February 21, 2023
FOR IMMEDIATE RELEASE

NEWS RELEASE

TSX: JAG
OTCQX: JAGGF

Jaguar Mining Announces High Grade Drilling Intercepts at Pilar Mine and Catita Target New Growth Opportunities Added

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Drilling Highlights include (over estimated true width):

20.93 g/t Au over 10.0m including 42.3 g/t Au over 3.2m in BA Structure
24.01 g/t Au over 5.0m in LPA Structure
9.72 g/t Au over 9.0m in SW Structure
9.51 g/t Au over 5.9m* including 15.24 g/t Au over 3.2m at Catita Target
***** *(Drilled width – true width unknown)*

Toronto, Canada, February 21, 2023 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX:JAG; OTCQX:JAGGF) is pleased to announce positive results from recent in-mine diamond drilling at its Pilar mine complex and exploration drilling at its Catita target, located in the Iron Quadrangle in the state of Minas Gerais, Brazil.

In the fourth quarter of 2022, the Company successfully advanced several high priority diamond drill campaigns focused on identifying or extending high grade mineralization at its Pilar mine. This diamond drilling focused on various new targets including holes testing the projected fold hinge within the BA – TORRE structure, the LPA structure, and extensions of a higher grade mineralized trend within the SW structure (press release dated September 13, 2022).

Results from this recent drilling at Pilar has been particularly encouraging with a number of exceptional intersections reporting grade x thickness (GT) intervals greater than 100-gram meters on the BA – Torre and LPA structures on level 16. These intercepts again demonstrate potential down plunge extensions within these structures. The identification of down plunge potential within the BA structure is of particular importance given that this structure was the main historically producing ore zone at Pilar mine at shallower levels. (refer to Table 1 and Figures 1 and 2)

The Company will publish updated Mineral Reserves and Mineral Resources along with its AIF in March 2023.

At Jaguar´s Catita Project diamond drilling is targeting potential mineralized extensions to the previously mined Catita open pit. Catita is part of the emerging Córrego Brandão – Catita Mineralized Trend 5km from the Company's CCA plant at Caete. The high-grade intercept reported here provides support for additional exploration focus on this target in 2023.

Vern Baker, President, and CEO of Jaguar Mining stated: *"The results reported today include intersections with excellent grade and width, especially in new target areas. This supports our belief that there are still various exciting opportunities that exist throughout the mine. Our geologists continue to refine structural – geological targets that justify ongoing drilling activities. Furthermore, the high-grade intercept reported at Catita demonstrates the clear potential of this target trend which is quickly becoming one of our most prospective target areas within our exploration and growth portfolio".*

Pilar Mine Drilling

At Pilar, drilling in the later part of 2022 and into 2023 has been focused on the further delineation and expansion of higher-grade mineralization throughout the mine. Drill testing has generally targeted the projected plunge positions of fold hinges associated with the folded Banded Iron Formations and associated Schists which generally host higher-grade mineralization in previously exploited and or current mining production areas. This tactic is successfully expanding known higher - grade areas and importantly highlighting further potential in new areas. (press release dated September 13, 2022).

Of particular interest is the exceptional intersection in hole PPL850 which reported 42.35 g/t Au (uncut) over an estimated true width of 3.2m within a broader zone grading 20.93 g/t Au over an estimated true width of 10.0m within the BA Structure on 16 level. This intercept opens a new area for exploration close to existing mine development on this level. Figure 3 shows a schematic view aimed at representing the projected BA-Torre Structure fold hinge intersected in hole PPL850 while Figure 4 presents the individual samples contributing to this high-grade intersection.

Similarly hole PPL929 intersected 9.72 g/t Au over an estimated true width of 9.0m within the SW structure again opening the opportunity of adding to the ounce per vertical meter profile on this structure below level 12.

High grade mineralization intercepts with grade x thickness (GT) > 20 (gram per tonne meter) are tabulated below in table 1.

