUARTER PRODUCTION RESULTS

Toronto, October 11, 2022 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) today announced interim gold production results for the Third quarter of 2022 ("Q3 2022"). Financial results for Q3 2022 will be reported and filed on SEDAR on or before November 15, 2022. All figures are in US Dollars, unless otherwise expressed.

Q3 2022 Operating Highlights

- Consolidated gold production for the quarter was 21,161 ounces, 6% lower than Q3 2021 production of 22,603 ounces. Tonnes of ore milled increased to 216,000 for the quarter compared to 214,000 in Q3 2021.
 - Pilar gold production was lower by 9% with 11,195 ounces for the quarter compared to 12,338 ounces produced in Q3 2021;
 - Turmalina gold production was lower by 3% with 9,966 ounces for the quarter, compared to 10,265 ounces produced in Q3 2021;
- Total development of 3,000 metres for Q3 2022, represented an increase of 15% compared to 2,615 metres for the same period in 2021.
- Total definition, infill and exploration drilling of 21,359 metres for the quarter represented an increase of 13% compared to 18,852 metres for the same period in 2021.
- Treasury position as of September 30, 2022, with cash of \$30 million compared to cash of \$30.5 million on June 30, 2022. During the quarter, the Company paid a dividend of \$2.2 million.

Q3 2022 Operating Results

Quarterly Summary	Q3 2022			Q3 2021		
	Turmalina	Pilar	Total	Turmalina	Pilar	Total
Tonnes milled (t)	105,000	111,000	216,000	103,000	119,000	214,000
Average head grade (g/t)	3.41	3.51	3.46	3.49	3.68	3.59
Recovery %	87%	89%	88%	89%	88%	88%
Gold ounces						
Produced (oz)	9,966	11,195	21,161	10,265	12,338	22,603
Sold (oz)	10,867	11,254	22,121	10,057	13,190	23,247
Development						
Primary (m)	1,070	671	1,741	804	469	1,273
Secondary (m)	677	582	1,259	704	638	1,342
Definition, infill, and exploration drilling (m)	11,354	10,005	21,359	9,848	9,004	18,852

Vern Baker, President and CEO of Jaguar Mining stated: "In terms of production, Turmalina actually had one of its best quarters since 2021; the mine showed good consistency in both stoping and development, and we expect that to strengthen over the next quarter. At Pilar, production was slightly lower due to cycling issues related to backfilling limited higher-grade stoping blocks. Pilar expects to be back on track with consistent performance in the next quarter."

Jaguar's third quarter continues to be defined by our internal development projects and exploration success. At Turmalina, Project NorthWest ("PNW") continues to advance at planned rates and development has successfully accessed new mineralized structures providing several new stoping blocks. This mineralization has been further defined and extended by drilling several hundred metres to depth down plunge. As expected, PNW is providing mineable ounces and adding opportunity to expand our mineral resources. Furthermore, PNW will provide access to the Faina resource area. Work on the Faina Project continued with the completion of the logging and sampling of the 15,000 metres that was completed at the end of July. Over 90% of assay results from this drill program have been received and are currently informing the ongoing resource modelling and metallurgical test work programmes required to progress the PNW through the PEA and PFS process in 2023. At Pilar, Project SouthWest ("PSW") continues to extend the resource we already have and developing the platform to exploit those resources beginning in 2023. Deep drilling on the main orebody at Pilar has confirmed the structure and grades that make the potential to extend to depth look strong. The next drill program to extend resources well beyond current levels is currently being planned.

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.

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 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). 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.