

JAGUAR



MINING INC.

ANNUAL INFORMATION FORM

FOR THE YEAR ENDED DECEMBER 31, 2023

March 25, 2024

TABLE OF CONTENTS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS.....	1
REPORTING CURRENCY.....	2
NON-GAAP MEASURES.....	3
CORPORATE STRUCTURE.....	3
GENERAL DEVELOPMENT OF THE BUSINESS.....	5
Overview of Business.....	5
Recent History.....	8
2023 Operational Highlights.....	8
Turmalina Complex.....	14
Caeté Complex.....	23
Paciência Complex.....	34
Growth Projects.....	38
Generative Exploration.....	42
Gold Production and Sales.....	47
Employees.....	47
Foreign Operations.....	47
Customers and Suppliers.....	47
Health, Safety and Environmental.....	47
RISK FACTORS.....	48
I. Risk Factors Relating to the Gold Industry.....	48
II. Risks Relating to Jaguar’s Business.....	50
DIVIDENDS.....	56
DESCRIPTION OF CAPITAL STRUCTURE.....	56
MARKET FOR SECURITIES.....	57
PRIOR SALES.....	57
DIRECTORS AND EXECUTIVE OFFICERS.....	58
Directors and Executive Officers.....	58
Board and Management Experience.....	59
Corporate Cease Trade Orders or Bankruptcies.....	61
Audit and Risk Committee and Audit Fees.....	61
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS.....	62
LEGAL PROCEEDINGS AND REGULATORY ACTIONS.....	62
INTERESTS OF EXPERTS.....	63
TRANSFER AGENT AND REGISTRAR.....	63
ADDITIONAL INFORMATION.....	63
APPENDICES.....	64
APPENDIX 1 – General Technical Information.....	64
APPENDIX 2 – Turmalina Mining Complex Background.....	65
APPENDIX 3 – Caeté Complex Background.....	77
APPENDIX 4 – Paciência Mining Complex Background.....	89
APPENDIX 5 – Permits, Licences and Other Regulatory Approvals.....	92
APPENDIX 6 – Charter of the Audit and Risk Committee.....	93

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Information Form (“AIF”) contains forward-looking statements and information within the meaning of applicable Canadian securities legislation (collectively, “forward-looking statements”). These forward-looking statements relate to, among other things, the objectives, goals, strategies, beliefs, intentions, plans, estimates and outlook of Jaguar Mining Inc. (“Jaguar” or the “Company”).

Forward-looking statements can generally be identified by the use of words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “goal,” “will,” “may,” “target,” “potential” and other similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Forward-looking statements are based on estimates and assumptions made by Jaguar in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors Jaguar believes are appropriate in the circumstances. These estimates and assumptions are inherently subject to significant business, economic, competitive, and other uncertainties and contingencies, many of which, with respect to future events, are subject to change. Although Jaguar believes that the expectations reflected in such forward-looking statements are reasonable, undue reliance should not be placed on such statements.

In making the forward-looking statements in this AIF, Jaguar has made several assumptions, including, but not limited to, assumptions concerning: production costs; the geological interpretation and statistical inferences or assumptions drawn from drilling and sampling analysis that are involved in the calculation of Mineral Reserves (as defined below) and Mineral Resources (as defined below); that there is no material deterioration in general business and economic conditions; that there is no unanticipated fluctuation of interest rates and foreign currency exchange rates; that the supply and demand for, deliveries of, and the level and volatility of prices of gold as well as oil and petroleum products develop as expected; that Jaguar receives all applicable regulatory and governmental approvals for its development projects and other operations on a timely basis; that Jaguar is able to obtain all requisite financing for its development projects on reasonable terms; that there is no unforeseen deterioration in Jaguar’s costs of production or Jaguar’s production and productivity levels; that Jaguar is able to procure mining equipment and operating supplies in sufficient quantities and on a timely basis; that engineering and construction timetables and capital costs for Jaguar’s development and expansion projects are not incorrectly estimated or affected by unforeseen circumstances; that costs of closure of various operations are accurately estimated; that unforeseen changes to the political stability or government regulation in the country in which Jaguar operates do not occur, including Brazil; that there are no unanticipated changes to market competition; that Jaguar’s Mineral Reserve estimates are within reasonable bounds of accuracy (including with respect to size, grade and recoverability) and that the geological, operational and price assumptions on which these are based are reasonable; that Jaguar realizes expected premiums over London Metal Exchange cash and other benchmark prices; and that Jaguar maintains its ongoing relations with its employees, affected communities, business partners and joint venture partners.