Figure 1 – Pilar Mine Long Section showing 2022 drilling intersections with grade x thickness (GT) > 20

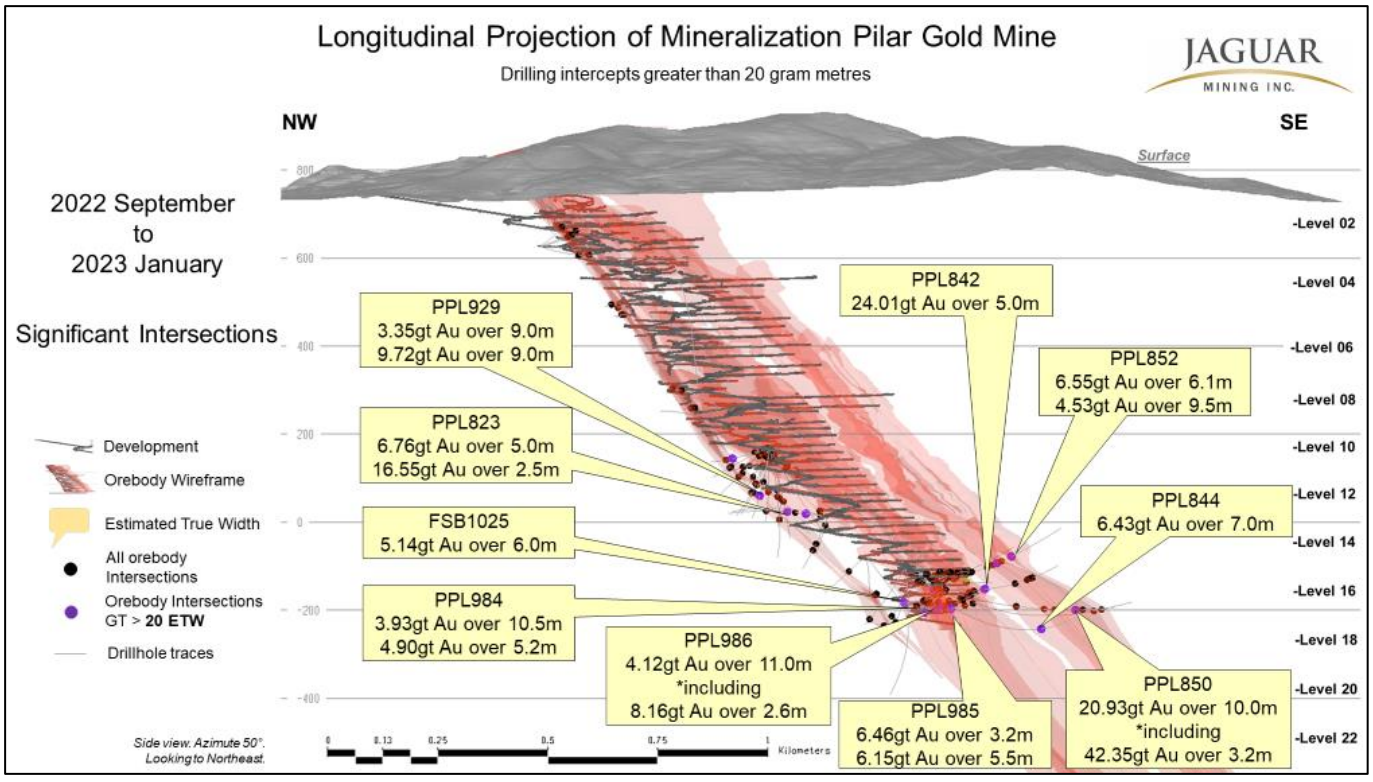

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Figure 2 – Schematic Plan View Image showing relative location of the Pilar Mine Mineralized Zones and Structural framework on 16 level

