

## JAGUAR MINING REPORTS UPDATED MINERAL RESERVES AND MINERAL RESOURCES

## BOOSTS PROVEN AND PROBABLE (2P) MINERAL RESERVES 4%, MEASURED AND INDICATED MINERAL RESOURCES 27% AND INFERRED RESOURCES 41%

Toronto, February 26, 2024 – Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG, OTCQX: JAGGF) is pleased to announce its annual Mineral Reserves and Mineral Resources (MRMR) statement for 2023. Proven and Probable (2P) Mineral Reserves and Measured, Indicated and Inferred Mineral Resources figures are reported for Jaguar's two operating mining and production complexes, Turmalina and Caeté, and for the Paciencia Complex, currently on care and maintenance. The Turmalina Complex is comprised of the Turmalina mine, the Faina and Onças de Pitangui growth projects as well as the Zona Basal and Pontal deposits. The Caeté Complex is comprised of the Pilar mine, the Roça Grande mine (on care and maintenance) and the Córrego Brandao deposit. The Paciencia Complex is comprised of the Santa Isabel and Margazao mines (both on care and maintenance) and the Bahú deposit.

Detailed tabulations and discussion of this 2023 MRMR disclosure may be found within the company's AIF Document which will be uploaded to SEDAR+ on or before the March 31, 2023. An updated NI 43-101 Technical Report for the Turmalina Complex was uploaded to SEDAR+ on the February 2, 2024.

#### HIGHLIGHTS

- Consolidated Proven and Probable Mineral Reserves show additions of 132 koz reflecting the addition of reserves at the Faina project, offset by mined depletion at Pilar and Turmalina of 88 koz and removal of remnant material from inventory at Turmalina of 28 koz for a net increase of 4% to 470 koz, (4,015 kt @ 3.64 g/t Au).
- Faina Probable Mineral Reserves added 132 koz (787 kt @ 5.22 g/t Au) to Jaguar's 2P Mineral Reserves inventory.
- Consolidated Measured and Indicated Mineral Resources increased by 27% to 1,676 koz, (12,633 kt @ 4.12 g/t Au), reflecting the addition of measured and indicated mineral resources from the Onças de Pitangui project.
- Onças de Pitangui Indicated Mineral Resources added 448 koz, (3,423 kt @ 4.07 g/t Au) to Jaguar's Mineral Resources inventory.
- **Consolidated Inferred Mineral Resources** increased by 41% to 1,628 koz, (14,175 kt @ 3.58 g/t Au), driven by the addition of inferred mineral resources from the Onças de Pitangui project.
- Onças de Pitangui Inferred Mineral Resources added 379 koz, (3,343 kt @ 3.53 g/t Au) to the Company's inventory.
- Life of Mine (LOM) plans at the Pilar operation forecast production at current rates into 2028. At the Turmalina Complex, with Faina ramping up from this year through 2026, the LOM extends at increased production rates beyond 2030. The Company continues to progress project work required to support the publication of initial mineral reserves for the Onças de

Pitangui project (current Indicated and inferred mineral resource at Sao Sebastiao) in the fourth quarter of 2024.

Vern Baker, CEO of Jaguar Mining stated, "This year's Mineral Reserve and Mineral Resource update further advances our organic growth strategy, especially with the initial disclosure of probable Mineral Reserves from our Faina project and the addition of 800 koz of Mineral Resources added from the acquisition of lamgold's Sao Sebastiao deposit and Onças de Pitangui project. A net increase of 4% in Mineral Reserves along with the material increases in Mineral Resources is a very positive driver underpinning the long-term future of the company.

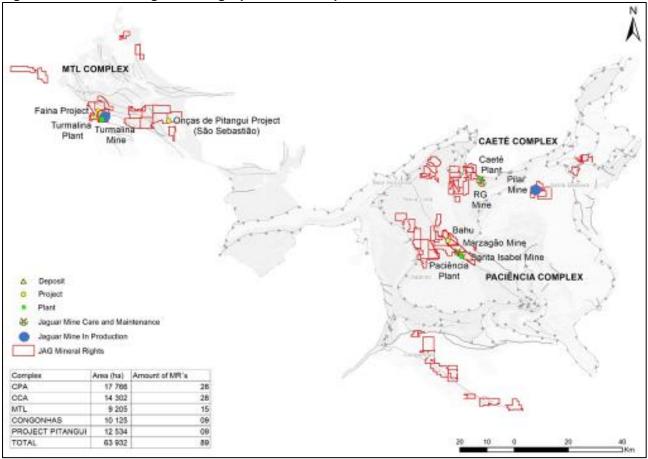
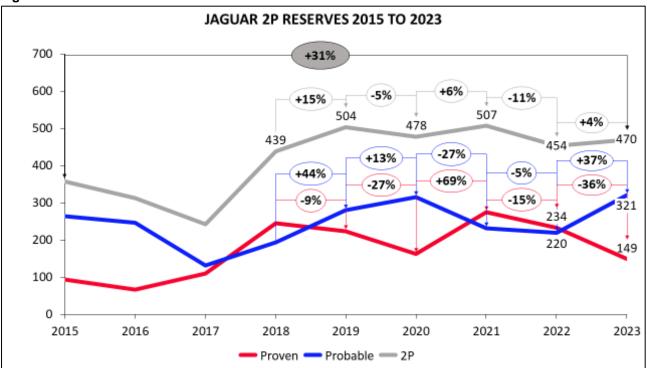