Actual results may differ materially from those expressed or implied in the forward-looking statements contained in this AIF. The Company anticipates that subsequent events and developments may cause the Company’s views to change. Factors that could cause results or events to differ from current expectations include, among other things:

- fluctuations in the spot and forward price of gold or certain other commodities (such as diesel fuel, natural gas and electricity).
- risks associated with projects in the early stages of evaluation and for which additional engineering and other analysis is required.
- risks related to the possibility that future exploration results will not be consistent with the Company’s expectations, that quantities or grades of reserves will be diminished, and that resources may not be converted to reserves.
- changes in mineral production performance, exploitation, and exploration successes.
- risks that exploration data may be incomplete and considerable additional work may be required to complete further evaluation, including but not limited to drilling, engineering and socioeconomic studies and investment.
- the speculative nature of mineral exploration and development.
- risks associated with the fact that certain of the initiatives described in this Annual Information Form are still in the early stages and may not materialize.
- Jaguar’s ability to maintain a listing of its common shares on a stock exchange.
- actions taken by the Company’s lenders, creditors, shareholders, and other stakeholders to enforce their rights.
- lack of certainty with respect to foreign legal systems, corruption and other factors that are inconsistent with the rule of law.
- changes in national and local government legislation, taxation, controls, or regulations and/or changes in the administration of laws, policies, and practices.

- expropriation or nationalization of property and political or economic developments in Canada and Brazil or other countries in which Jaguar does or may carry on business in the future.
- risks relating to political instability in certain of the jurisdictions in which Jaguar operates.
- non-renewal of key licences by governmental authorities.
- failure to comply with environmental and health and safety laws and regulations.
- contests over title to properties, particularly title to undeveloped properties, or over access to water, power and other required infrastructure.
- the liability associated with risks and hazards in the mining industry, and the ability to maintain insurance to cover such losses.
- climate change-induced physical risks, such as property damages and disruption to operations caused by extreme weather events.
- financial risks related to climate change, including without limitation, increased costs induced by physical risks.
- litigation and legal and administrative proceedings.
- operating or technical difficulties in connection with mining or development activities, including geotechnical challenges, tailings dam and storage facilities failures, and disruptions in the maintenance or provision of required infrastructure and information technology systems.
- increased costs, delays, suspensions, and technical challenges associated with the construction of capital projects.
- risks associated with artisanal and illegal mining.
- adverse changes in the Company's credit ratings.
- the impact of global liquidity and credit availability on the timing of cash flows and the values of assets and liabilities based on projected future cash flows.
- business opportunities that may be presented to, or pursued by, the Company.
- the Company's ability to successfully integrate acquisitions or complete divestitures.
- risks related to competition in the mining industry.
- employee relations, including loss of key employees.
- availability and increased costs associated with mining inputs and labor.
- actions taken against the Company by governmental agencies and securities and other regulators.
- the impact of rising interest rates and inflation, including global inflationary pressures driven by supply chain disruptions.

In addition, there are risks and hazards associated with the business of mineral exploration, development and mining, including environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins, flooding and gold bullion or gold concentrate losses (and the risk of inadequate insurance, or inability to obtain insurance, to cover these risks). Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Readers are cautioned that forward-looking statements are not guarantees of future performance. All of the forward-looking statements made in this Annual Information Form are qualified by these cautionary statements. Specific reference is made to "General Development of the Business – Mineral Reserves and Mineral Resources" and "Risk Factors" and to the MD&A (as defined below) (which is available on SEDAR+ at www.SEDAR+.com) for a discussion of some of the factors underlying forward-looking statements and the risks that may affect Jaguar's ability to achieve the expectations set forth in the forward-looking statements contained in this Annual Information Form. The Company may, from time to time, make oral forward-looking statements. The Company advises that the above paragraph and the risk factors described in this Annual Information Form and in the Company's other documents filed with the Canadian securities regulatory authorities should be read for a description of certain factors that could cause the actual results of the Company to materially differ from those in the oral forward-looking statements. The Company disclaims any intention or obligation to update or revise any oral or written forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