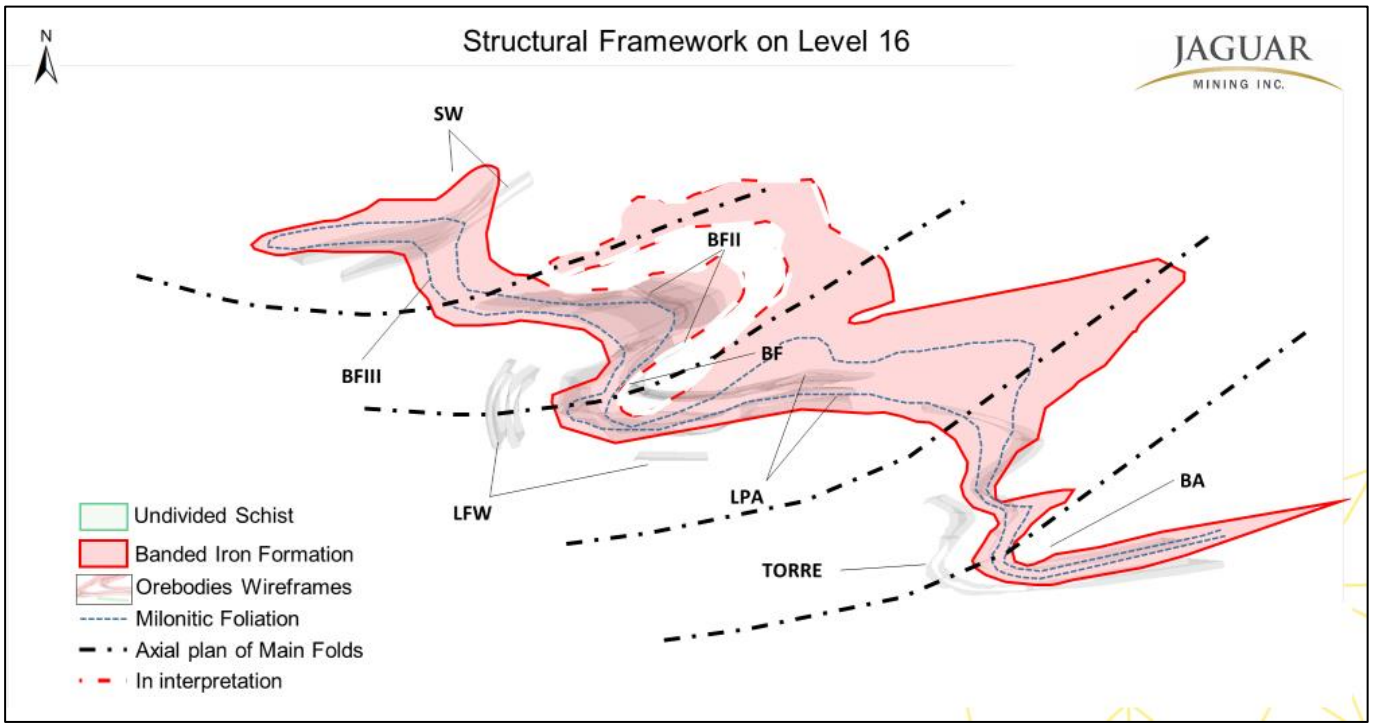

Figure 3 – Schematic Plan View image of Pilar Mine Level 16 showing the location of recent higher grade drill intercepts