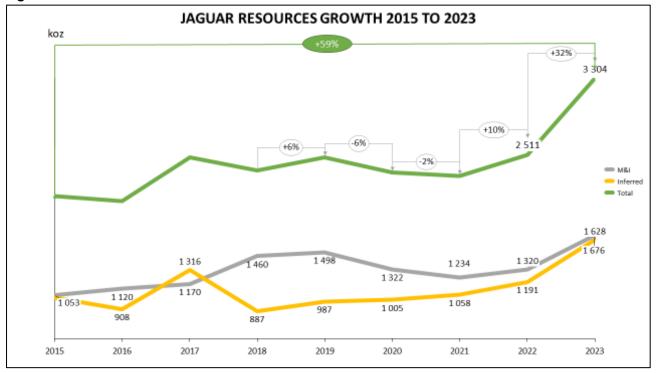
Figure 1. Location of Jaguar Mining Operations Complexes

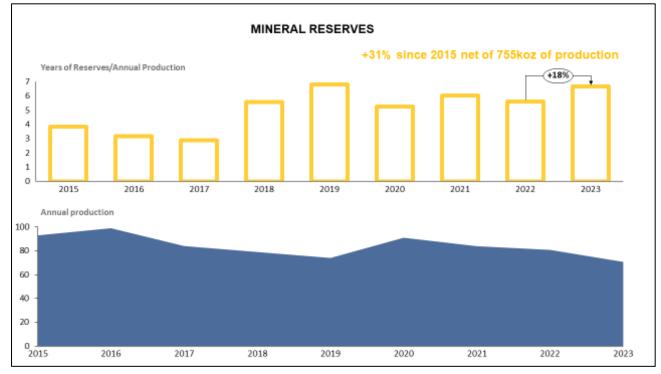
The Company's year-over-year track record of Mineral Reserve estimates replacing production, and Mineral Resource growth, are illustrated in the following figures.





#### Figure 3. Mineral Resources Growth 2015 - 2023





# Figure 4. Graph showing the Mineral Reserves - Annual Production ratio over time since 2015. Reserve replacement has successfully maintained a 5-year Life of Mine profile since 2018.

## 2023 MINERAL RESERVES AND MINERAL RESOURCES

#### Mineral Reserves

During the year, **the Company's consolidated Proven and Probable Mineral Reserves** showed additions of 132 koz at the Faina project, partly offset by mined depletion at Pilar and Turmalina of 88 koz and the removal of remnant material from inventory at Turmalina of 28 koz, for a net increase of 4% to 470 koz (4,015 kt @ 3.64 g/t Au).

Turmalina Complex Proven and Probable (2P) Mineral Reserves of 276 koz, (2,109 kt @ 4.07 g/t Au) reflects a net increase of 62 koz from the prior year. Mining in 2023 depleted 42 koz from the Mineral Reserve and a further 28 koz of Mineral Reserves attributed to remnant material was re-evaluated, proved to be uneconomic, and removed from inventory. At Faina, an initial Mineral Reserve was estimated, as detailed in a NI 43-101 Technical Report for the Turmalina Complex.

The 2P Mineral Reserves at Turmalina (excluding Faina) can be separated between Orebody A (24 koz, 177 kt @ 4.16 g/t Au), Orebody B (32 koz, 302 kt @ 3.33 g/t Au), and Orebody C (88 koz, 843 kt @ 3.24 g/t Au).

At Pilar, 2P Mineral Reserves are reported as 194 koz, (1906 kt @ 3.17 g/t Au) which reflects a net decrease of 46 koz by mined depletion.

At Pilar, a 17% reduction in the Mineral Reserve grade year-over-year from 3.81 g/t Au to 3.17 g/t Au was reported. This difference largely reflects the impacts of geometrical and grade challenges associated with unexpected geological complexity encountered in early 2023, especially on level 15. The average produced grade in the first and second quarter of 2023 of 3.26 g/t Au is consistent with this reduced Mineral Reserve grade reported in this disclosure. It is important to note that modifications to mining methodology and grade control protocols implemented late in the second quarter to mitigate these reconciliation and geometrical / grade challenges saw the produced grade at Pilar increase to

3.68 g/t Au by the fourth quarter of 2023. However, due to timing constraints, the database cut-off date for the Mineral Reserves disclosure presented here was July 31, 2023, which did not capture any drilling (77 holes) or productive development sampling results (approximately 1,000 metres) achieved subsequent to July 31, 2023, in the remainder of 2023. The results from this incremental drilling and development sampling were generally higher grade than the areas mined in the first and second quarter. The Company also reported higher grades in production during the fourth quarter of 2023 and expects these grade improvements to be incorporated in the next MRMR estimation cycle, through which Pilar mine inventories can be expected to return to pre-2023 levels.