REPORTING CURRENCY

In this AIF, dollar amounts are reported in United States ("US") dollars unless otherwise stated. For Canadian dollars to US dollars, the average exchange rate for 2023 and the exchange rate as at December 31, 2023 were approximately one Canadian dollar per 0.741 and 0.756 U.S. dollars, respectively. For Brazilian Reais to U.S. dollars, the average exchange rate for 2023 and the exchange rate as at December 31, 2023 were approximately one Brazilian Real per 0.21 U.S. dollars.

NON-GAAP MEASURES

Jaguar uses certain non-GAAP financial performance measures in its financial reports, including total cash costs per ounce, all-in sustaining costs per ounce, all-in costs per ounce, and all-in sustaining costs per pound. For a description and reconciliation of each of these measures, please see pages 4 to 18 of Jaguar's Management's Discussion and Analysis of Financial and Operating Results for the year ended December 31, 2023 (the "MD&A"), available electronically from SEDAR+. See also "Non-GAAP Financial Measures" at pages 22 to 25 for a detailed discussion of each of the non-GAAP measures used in this Annual Information Form.

CORPORATE STRUCTURE

Summary

Jaguar's operations, development and exploration activities are conducted through its wholly-owned subsidiaries Mineração Serras do Oeste Ltda. ("MSOL"), IAMGOLD Brazil Prospecção Mineral Ltda. and Agua Nova Pesquisas Mineraias Ltda. (the latter two comprising "IAMGOLD Brazil"). MSOL holds the Turmalina and Pilar underground mines and the Caeté processing plant, in addition to the Company's properties under care and maintenance, which comprise the Roça Grande mine (2019) and the Santa Isabel mine (2012) and adjacent processing plant. IAMGOLD Brazil holds the Company's Onças de Pitangui Project and a land tenement package in the Iron Quadrant which includes the early-stage Acurui Project, in which Jaguar now has a 100% interest. The registered and head office of MSOL and IAMGOLD Brazil is located at Rua Andaluzita, 131, 7ª Andar, Carmo, Belo Horizonte, Minas Gerais, CEP 30310-030, Brazil. Jaguar's corporate head office and registered office is located at 25 Adelaide Street East, Suite 1400, Toronto, Ontario, Canada M5C 3A1.

Background

Jaguar was incorporated on March 1, 2002, pursuant to the Business Corporations Act (New Brunswick). On March 30, 2002, Jaguar issued initial common shares to Brazilian Resources, Inc. ("Brazilian") and IMS Empreendimentos Ltda. ("IMS") in exchange for property. In that transaction, Brazilian contributed to Jaguar all of the issued and outstanding shares in MSOL, a Brazilian mining company that controlled the mineral rights, concessions and licences to certain property located near the community of Sabará (the "Sabará Property"), east of Belo Horizonte in the state of Minas Gerais, Brazil, and IMS contributed to Jaguar a 1,000-tonne per day production facility also located east of Belo Horizonte near the community of Caeté and the mineral rights to a nearby property related to the former National Department of Mineral Production ("DNPM/ANM") Mineral Exploration Request no. 831.264/87 and DNPM/ANM Mineral Exploration Request nos. 830.590/83 and 830.592/83 (the "Rio de Peixe Property"). Jaguar moved its domicile to Ontario in October 2003 and was incorporated under the provisions of the Business Corporations Act (Ontario) and is a corporation existing under the laws of Ontario.