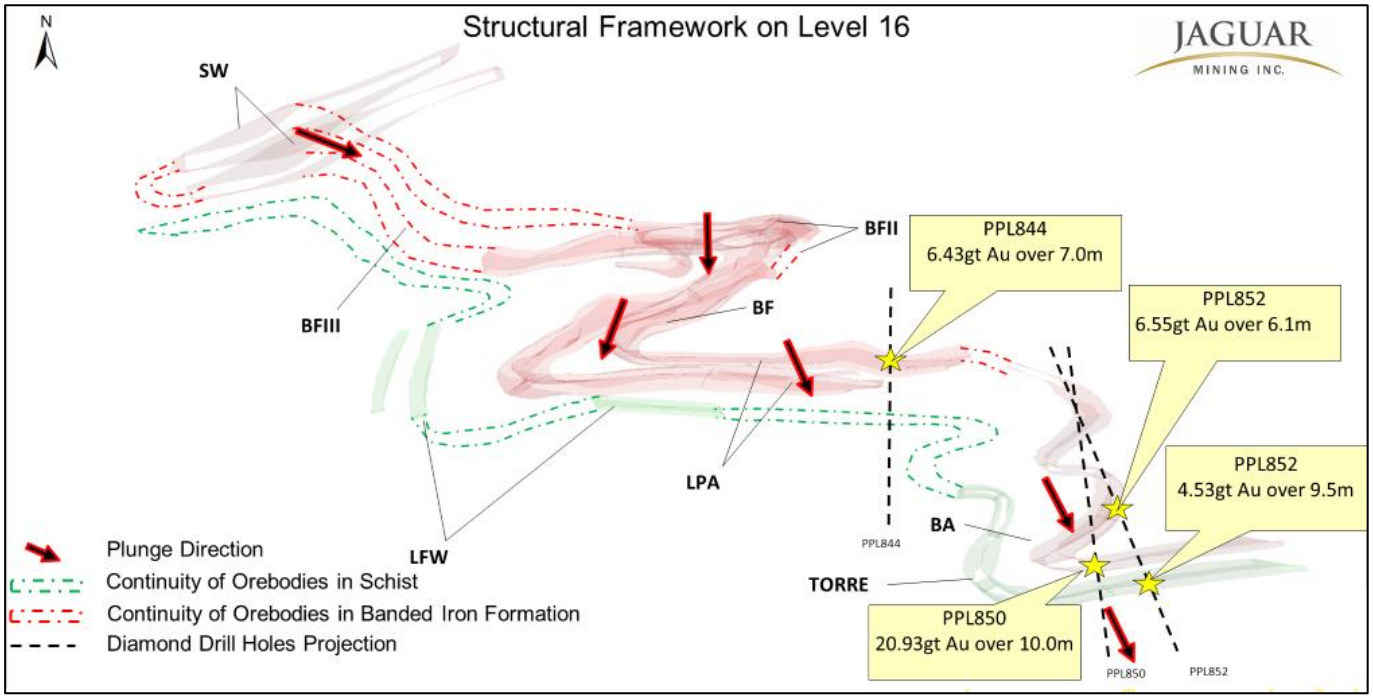

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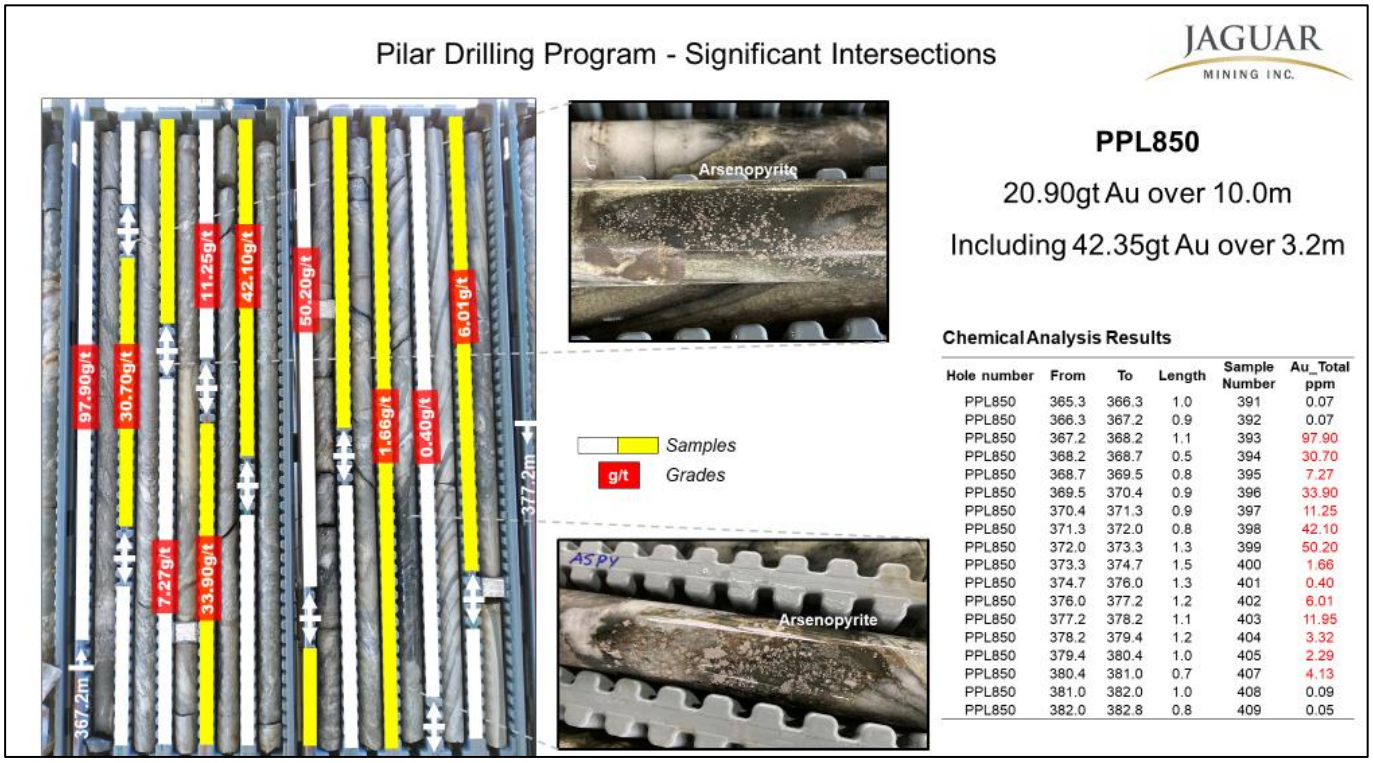
Table 1 - Best Drilling Intersections Pilar Mine with grade x width > 20