2P Mineral Reserves at Pilar can be divided between Orebody BA (26 koz, 237 kt @ 3.36 g/t Au), Orebodies BFs (92 koz, 869 kt @ 3.29 g/t Au), Orebody SW (54 koz, 550 kt @ 3.05 g/t Au), Orebody Torre (12 koz, 127 kt @ 2.98 g/t Au) and others (11 koz, 122 kt @ 2.77 g/t Au).

	Proven Reserves			Probable Reserves			Proven & Probable Reserves			
December 31, 2023	Tonnes	Grade	Gold oz	Tonnes	Grade	Gold oz	Tonnes	Grade	Gold oz	
	(000's)	(g/t)	(000's)	(000's)	(g/t)	(000's)	(000's)	(g/t)	(000's)	
Underground MTL Gold Complex										
Ore Body A	122	5	18	56	3	6	177	4	24	
Ore Body B	202	3.32	22	100	3.34	11	302	3.33	32	
Ore Body C	190	3.31	20	653	3.22	68	843	3.24	88	
Sub-Total - Turmalina Mine	514	3.61	60	808	3.24	84	1323	3.38	144	
Faina	0	0.00	0	787	5.22	132	787	5.22	132	
Total - MTL Complex UG	514	3.61	60	1595	4.21	216	2109	4.07	276	
Underground Caeté Gold Comp	Underground Caeté Gold Complex									
Pilar										
Ore Body BA	119	3.26	12	118	3.45	13	237	3.36	26	
Ore Body BFs (BF, BFI,BFII)	479	3.36	52	390	3.19	40	869	3.29	92	
Ore Body Torre	27	3.67	3	100	2.79	9	127	2.98	12	
Ore Body SW	177	3.31	19	373	2.92	35	550	3.05	54	
Others	31	2.77	3	92	2.77	8	122	2.77	11	
Total - Pilar	833	3.33	89	1073	3.05	105	1906	3.17	194	
						-				
Total - Mineral Reserves	1347	3.43	149	2668	3.75	321	4015	3.64	470	

 Table 1. Consolidated Mineral Reserves as at December 31, 2023

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.

2. Mineral Reserves are estimated at a cut-off grade of 2.39 g/t Au for orebodies A, B, and C at Turmalina deposit and 2.44 g/t Au for Pilar deposit. For Faina, the Mineral Reserves are estimated at a cut-off grade of 4.00 g/t Au.

3. Mineral Reserves are estimated using an average long-term gold price of US\$1,650 per ounce and a BRL/US\$ exchange rate of 5.20 for Turmalina and Faina deposits and an average long-term gold price of US\$1,800 per ounce and a BRL/US\$ exchange rate of 4.90 for Pilar deposit.

4. A minimum mining width of 3.50 m was used at Orebodies A, B, and C at Turmalina, 2.50 m at Pilar and 2.00 m at Faina deposit. 6. Numbers may not add due to rounding.

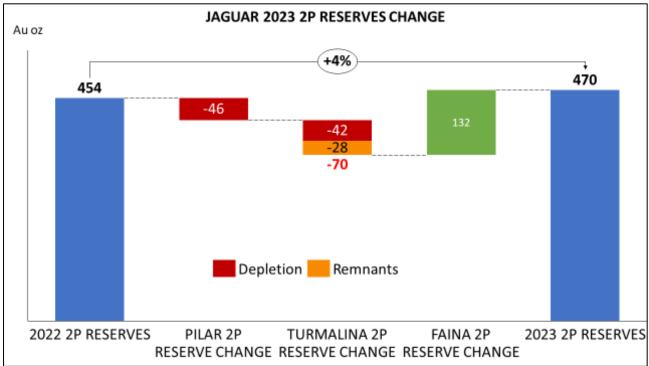
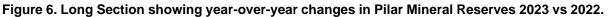


Figure 5. Waterfall Graph showing consolidated Proven and Probable (2P) Mineral Reserves year-over-year changes by operation 2022 – 2023.



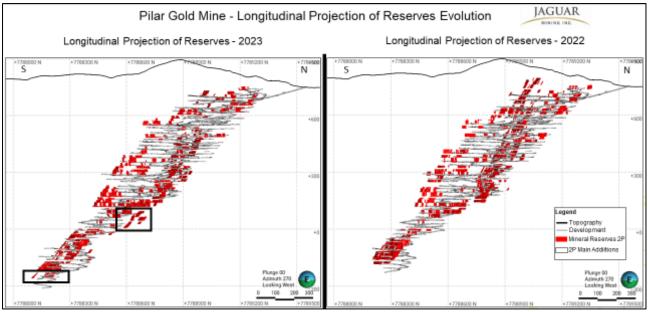
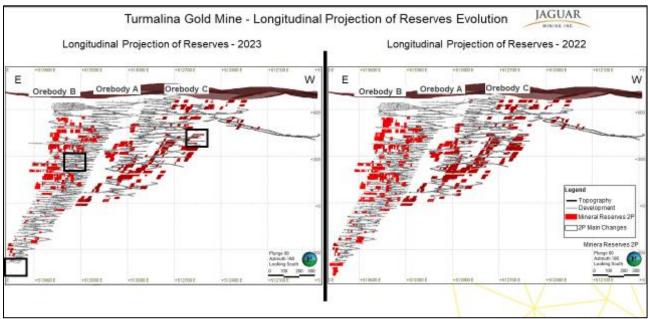


Figure 7. Long Section showing year-over-year changes in Turmalina Mineral Reserves 2023 vs 2022.