On October 9, 2003, Jaguar adopted the name "Jaguar Mining Inc." and was approved for listing and began trading on the TSX-Venture Exchange ("TSX-V") on October 16, 2003. Jaguar subsequently graduated from the TSX-V to the Toronto Stock Exchange ("TSX") and began trading on the TSX on February 17, 2004, under the symbol "JAG." On July 23, 2007, trading of Jaguar's common shares commenced on the NYSE Arca Exchange ("NYSE Arca") under the symbol "JAG." In July 2009, Jaguar received approval from the New York Stock Exchange ("NYSE") to transfer the trading of its common shares from the NYSE Arca to the NYSE. Trading on the NYSE began on July 6, 2009, also under the symbol "JAG." On June 7, 2013, the common shares of the Company were delisted from the NYSE and, following an insolvency declaration and successful restructuring of its balance sheet obligations, it was delisted from the TSX and relisted on the TSX-V on April 30, 2014. On July 29, 2016, the common shares of Jaguar and the Company's outstanding convertible senior secured debentures ("Debentures") were approved for listing on the TSX. The common shares and Debentures graduated from the TSX-V and commenced trading on the TSX on August 3, 2016, and, on October 13, 2016, the Company announced that the majority of the debentures were converted to common shares.

As at December 31, 2016, Jaguar had three wholly owned direct subsidiaries: MSOL, Mineração Turmalina Ltda. ("MTL") and Mineração Chega Tudo (MCT) Ltda. ("MCT"), each incorporated under the laws of the Federal Republic of Brazil ("Brazil"). In Q1 2017, MSOL completed a merger with MTL to centralize the assets and businesses into a single company, MSOL, providing greater efficiency and effectiveness in asset management, as well as greater synergy and a significant reduction of operating costs. In Q4 2017, Jaguar completed the sale of its wholly owned subsidiary MCT to Avanco Resources Limited ("Avanco") pursuant to an accelerated earn-in agreement. In Q2 2021, the Company completed the full divestment of a 100% interest in the Pedra Branca project to South Atlantic

Gold Corp. when South Atlantic Gold Corp. successfully fulfilled its three performance obligations stated in the definitive option agreement executed on July 29, 2020. On August 27, 2020, the Company completed a share consolidation (the “Share Consolidation”) of its outstanding common shares on the basis of one (1) post-consolidation share for every ten (10) pre-consolidation shares. As a result of the Share Consolidation, the 723,502,108 common shares issued and outstanding as at that date were consolidated to 72,350,197 common shares on a non-diluted basis. As at the date of this AIF, the Company has 79,066,665 common shares outstanding on a non-diluted basis.

MSOL, IAMGOLD Brazil and Jaguar’s Assets and Operations in Brazil

IAMGOLD Brazil was acquired by Jaguar in September 2023 and its land and projects came under the management of the exploration and engineering teams of MSOL. MSOL does not have a board of directors but rather, it has two administrators who are also executive officers of Jaguar and report directly to the Chief Executive Officer and a director of Jaguar, Vernon Baker, who is a resident of Brazil and reports directly to Jaguar’s Board of Directors (the “Board”). Specifically, the two administrators of MSOL are Eric Duarte (VP of Operations) and Marina Freitas (VP of Projects and Finance of Jaguar), and both of them are citizens and residents of Brazil and have power of attorney to effect decisions that the Board makes in regard to MSOL, IAMGOLD Brazil and Jaguar’s assets and operations in Brazil. The Board instructs the Chief Executive Officer of Jaguar (Mr. Baker), who then instructs the two VPs of Jaguar who also act as the administrators of MSOL (Mr. Duarte and Ms. Freitas), and they, in turn, execute those instructions in Brazil. Corporate matters of Jaguar in Toronto are handled by the Chief Financial Officer of Jaguar (Alfred Colas) and are reported to both the Chief Executive Officer and the Chairman of the Board (Jeff Kennedy).

One of Jaguar’s Directors, Luis Miraglia, is a citizen and resident of Brazil and, other than the Chief Financial Officer of Jaguar (Mr. Colas), all members of Jaguar’s management team are residents of Brazil. Mr. Colas travelled to Brazil to meet with local management and visit the Company’s material projects three times between September 2023 and March 2024, which translates to at least six trips per year.

Jaguar’s finance team reviews the management accounts of MSOL and IAMGOLD Brazil at the end of each quarter.