Summary of Diamond Drill Intersections Pilar Mine - Best Intersections							
Hole ID	**From (m)**	**To (m)**	**DownHole Interval (m)**	**Estimated True Width (m)**	**Gold Grade (g/t Au)**	**GT (ETW)**	**Orebody**
FSB1025	39.8	55.1	15.3	6.0	5.14	31	BF
PPL823	54.3	65.3	11.1	5.0	6.76	34	SJ?
PPL823	110.3	114.8	4.6	2.5	16.55	41	SW
PPL842	149.0	157.7	8.7	5.0	24.01	120	LPA?
PPL844	335.9	343.9	8.0	7.0	6.43	45	LPA
PPL850	367.1	381.0	13.9	10.0	20.93	209	BA
Including	367.1	373.2	6.1	3.2	42.35	136	BA
PPL852	178.1	187.2	9.1	6.1	6.55	40	BA
PPL852	214.3	229.9	15.6	9.5	4.53	43	TORRE
PPL929	80.1	90.9	10.8	9.0	3.35	30	SW
PPL929	119.1	130.0	11.0	9.0	9.72	87	SW
PPL984	155.5	172.0	16.5	10.5	3.93	41	BF/BFII
PPL984	231.4	239.1	7.7	5.2	4.90	25	BFII
PPL985	127.2	130.8	3.6	3.2	6.46	21	BFII
PPL985	140.4	146.6	6.2	5.5	6.15	34	BFII
PPL986	150.5	169.0	18.5	11.0	4.12	45	BFII
Including	155.5	159.9	4.4	2.6	8.16	21	BFII

Figure 4 – Image of drill core intercepted in hole PPL850 with individual sample assay results highlighted



Chemical Analysis Results

Hole number	From	To	Length	Sample Number	Au_Total ppm
PPL850	365.3	366.3	1.0	391	0.07
PPL850	366.3	367.2	0.9	392	0.07
PPL850	367.2	368.2	1.1	393	97.90
PPL850	368.2	368.7	0.5	394	30.70
PPL850	368.7	369.5	0.8	395	7.27
PPL850	369.5	370.4	0.9	396	33.90
PPL850	370.4	371.3	0.9	397	11.25
PPL850	371.3	372.0	0.8	398	42.10
PPL850	372.0	373.3	1.3	399	50.20
PPL850	373.3	374.7	1.5	400	1.66
PPL850	374.7	376.0	1.3	401	0.40
PPL850	376.0	377.2	1.2	402	6.01
PPL850	377.2	378.2	1.1	403	11.95
PPL850	378.2	379.4	1.2	404	3.32
PPL850	379.4	380.4	1.0	405	2.29
PPL850	380.4	381.0	0.7	407	4.13
PPL850	381.0	382.0	1.0	408	0.09
PPL850	382.0	382.8	0.8	409	0.05

Catita Project Drilling

During 2021 and 2022 Jaguar has been exploring the emerging Córrego Brandão – Catita trend close to its CCA Plant facility near Caete. This trend is defined by an approximately 1.5km northwest – southeast trending structural corridor connecting a major antiformal fold structure centred on the Catita target in the west and a major synformal fold structure centred on the Córrego Brandão target in the east. A strong Au-As in soil anomaly extends along the entire trend.

Exploration in 2021 was largely focused on the Córrego Brandão section of the structure where the initial discovery was made, and which lead to the publication of a maiden Inferred Mineral Resource of some 51koz @ 1.48 g/t Au.