### **Mineral Resources**

Consolidated Measured and Indicated Mineral Resources as of December 31, 2023, are reported as 1,676 koz (12,633 kt @ 4.12 g/t Au) which are 356 koz above the prior year reflecting a 27% increase in reported Measured and Indicated Mineral Resource inventory year-over-year.

Inferred Mineral Resources for 2023 are reported as 1,628 koz (14,175 kt @ 3.58 g/t Au) which is a 437 koz net increase over the prior year reflecting a 41% increase in reported Inferred Mineral Resource inventory year on year.

December 21, 2022	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
December31, 2023	Tonnes	Grade	Gold oz	Tonnes	Grade	Gold oz	Tonnes	Grade	Gold oz	Tonnes	Grade	Gold oz
	(000's)	(g/t)	(000's)	(000's)	(g/t)	(000's)	(000's)	(g/t)	(000's)	(000's)	(g/t)	(000's)
Underground Turmalina Gold Complex						-						
Ore Body A	711	6.29	144	263	3.64	31	974	5.58	175	95	3.61	11
Ore Body B	297	3.69	35	182	3.66	21	479	3.68	57	167	4.36	23
Ore Body C	646	3.48	72	1196	3.34	128	1842	3.39	201	1009	3.05	99
Sub-Total Turmalina Mine	1655	4.73	251	1641	3.42	181	3295	4.08	432	1271	3.26	133
Faina				1427	5.08	233	1427	5.08	233	1420	5.09	232
Pontal				266	3.44	29	266	3.44	29	159	4.72	24
Pontal South										669	3.76	81
Projeto Pitangui (São Sebastião)				3423	4.07	448	3423	4.07	448	3343	3.53	379
Total - MTL Complex UG	1655	4.73	251	6757	4.10	891	8411	4.23	1143	6862	3.85	849
Underground Caeté Gold Complex												
Pilar												
Ore Body BA	276	4.68	41	168	4.11	22	443	4.46	63	283	6.19	56
Ore Body BFs (BF, BFI,BFII)	780	4.44	111	494	4.13	65	1275	4.32	176	772	3.90	97
Ore Body Torre	47	3.78	6	243	4.16	33	290	4.10	38	365	4.29	50
Ore Body SW	284	3.75	34	689	3.26	72	973	3.40	106	1039	3.05	102
Others	53	3.45	6	226	3.03	23	279	3.11	29	312	3.84	38
Total - Pilar	1440	4.29	198	1821	3.67	215	3260	3.93	413	2771	3.87	343
Roça Grande	197	3.42	22	765	4.02	99	962	3.90	121	889	4.08	117
Total - Caeté UG	1637	4.19	220	2586	3.77	314	4222	3.92	534	3660	3.92	460
Underground Paciência Gold Complex												
Santa Isabel/Corrego Grande		-	-	-	-	-	-	-	-	978	4.01	126
Marzagão	-	_	-	-	_	-	-	-	-	445	4.01	63
Bahu		_	-	-	_		-	-	_	333	3.99	43
Total - Paciência Complex UG		-	-	-		-	-	-	-	1756	4.12	232
	_	_			_		_	_	_	1750	4.12	232
Open Pit - MTL Gold Complex												
Zona Basal	-	-	-	-	-	-	-	-	-	781	1.28	32
Open Pit - Caeté Gold Complex												
Córrego Brandão		-	-	-	-	-	-	-	-	1072	1.48	51
Córrego Brandão Waste	0											
Open Pit -Paciência Gold Complex												
Bahu	-	-	-	-	-	-	-	-	-	43	2.08	3
JAGUAR UG Total - Mineral Resources	3291	4.46	471	9342	4.01	1205	12633	4.12	1676	12278	3.91	1542
JAGUAR OP Total - Mineral Resources			4/1		4.01	- 1205	-	4.12		1896	1.41	86
JAGUAR TOTAL - Mineral Resources	3291	4.46	471	9342	4.01	1205	12633	4.12	1676	14175	3.58	1628