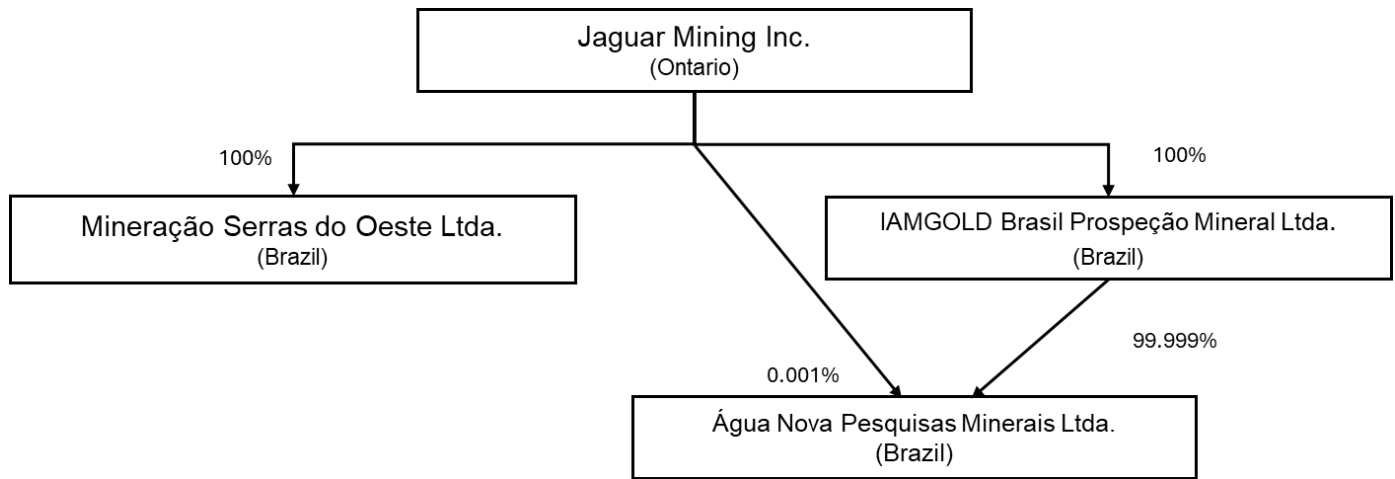
MSOL, which includes IAMGOLD Brazil in all subsequent references, is largely funded by Jaguar as the proceeds from the sale of gold in Brazil are split between MSOL and Jaguar under the provisions of a transfer-pricing agreement. Management of Jaguar transfers funds to MSOL on an as-needed basis, following thoughtful deliberations with the Board in regard to the respective budgets of Jaguar and MSOL, MSOL’s payables, Jaguar’s cash flow forecast and existing market conditions. The leftover payable from Jaguar to MSOL, if any, is settled against an intercompany loan.

Jaguar and MSOL are highly integrated in terms of personnel and reporting structures. Furthermore, multiple staff members hold positions in both companies. The Board can remove officers of MSOL in consultation with senior management of Jaguar. Jaguar’s Human Resources team in Brazil will execute any decision of the Board to remove an officer of MSOL in accordance with the applicable policies and procedures of Jaguar.

The minute books and corporate records of MSOL are kept in electronic form in the Commercial Registry in Brazil. MSOL does not have a corporate seal as none is required under Brazilian law. Jaguar’s books and records are located at the head office of Jaguar in Toronto, Ontario.

Corporate Structure Chart

Figure 1: Corporate Structure Chart



As at March 2024

GENERAL DEVELOPMENT OF THE BUSINESS

Overview of Business

Jaguar Mining Inc. is a Canadian-listed junior gold mining, development, and exploration company operating in the Iron Quadrangle, Minas Gerais, Brazil. The Company's assets include three gold mining complexes (MTL, Caeté and Paciência) within a large, highly prospective tenement package of approximately 56,000 hectares in surface area. The MTL Complex comprises the active Turmalina mine and the Faina and Onças de Pitangui development projects. The Caeté Complex comprises the active Pilar mine and the inactive Roça Grande mine (on care and maintenance since 2019) while the third complex, Paciência, comprises the currently inactive Santa Isabel and Marzagão mines which have been on care and maintenance since 2012.

The Company also owns a portfolio of high-potential exploration targets both contiguous to its mine and plant infrastructure and within its strategic and highly prospective tenement package.

The Company is led by a proven executive management team with extensive gold operations and development experience in South America.

