

July 13, 2021 FOR IMMEDIATE RELEASE NEWS RELEASE TSX: JAG

JAGUAR MINING REPORTS SECOND QUARTER OPERATING RESULTS

Consolidated Production up 11% to 20,212 Ounces
Recovery Continues to Sustainable Levels Across all Operations
Company Maintains Strong Balance Sheet & Liquidity

Toronto, July 13, 2021 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG OTCQX:JAGGF) today announced interim gold production results for the Second quarter of 2021 ("Q2 2021"). Financial results for Q2 2021 will be reported and filed on SEDAR on or before August 15, 2021. All figures are in US Dollars, unless otherwise expressed.

Vern Baker, President and CEO of Jaguar Mining stated: "I am very pleased to announce that our team has delivered over 20,000 production ounces for the second quarter. Consolidated production increased 11% over Q1 (from 18,161 to 20,212 ounces) and development metres increased by 19% over Q1 (from 2,017m to 2,400m). This was accomplished in a quarter that started out with Brazil and therefore Jaguar, experiencing peak impacts of the COVID-19 pandemic. By mid-May, Brazil was experiencing a notable reduction in pandemic infection rates and the impact to Jaguar's operations also decreased significantly. Although the company continues to be impacted by some cases, the number is now manageable, and the team continues to work with adjusted operating practices. I am pleased to report that the number of cases impacting the operations in the first week of the current third quarter is at a much lower level and expect that we will see a shift towards pre-pandemic operations in the second half of the year. Vaccination roll outs across the state of Minas Gerais and throughout Brazil are proceeding well and although we will continue to see some cases of infection within the workforce, we anticipate they will be at manageable levels. Jaguar expects that by the end of the third quarter, most of the workforce should be vaccinated. While the pandemic and its affects are unpredictable, currently, I fully expect to see continuing recovery of production levels in the next two quarters as our teams work to achieve sustainable levels at both mines.

I am very pleased with the performance at Pilar and the changes made to ensure a strong second half of the year. Our mining team increased production to 4,000 ounces a month for May and June. Quarterly production for Q2 was up 20% from Q1 (from 9,643 ounces to 11,627 ounces) at the mine, along with an increase of 12% in development metres from Q1 to Q2 (from 888 to 997). Pilar processed good tonnage, averaging 38,000 tonnes per month and the grade was close to reserve levels. Pilar expects to perform at sustainable levels for the remainder of the year.

Turmalina has been experiencing a slower return to sustainable levels of production, but I expect to see improvement in the second half of the year. Production for Q2 at Turmalina was 8,577 ounces, consistent with Q1 and development rates picked up by 24% in Q2 from Q1 (from 1,128m to 1,403m). While tonnage has been reasonable, it has depended on a large component of those tonnes coming from shallower areas of the mine. As those areas are of lower grade, the mine's ROM grades have been lower than the reserve. Dilution has also impacted grades as limited availability of skilled operators during the pandemic cut short the drilling capacity available for cablebolting. The current challenge at the mine is to deliver reserve grade production tonnes to the mill. I am confident the team at Turmalina is focused on making the changes needed to return to reserve grades in the current year.

During the height of the pandemic, in the first half of the second quarter, we put our exploration/third party drillers on stand-by to reduce the number of people stationed in our local communities (done at the request of community leadership). By June we were back to full crews drilling on both surface properties and in our underground mines.

While the first half of the year has been disappointing in terms of production, it has also provided us with opportunities in the form of data and perspective for starting key projects within or near the mines in the second half of the year. One such project, is the accelerated development of the SW ore system in the Pilar Mine. This will provide additional mining areas from level 9 and up to provide additional capacity and flexibility in production. At Turmalina the team is working on a project to develop the northwest trend of the CNW ore body at shallow levels beginning on level 1. The team is also evaluating a narrow vein project at Turmalina which can allow us to take advantage of narrow, good grade zones left as remnants located higher up in the mine. And, from exploration results the engineering team is initiating a pre-feasibility study on the Faina resource to add mining capacity at Turmalina."

Q2 2021 Operating Highlights

- Consolidated gold production decreased 14% with 20,204 ounces compared to 23,483 ounces produced in Q2 2020. Grade also decreased to 3.29 g/t compared to 4.00 g/t in Q2 2020.
- Pilar production decreased 14% with 11,627 ounces compared to 13,452 ounces produced in Q2 2020.
- Turmalina production decreased 14% with 8,577 ounces, compared to 10,031 ounces produced in Q2 2020.
- Total development of 2,400 metres for the second quarter of 2021 was in line compared to the same period in 2020 with 2,445 metres.
- Total definition, infill and exploration drilling decreased 17% to 11,870 metres compared to 14,278 metres drilled in Q2 2020.
 - Drilling limited due to the pandemic for the first half of the quarter,
 - Growth in resources and reserves from drilling is expected to be completed this year.
- Treasury position as of June 30, 2021, with cash of \$34.7 million compared to cash of \$37.8 million on March 31, 2021. During the quarter, the Company paid a dividend of \$4.8 million.

The table below summarizes Q2 2021 operating results compared to Q2 2020:

Quarterly Summary	Q2 2021			Q2 2020		
	Turmalina	Pilar	Total	Turmalina	Pilar	Total
Tonnes milled (t)	100,000	114,000	214,000	104,000	104,000	208,000
Average head grade (g/t)	2.90	3.63	3.29	3.41	4.59	4.00
Recovery %	88%	87%	88%	88%	87%	88%
Gold ounces						
Produced (oz)	8,577	11,627	20,204	10,031	13,452	23,483
Sold (oz)	8,846	11,277	20,123	10,836	14,134	24,970
Development						
Primary (m)	875	478	1,353	1,086	621	1,707
Secondary (m)	528	519	1,047	415	323	738
Definition, infill, and	7.070	4.000	44.070	0.070	C 000	44.270
exploration drilling (m)	7,670	4,200	11,870	8,270	6,008	14,278

Vern continued; "Our commitment to exploration in the Iron Quadrangle continues with several on-going exploration programs including a focus on growing mineral resources and reserves in and around the mines. I believe our team can develop an expanded resource base that will allow us to grow production at each mine. We also have several programs on properties adjacent to, or nearby, our processing plants. These include Zona Basal near Turmalina

where we are planning a significant reverse circulation drilling program in the second half of the year. The exploration team is following up on some excellent results on the Corrego Brandão prospect near our Caeté plant which also feeds the Pilar Mine. And we have a full team working on the Acurui project which is part of our JV with IAMGOLD and is located near the Paciência plant.

With the solid recovery that continues in production, our development projects and our exploration portfolio, which is starting to deliver excellent results, I look forward to reporting on a much improved second half of the year to our shareholders."

Risks and Mitigating Factors

Jaguar is maintaining its social licenses to operate in all sites throughout Brazil and continues to deliver on its ethical and collaborative partnerships with employees, suppliers, local communities and unions. During this COVID-19 pandemic, the Company has formulated a formal COVID-19 Action Plan which has been adopted company-wide. The Action Plan is committed to sustainability while implementing increased health and safety initiatives with all stakeholders, emphasizing the protection of employees and their employment.

COVID-19 remains the largest question mark for all companies. At any time, state and federal government mandates may change and any mandate that would result in the shutdown of operations will affect the Company's production. As well, the pandemic may impact the availability of our workforce or supplies. Jaguar is not able to predict the consequences of the pandemic over the next several months and hence is unable to project the impact on production at the current time.

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), 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 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 37,000 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 additional 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 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). 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.