#### Notes:

1. CIM (2014) definitions were followed for the classification of Mineral Resources.

 Mineral Resources are inclusive of the Mineral Reserves at Turmalina, Faina and Pilar. No Mineral Reserves are currently present at the Pontal, Zona Basal, São Sebastião, Santa Isabel, Marzagão, Bahu, Roça Grande and Córrego Brandão deposits.
 Mineral Resources include the Turmalina, Faina, Pontal, São Sebastião, Santa Isabel, Marzagão, Bahu, Pilar and Roça Grande

underground mineral resources and the Zona Basal, Bahu and Córrego Brandão open-pit mineral resources. 3. Mineral Resources are estimated at a cut-off grade of 1.79 g/t Au at Turmalina, 2.65 g/t Au at Faina, 3.0 g/t Au at Pontal, 0.75 g/t Au at Zona Basal, 2.25 g/t Au at São Sebastião, 2.75 g/t Au at Santa Isabel, 2.75 g/t Au at Marzagão, 0.74 g/t Au and 1.85 g/t Au for, respectively, open-pit and underground mineral resources at Bahu, 1.86 g/t Au at Pilar, 1.80 g/t Au at Roça Grande and 0.38 g/t Au and 0.74 g/t Au for, respectively, oxidized and fresh material for open-pit mineral resources at Córrego Brandão deposit. 4. Mineral Resources at the Turmalina deposit include all drill hole and channel sample data as of September 13, 2022, and are depleted using mining excavations as of December 31, 2023. Mineral Resources at the Faina and Pontal deposits include drill hole information as of September 9, 2022. Mineral Resources at the Zona Basal deposit include drill hole information current as of August 25, 2022. Mineral Resources at the Zona Basal deposit include drill hole information current as of August 25, 2022. Mineral Resources at the São Sebastião deposit include drill hole information current as of August 25, 2022. Mineral Resources at the Cornego Brandão deposit include drill hole information current as of July 29, 2019. Mineral Resources at the Santa Isabel and the Marzagão deposits include drill hole information current as of September 2022. Mineral Resources at the Bahu deposit include drill hole information current as of November 2022. Mineral Resources at the Pilar deposit include drill hole information current as of July 25, 2023. Mineral Resources at the Roça Grande deposit include drill hole information current as of July 26, 2023. Mineral Resources at the Roça Grande deposit include drill hole information current as of July 26, 2023. Mineral Resources at the Roça Grande deposit include drill hole information current as of November 2022. Mineral Resources at the Pilar deposit include drill hole

6. Mineral Resources are estimated using an average long term exchange rate of R\$5.20:US\$1.00 for the Turmalina, Faina, Pontal, Zona Basal, São Sebastião, Santa Isabel, Marzagão, Bahu, Roça Grande, Córrego Brandão deposits and an exchange rate of R\$4.90:US\$1.00 for the Pilar deposit.

7. Minimum width of approximately 2.00 m was used for Turmalina, Faina, Pontal, Santa Isabel, Marzagão, Bahu, Pilar and Roça Grande deposits. A minimum height of 2.00 m was applied to São Sebastião using reporting panels. Córrego Brandão, Zona Basal and Bahu open pit mineral resources were constrained with pit optimizations using Lerchs-Grossmann algorithm. 8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

9. Numbers may not add due to rounding.

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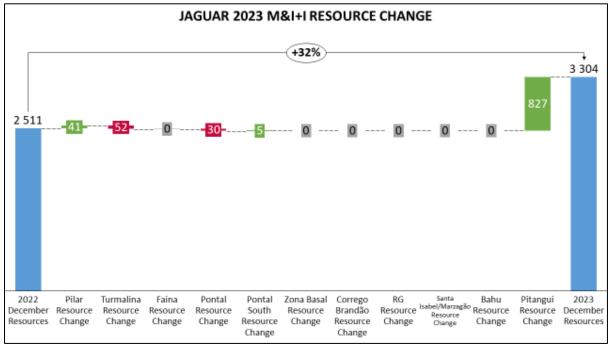
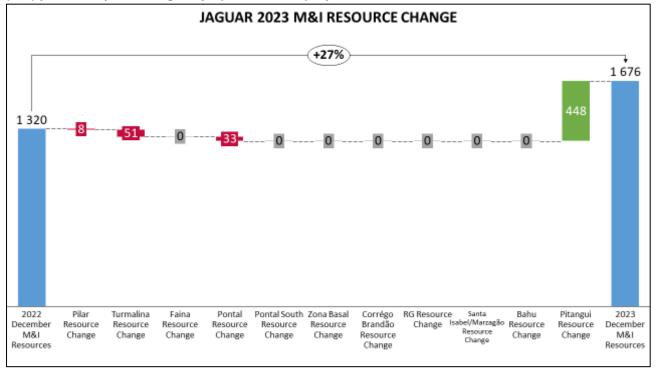


Figure 8. Waterfall Graph showing consolidated Mineral Resources (koz) year-over-year changes by operation and project 2022 vs 2023.

Figure 9. Waterfall Graph showing consolidated Measured and Indicated Mineral Resources (koz) year-over-year changes by operation and project 2022 vs 2023.



