



September 7, 2021
FOR IMMEDIATE RELEASE

NEWS RELEASE
TSX: JAG

JAGUAR COMMENCES OXIDE RESOURCE DELINEATION DRILLING AT ZONA BASAL TARGET, TURMALINA MINE, BRAZIL

- **6,000m grid drill campaign will target shallow oxide maiden mineral resource.**
- **Reverse circulation drilling will evaluate an area 1,000m along strike by 200m width to a depth of 30-50m defined by gold in soil anomalies and mineralized drill intersections.**

Toronto, September 7, 2021 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) is pleased to announce that a 6,000m reverse-circulation drilling campaign has commenced at the Zona Basal Target ("ZB") located near the operating Turmalina Gold Mine and Mill Complex (MTL) in Minas Gerais, Brasil. ZB is defined by an extensive gold in soil anomaly (> 100ppb Au) and successful phase one diamond drilling (best intersection 2.39 gt Au over a drilled width of 20,45m (see press-release dated 16, February 2020).

The current grid infill drilling campaign is targeting a shallow oxide maiden resource within the surface exposure and shallow supergene (oxide-saprolite) regolith profile within a central area which extends some 1,000m along strike by 200m width (across strike) and to a depth of 30-50m.

A total of 120 reverse-circulation holes to an average depth of 50m are planned along a 50m x 50m grid pattern. Drilling is expected to take three months with expected assay results to be reported on by year end 2021. The estimation of the maiden mineral resource is expected in late Q1-2022.

Jon Hill, Vice President, Geology and Exploration, Jaguar Mining commented: *"We are confident ZB has the potential to deliver an additional and important oxide mineral resource, as either supplementary mill feed at the Turmalina Mill, leveraging existing excess capacity, or as a stand-alone heap leach facility. Closer spaced drilling will provide important additional geological and grade data at an appropriate scale to inform targeting of higher-grade, structurally controlled mineralization extending beneath the near surface, open pit mineable oxide zones."*

Vern Baker, CEO, Jaguar Mining commented: *"Jaguar sees a great opportunity in the Zona Basal target to grow our resources with material that has very strong potential economics. The first step is being taken to define the near surface oxide resource available. Zona Basal clearly reflects our exploration team's ability to find high quality exploration projects within short distances of our existing capital base and operating teams. We expect to move forward quickly with this project once the data is accumulated and analysed."*

Figure 1 – Location of Zona Basal Target relative to Jaguar’s Operations in Minas Gerais, Brasil.