Mineral Resources and Mineral Reserves

As at December 31, 2023, Jaguar's Mineral Reserves and Mineral Resources are:

1. Jaguar's total Proven and Probable Mineral Reserves are estimated to total 470 koz of gold (4,015 kt with an average grade of 3.64 g/t Au).
2. Jaguar's total Measured and Indicated Mineral Resources are estimated to total 1,676 koz of gold (12,633 kt with an average grade of 4.12 g/t Au). Jaguar's Mineral Resources are stated inclusive of the Mineral Reserves.
3. Jaguar's Inferred Mineral Resources are estimated to total 1,628 koz of gold (14,175 kt with an average grade of 3.58 g/t Au).

The tables below present the Mineral Reserve and Mineral Resource estimates for the MTL Complex, Caeté Complex and Paciência Complex as per the Notes below.

Table 1: Summary of Mineral Reserves as at December 31, 2023

December 31, 2023	Proven Reserves			Probable Reserves			Proven & Probable Reserves		
	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 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

- 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.
 5. Numbers may not add due to rounding.
 6. There are no known environmental, permitting, legal, title, socio-economic, political, or other risk factors that could materially affect the Mineral Reserve estimates.

Table 2: Summary of Mineral Resources as at December 31, 2023

December 31, 2023	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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, BFI1)	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	4.44	63
Bahu	-	-	-	-	-	-	-	-	-	333	3.99	43
Total - Paciência Complex UG	-	-	-	-	-	-	-	-	-	1756	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	-	-	-	-	-	-	-	-	-	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.
 2. 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, Bahú, Roça Grande and Córrego Brandão deposits.
 3. Mineral Resources include the Turmalina, Faina, Pontal, São Sebastião, Santa Isabel, Marzagão, Bahú, Pilar and Roça Grande underground mineral resources and the Zona Basal, Bahú and Córrego Brandão open-pit mineral resources.
 4. 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 Bahú, 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.
 5. 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 São Sebastião 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 Bahú 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 December 31, 2018. Mineral Resources at the Córrego Brandão deposit include drill hole information current as of June 8, 2021.

6. Mineral Resources are estimated using a long-term gold price of US\$1,800/oz Au for the Turmalina, Faina, Pontal, Zona Basal, Santa Isabel, Marzagão, Bahú, Roça Grande and Córrego Brandão deposits, US\$1,500/oz Au for the São Sebastião deposit and US\$1,950/oz Au for the Pilar deposit.
7. 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, Bahú, Roça Grande, Córrego Brandão deposits and an exchange rate of R\$4.90:US\$1.00 for the Pilar deposit.
8. Minimum width of approximately 2.00 m was used for Turmalina, Faina, Pontal, Santa Isabel, Marzagão, Bahú, 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 Bahú open pit mineral resources were constrained with pit optimizations using Lerchs-Grossmann algorithm.
9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
10. Numbers may not add due to rounding.

Notes to Tables 1 and 2:

Jaguar prepared the Mineral Reserve and Mineral Resource depletion under the supervision of Jonathan Victor Hill, FAUSIMM (Jaguar), who is a Qualified Person within the definition of the NI 43-101. Although Jaguar has carefully prepared and verified the Mineral Resource and Mineral Reserve figures presented herein, such figures are estimates, which are, in part, based on forward-looking information and no assurance can be given that the indicated amounts of gold will be produced. Estimated Mineral Reserves may have to be recalculated based on actual production experience. Market price fluctuations of gold, as well as increased production costs or reduced recovery rates and other factors, may render the present Proven and Probable Mineral Reserves unprofitable to develop at a particular site or sites for periods of time. See “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements.”

Recent History

2023 Operational Highlights

The following is a description of Jaguar’s most significant events over the past three completed financial years.