Consolidated Turmalina Complex (Measured and Indicated) Mineral Resources (Underground) are reported as 1,143 koz (8,411 kt @ 4.23 g/t Au) and Inferred Mineral Resources 881 koz, (Underground, 6,862 kt @ 3.85 g/t Au and Open Pit, 781 kt @ 1.28 g/t Au) subdivided as follows:

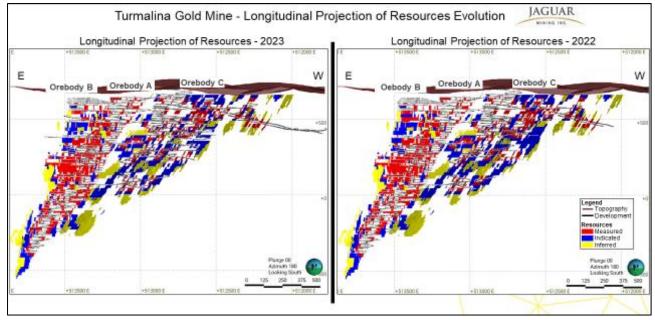
### **Underground Mineral Resources**

- Turmalina mine Measured and Indicated Mineral Resources are reported as 432 koz (3,295 kt @ 4.08 g/t Au).
- Turmalina mine Inferred Mineral Resources are reported as 133 koz (1,271 kt @ 3.26 g/t Au).
- Faina project Measured and Indicated Mineral Resources of 233 koz (1,427 kt @ 5.08 g/t Au). Unchanged from the prior year's disclosure.
- Faina project Inferred Mineral Resources are reported as 232 koz (1,420 kt @ 5.09 g/t Au). Unchanged from the prior year's disclosure.
- Pontal deposit Measured and Indicated Mineral Resources are reported as 29 koz (266 kt @ 3.44 g/t Au).
- Pontal deposit Inferred Mineral Resources are reported as 24 koz (159 kt @ 4.72 g/t Au)
- Pontal South deposit Inferred Mineral Resources are reported as 81 koz (669 kt @ 3.76 g/t Au).

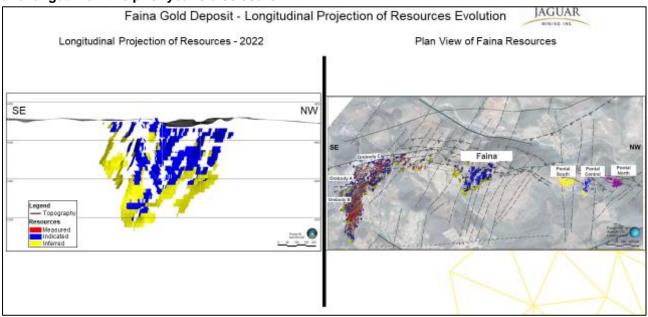
## **Open Pit Mineral Resources**

Initial Zona Basal deposit Inferred Mineral Resources (Open Pit) are reported as 32 koz (781 kt @ 1.28 g/t Au) unchanged from the prior year's disclosure.

## Figure 10. Long Section showing year-over- year changes in Turmalina Mineral Resources 2022 – 2023.



## Figure 11. Long Section showing Faina Mineral Resources as at December 31, 2022 unchanged from the prior year's disclosure.



## Figure 12. Long Section showing year on year changes in Geological Interpretation of Pontal and Pontal South deposit 2022-2023.

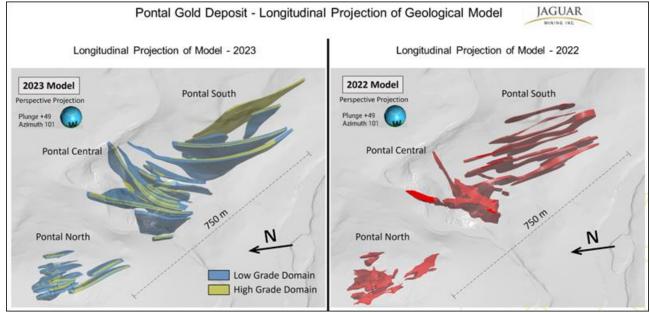


Figure 13. Long Section showing Zona Basal Mineral Resources as at December 31, 2023 unchanged from the prior year's disclosure.

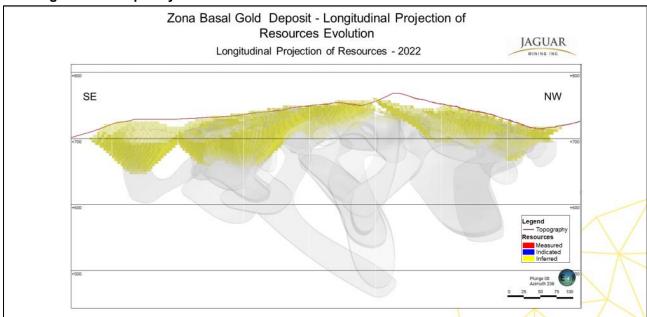
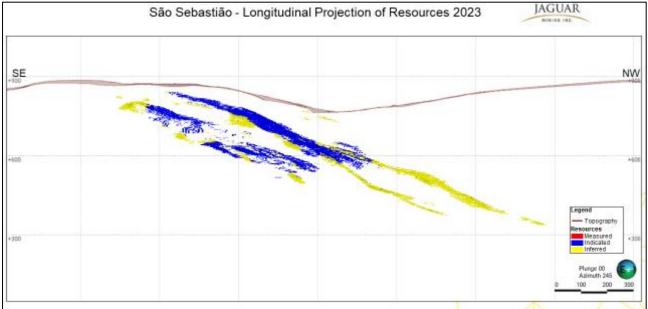


Figure 14. Long Section showing São Sebastião Resources as at December 31, 2023.