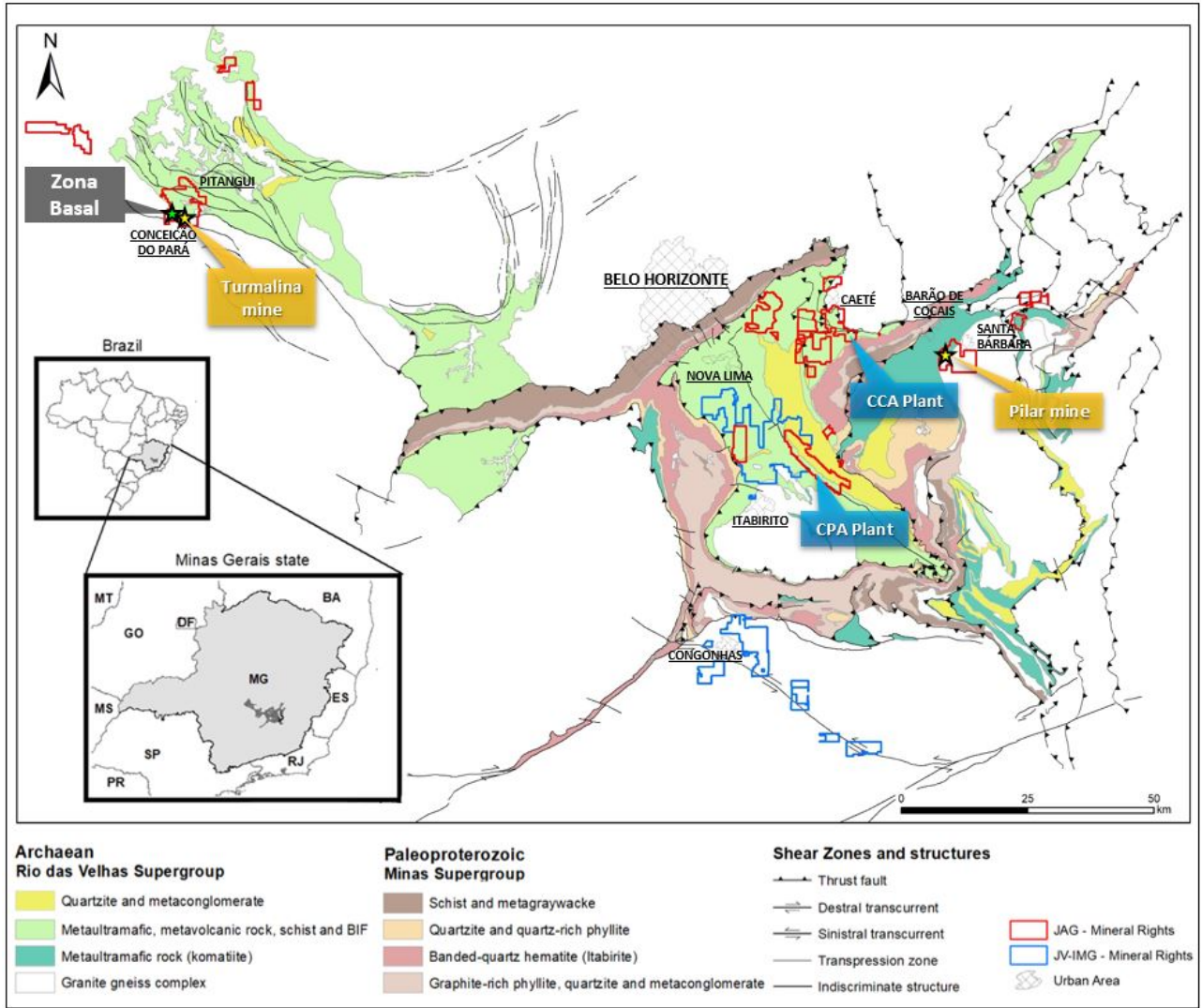


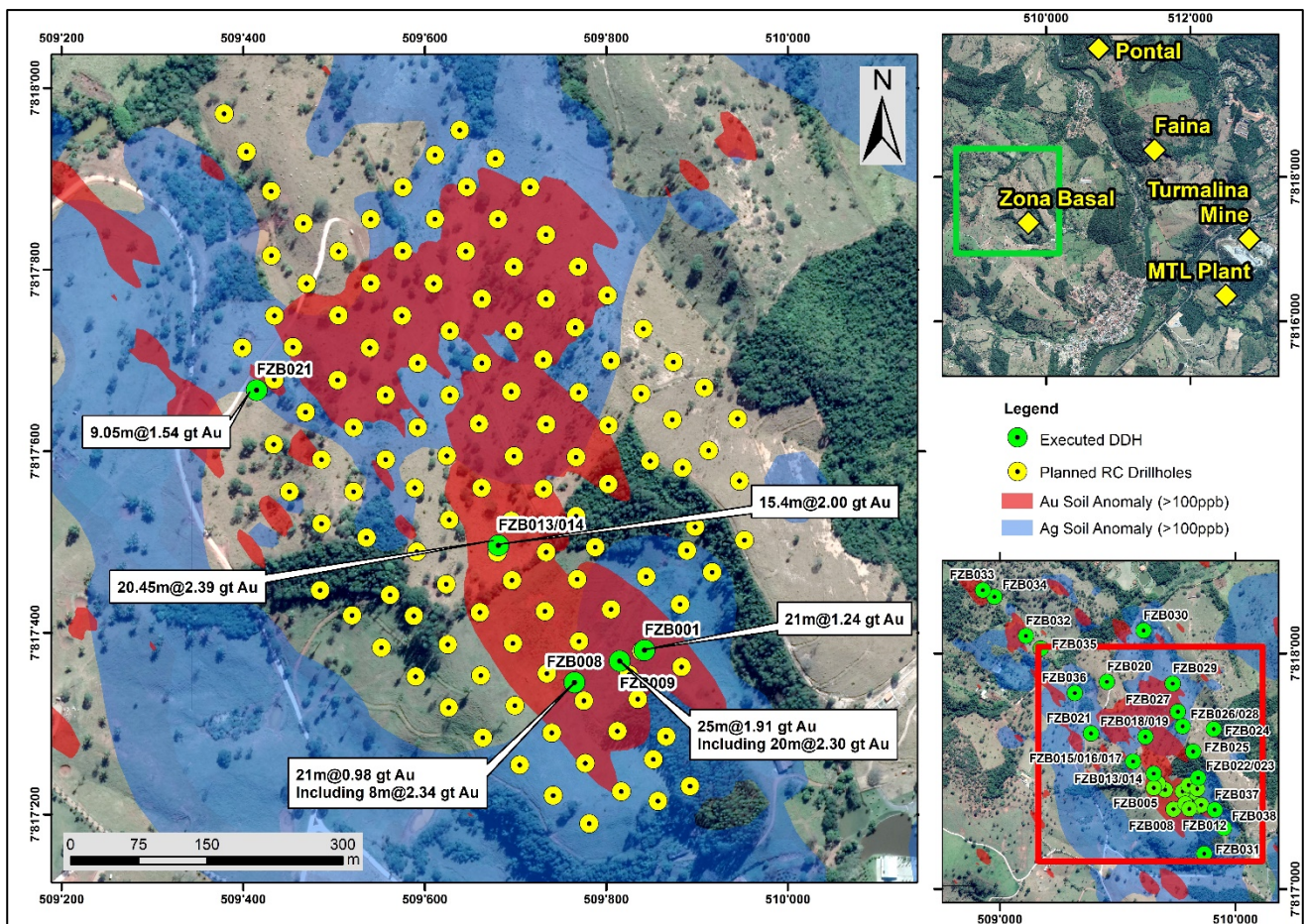
Table 1 – Summary Statistics of Exploration Activities completed at Zona Basal to date.

Zona Basal Exploration	No of holes / samples	Metres
Diamond Drilling	38	4664
Auger Drilling	96	568
Soil Samples	4349	NA
Trenches	48	2909
Channel	6	51

Table 2 – Planned reverse circulation infill drilling programme (September – November 2021)

Zona Basal	#RC DH	Average Depth	Total. Metres
2021 RC Planning	120	50	6000

Figure 2. Map showing planned reverse circulation infill drilling grid (September – November 2021). Background shows gold in soil anomaly > 100ppb Au (Red) and silver in soil anomaly (Blue).



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 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 south-eastern 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 62,000* hectares (*includes lamgold JV Agreement Areas).

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, 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.