Table 3: Summary of the Operations

Annual Summary Operating Results	2023			2022			2021		
	Turmalina	Pilar	Total	Turmalina	Pilar	Total	Turmalina	Pilar	Total
Tonnes Milled (kt)	408	405	813	383	444	827	409	447	856
Average head grade (g/t)	2.92	3.27	3.09	3.28	3.57	3.44	3.22	3.69	3.47
Recovery (%)	86	88	87	87	88	88	88	87	87
Gold ounces									
Produced (koz)	33.1	37.6	70.7	36.2	44.8	81.0	37.5	46.4	83.9
Sold (koz)	33.4	37.0	70.5	35.9	44.2	80.0	37.8	46.8	84.6
Development									
Primary (km)	3.1	1.8	5.0	2.3	1.4	3.7	2.8	1.6	4.4
Secondary (km)	2.6	2.6	5.2	3.0	2.3	5.3	2.5	2.3	4.8
Primary + Secondary (km)	5.7	4.4	10.2	5.3	3.6	8.9	5.3	3.9	9.2
Exploration Development (km)	1.7	0.0	1.7	1.5	1.1	2.6	0.1	0.2	0.3
Definition, infill and exploration drilling (km)	23	22	45	54	34	88	47	34	81

In 2023, the Company made a substantial investment in ongoing lateral development from Turmalina which reached the Faina resource at the end of the year. This strategic commitment to Faina's development will persist throughout 2024, encompassing continuous advancements in both infrastructure and ore development. Anticipated milestones include the first stoping at Faina expected in the second half of the year, marking the commencement of increased ounce production.

At the Pilar mine, the recent discovery of ore in the BA-Torre structure is recognized as a significant prospect, offering substantial opportunities for the expansion of mineral resources both above and below the existing development. Its proximity to the current mining zones and infrastructure positions the Company to explore developments both upward and downward along the plunge.

The Turmalina and the Caeté process plants are in the process of closing their tailings dams, as both plants transition to full dry stacking of tailings. The Turmalina dam has been closed and covered with HDPE lining. Final covering with soil and vegetation is planned. The Caeté plant has a leach tailings filter plant and a water treatment plant. During 2023, the Turmalina and Pilar mines replaced their underground haulage fleet with fixed-frame trucks that can travel up the ramps more quickly, for improved trucking efficiency and shorter cycle times. 2023 was a challenging year operationally as both mines faced changing geometry of their ore bodies, which narrowed widths and increased ore dilution. The Pilar mine encountered geometry changes in primary orebodies, leading to dilution and extraction problems. At the Turmalina mine, variability in mined areas necessitated modifications to the grade control program. The Faina project saw ongoing development, with plans for adjustments to the mining system. Despite these challenges, strategic initiatives and acquisitions were undertaken to position the Company for sustainable growth.

In the third quarter, the Company faced implementation challenges, especially in adapting to new tools at Turmalina and initiating a cut-and-fill mining method, where appropriate, at Pilar. Productivity-enhancing measures were implemented to lower operating costs. The acquisition of IAMGOLD’s Brazilian assets, including the Onças de Pitangui project, was successfully completed.