Consolidated CCA Complex (Measured and Indicated) Mineral Resources (Underground) are reported as 534 koz (4,222 kt @ 3.92 g/t Au) and Inferred Mineral Resources 511 koz, (Underground, 3,660 kt @ 3.92 g/t Au and Open Pit, 43 kt @ 2.08 g/t Au) subdivided as follows:

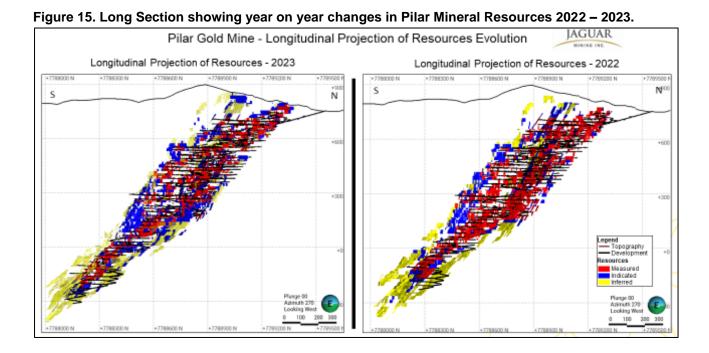
## **Underground Mineral Resources**

- Pilar mine Measured and Indicated Mineral Resources are reported as 413 koz (3,260 kt @ 3.93 g/t Au).
- Pilar mine Inferred Mineral Resources are reported as 343 koz (2,771 kt @ 3.87 g/t Au).

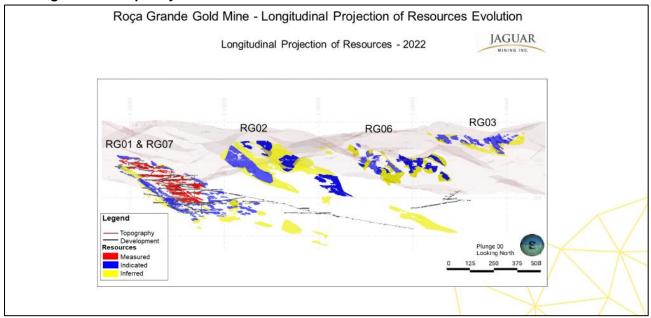
- Roça Grande mine Measured and Indicated Mineral Resources are reported as 121 koz (962 kt @ 4.0 g/t Au), unchanged from the prior year's disclosure.
- Roça Grande mine Inferred Mineral Resources are reported as 117 koz (889 kt @ 4.0 g/t Au), unchanged from the prior year's disclosure.

### **Open Pit Mineral Resources**

Córrego Brandão Inferred Mineral Resources are reported as 51 koz (1,072 kt @ 1.48 g/t Au) unchanged from the prior year's disclosure.



## Figure 16. Long Section showing Roça Grande Mineral Resources as at December 31, 2023 unchanged from the prior year's disclosure.



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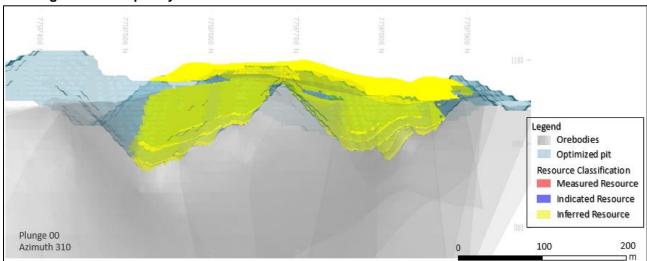


Figure 17. Image showing Córrego Brandão Mineral Resources as at December 31, 2023 unchanged from the prior year's disclosure.

Consolidated CPA Complex Inferred Mineral Resources, unchanged from the prior year's disclosure, are reported as 235 koz (Underground 1,756 kt @ 4.12 g/t Au, Open Pit 43 kt @ 2.08 g/t Au) subdivided as follows:

#### **Underground Mineral Resources**

- Santa Isabel mine Inferred Mineral Resources are reported as 126 koz (978 kt @ 4.01 g/t Au).
- Margazao mine Inferred Mineral Resources are reported as 63 koz (445 kt @ 4.44 g/t Au).
- Bahu Inferred Mineral Resources are reported as 43 koz (333 kt @ 3.99 g/t Au).

#### **Open Pit Mineral Resources**

• Bahu Inferred Mineral Resources are reported as 3 koz (43 kt @ 2.08 g/t Au).

An updated NI 43-101 Technical Report for the CPA Complex was published and uploaded to SEDAR on May 30, 2023.

Figure 18. Long Section showing Santa Isabel and Marzagão Mineral Resources as at December 31, 2023 unchanged from the prior year's disclosure.