Exploration during 2022 was aimed at expanding exploration along the trend which included commencing a thorough re-evaluation of historical geological and mining data over the Catita target. Geological mapping and resulting structural modelling at Catita is highlighting several priority drill targets within this complex geological setting. Some early success with initial drill testing is being reported here where hole FCAT045 reporting an intersection grading 9.51 g/t Au over a drilled width of 5.9m.

Figure 5 – Catita – Córrego Brandão Trend

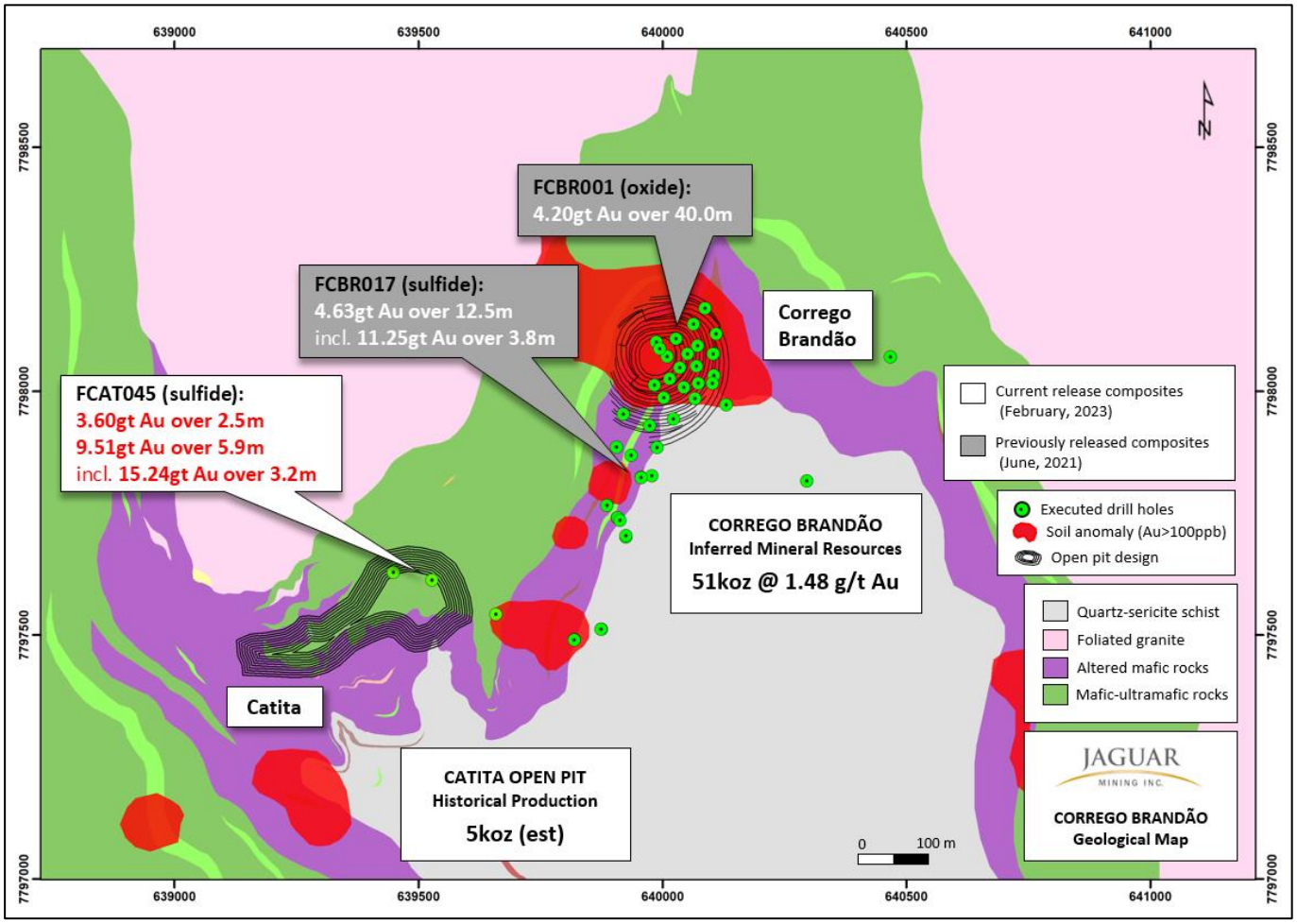


Table 2 – Best Drilling Intersections – Catita Structure

Summary of Diamond Drill Intersections Catita - Córrego Brandão Trend						
Hole ID	**From (m)**	**To (m)**	**DownHole Interval (m)**	**Gold Grade (g/t Au)**	**GT* (Grade x Thickness)**	**Orebody**
FCAT045	25.9	28.35	2.5	3.6	9	CATITA
FCAT045	53.85	59.7	5.9	9.51	56	CATITA
Including	56.55	59.7	3.2	15.24	48	CATITA

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Quality Control

All sampling and samples utilized at Jaguar for Mineral Resource and or Mineral Reserves estimation uses a quality-control program that includes insertion of blanks and commercial standards in order to ensure best practice in sampling and analysis.

HQ, NQ, and BQ size drill core is sawn in half with a diamond saw. Samples are selected for analysis in standard intervals according to geological characteristics such as lithology and hydrothermal alteration. Rock channel sampling of the underground development follows the same standard intervals as for the drill core.

Half of the sawed sample is forwarded to the analytical laboratory for analysis while the remaining half of the core is stored in a secure location. The drill core and rock chip samples for resource-reserve conversion and grade control samples are transported for physical preparation and analysis in securely sealed bags to the Jaguar in-house laboratory located at the company´s Caeté Complex, Caeté, Minas Gerais. Growth exploration samples are sent to the independent ALS Brazil (subsidiary of ALS Global) laboratory located in Vespasiano, Minas Gerais, Brazil. The analysis of these exploration samples is conducted at ALS Global's respective facilities (fire assay is conducted by ALS Global in Lima, Peru, and multi-elementary analysis is conducted by ALS Global in Vancouver, Canada). ALS has accreditation in a global management system that meets all requirements of international standards ISO/IEC 17025:2005 and ISO 9001:2015. All major ALS geochemistry analytical laboratories are accredited to ISO/IEC 17025:2005 for specific analytical procedures.

For a complete description of Jaguar's sample preparation, analytical methods and QA/QC procedures, please refer to "*Technical Report on the Roça Grande and Pilar Operations, Minas Gerais State, Brazil*", a copy of which is available on the Company's SEDAR profile at www.sedar.com.

The drilling results presented on this news release are from drill holes completed by contractors Major Drilling and Jaguars own fleet of underground diamond drilling rigs.

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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, 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.

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Appendix 1

Diamond Drill hole location data for Pilar drill-holes reported in this Press-Release

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Collar Dip (°)	Collar Azimuth (°)	Orebody	Drilling Company
FSB1025	662816.31	7788243.40	-125.1	101.4	-37.9	306.0	PILAR	JAGUAR MINING
FSB1026	662779.39	7788240.36	-125.2	97.2	-50.4	344.5	PILAR	JAGUAR MINING
PPL823	662654.71	7788492.64	10.9	321.0	10.7	1.8	PILAR	MAJOR
PPL842	662858.37	7788381.89	-143.3	364.2	-10.7	160.0	PILAR	MAJOR
PPL844	662858.47	7788382.55	-144.0	443.5	-36.5	152.0	PILAR	MAJOR
PPL850	662858.00	7788382.00	-143.0	474.9	-15.7	154.7	PILAR	MAJOR
PPL852	662858.59	7788381.63	-142.3	350.3	8.3	151.8	PILAR	MAJOR
PPL929	662659.71	7788669.97	167.8	170.4	-78.6	241.3	PILAR	MAJOR
PPL984	662795.11	7788388.89	-179.7	287.5	-13.4	191.2	PILAR	JAGUAR MINING
PPL985	662795.81	7788388.68	-179.8	269.4	-15.4	176.2	PILAR	JAGUAR MINING
PPL986	662795.42	7788388.86	-179.7	266.3	-13.4	184.5	PILAR	JAGUAR MINING
PPL988	662794.66	7788389.06	-179.6	302.5	-14.4	201.2	PILAR	JAGUAR MINING

Appendix 2

Diamond Drill hole location data for Catita-Córrego Brandão Trend drill-holes reported in this Press-Release

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Collar Dip (°)	Collar Azimuth (°)	Orebody	Drilling Company
FCAT045	639528.12	7797611.80	987.4	154.7	-76.0	156.6	CATITA	MAJOR