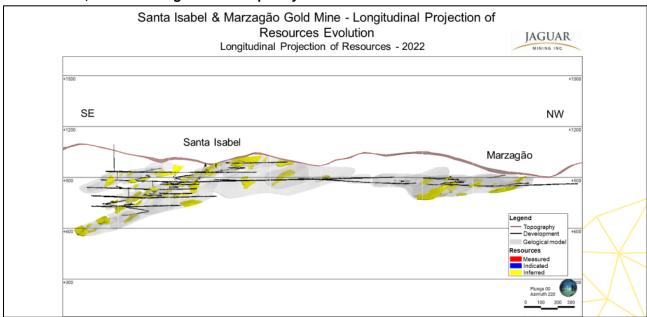
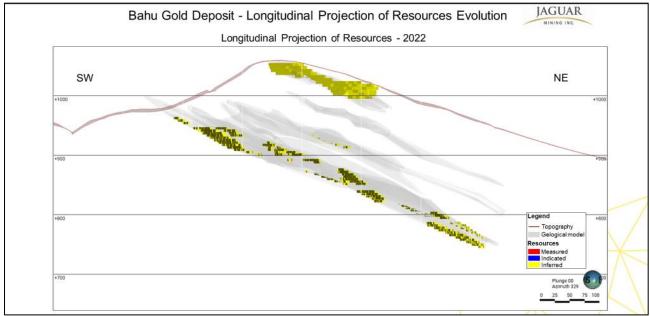


Figure 19. Long Section showing Bahú Mineral Resources as at December 31, 2023 unchanged from the prior year's disclosure.



### Table 3. MRMR Assumptions

ECONOMICAL PARAMETERS								
	Value							
	Unit	PILAR	TURMALINA	FAINA				
Gold Price Resources	USD/oz	1 950	1 800	1 800				
Gold Price Reserves	USD/oz	1 800	1 650	1 650				
Exchange Rate	BRL/USD	4.90	5.20	5.20				
WACC	%	7.00	7.00	7.00				

CUT-OFF GRADE ASSUMPTIONS									
	TURMALINA MINE	FAINA MINE	PILAR MINE	PONTAL	ZONA BASAL	P. PITANGUI (SÃO SEBASTIÃO)	-	STA ISABEL & MARZAGÃO	BAHU
RESERVES (g/t)	2.39	4.00	2.44						
RESOURCES (g/t)	1.79	2.65	1.86	3.00	0.75	2.25	1.80	2.75	1.85

Complex	Deposits	Model Date:			
	Turmalina	September 13, 2022			
	Faina	September 9, 2022.			
MTL Complex	Pontal	September 9, 2022.			
	Zona Basal	August 25, 2022			
	São Sebastião	July 29, 2019.			
	Santa Isabel	September 2022			
	Marzagão	September 2022			
Paciência Complex	Bahú	November 2022			
	Pilar	July 25, 2023.			
Caeté Complex	Roça Grande	December 31, 2018.			
	Córrego Brandão	June 8, 2021.			

### **Qualified Persons**

The scientific and technical information contained in this press release has been reviewed and approved (i) in respect of the estimated Mineral Reserves by Jeff Sepp, P.Eng., and (ii) in respect of the estimated Mineral Resources by Pierre Landry, P. Geo (Turmalina, Faina, Pitangui, Zona Basal, Pontal, Pontal South, CPA) and Reno Pressacco, P. Geo (Pilar, RG, Córrego Brandão, CPA) of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J 2H7. SLR is an independent mining consultancy and Mr. Sepp, Mr Landry, and Mr. Pressacco are each Qualified Persons within the definition of NI 43-101.

All remaining Scientific and technical information (other than described above) 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").

### **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.

Mineralized material for each orebody was classified into the Measured, Indicated, or Inferred Mineral Resource categories based on the search ellipse ranges obtained from the variography study, the observed continuity of the mineralization, the drill hole and channel sample density, and previous production experience from these orebodies.

The Mineral Resources are inclusive of Mineral Reserves. For those portions of the Mineral Resources that comprise the Mineral Reserve, stope design wireframes were used to constrain the Mineral Resource reports.

#### 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 Mining is the third largest operating gold company tenement holder in the Iron Quadrangle, holding or having access to some 56,000 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 covering an area of approximately 56,000 hectares. 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 Gold Mine Complex. The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012. 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 set forth 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," "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. These forward-looking statements are made as of the date of this news release and the dates of technical reports, as applicable. This news release contains forward-looking information regarding potential and, among other things, expected future mineral resources, potential mineral production opportunities, geological and mineral exploration statistics, ore grades, current and expected future assay results, and definition/delineation/exploration drilling at the Pilar Gold Mine and the Turmalina Gold Mine in Brazil, as well as forward-looking information regarding costs of production, capital expenditures, costs and timing of the development of projects and new deposits, success of exploration, development and mining activities, capital requirements, project studies, mine life extensions, and continuous improvement initiatives. The Company has made numerous assumptions with respect to forward-looking information contained herein, including, among other things, assumptions about the estimated timeline and for the development of the drill program at the Pilar Gold Mine (and its expanded exploration footprint) and the Turmalina Gold Mine; 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; and 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 its 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 without limitation environmental hazards, tailings dam failures, industrial accidents and workplace safety problems, unusual or unexpected geological formations, pressures, cave-ins, flooding, chemical spills, and gold bullion thefts and losses (and the risk of inadequate insurance, or the inability to obtain insurance, to cover these risks). Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information.