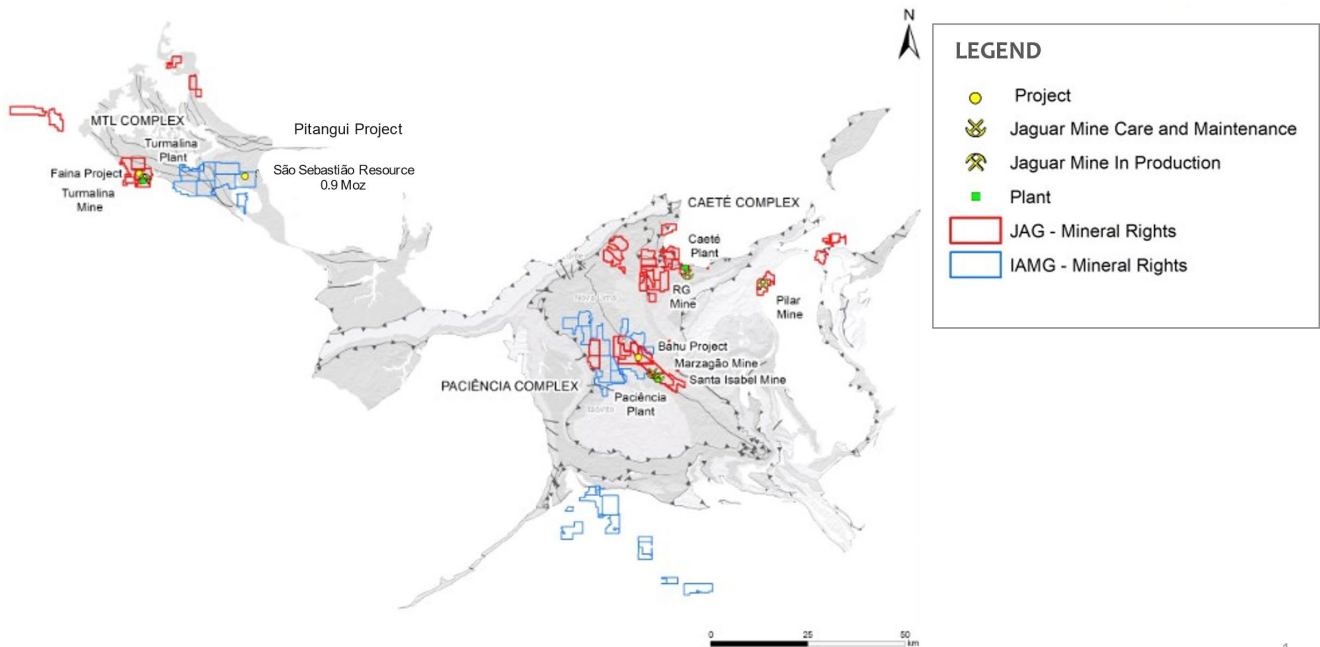
By the fourth quarter, production stabilized as the Company realized the benefits from adjustments and improvement work that began earlier in the year. The acquisition of IAMGOLD’s assets strengthened the Company’s resource base. Financially, the Company maintained a robust liquidity position, with a cash balance of \$22.0 million at the end of 2023.

Acquisition of IAMGOLD’s Brazilian Assets

In August 2023, Jaguar announced it had entered into a share purchase agreement dated August 1, 2023 (the “Agreement”), pursuant to which the Company agreed to purchase and assume (the “Transaction”) from a subsidiary of IAMGOLD Corporation (NYSE: IAG) (TSX: IMG) (“IAMGOLD”), AGEM Ltd. (the “Vendor”), the Onças de Pitangui Project and the Vendor’s interest in the Acurui Project.

Location of Jaguar’s and IAMGOLD’s Tenements which were consolidated under the share purchase agreement (the “Agreement”). This map also shows the locations of Jaguar’s operating assets, Turmalina mine (MTL Complex), the Caeté Complex including the Pilar mine, and the Paciência Complex (on care and maintenance since 2012).

Figure 2: IAMGOLD Location



The Transaction

As consideration for acquiring a 100% interest in the Onças de Pitangui Project and the Vendor's interest in the Acurui Project, the Company agreed to the following:

- a) the issuance to the Vendor of 6,331,713 common shares in the capital of the Company (the "Consideration Shares"), having an aggregate value of USD\$9 million based on the volume weighted average closing price per share for the thirty (30) calendar days preceding the date of the Agreement, which was CAD\$1.873 per share; and
- b) the grant to the Vendor of a net smelter returns royalty (the "Royalty"), which will be calculated as follows with respect to the Onças de Pitangui Project and the Acurui Project:
 - i. in the case of gold (not including silver or other metals) from the Onças de Pitangui Project, the Company will pay the Vendor a Royalty of US\$80 per ounce for the initial 250,000 ounces of gold sold from the Onças de Pitangui Project,
 - ii. following the initial 250,000 ounces of gold sold pursuant to the Onças de Pitangui Project, the amount of the Royalty payable to the Vendor in respect of the Onças de Pitangui Project for any applicable calendar quarter will be the result obtained by multiplying the net smelter returns for such calendar quarter by 1.5%,
 - iii. the amount of the Royalty payable to the Vendor in respect of the Acurui Project for any applicable calendar quarter will be the result obtained by multiplying the net smelter returns for such calendar quarter by 1.5%, and
 - iv. no Royalty shall be payable for, or with respect to, such reasonable quantities of product which are used by the Vendor exclusively for assaying, non-bulk sampling, treatment, amenability, metallurgical, test work, piloting or other analytical processes or procedures in respect of the Onças de Pitangui Project or the Acurui Project.

The Transaction was an arm's length transaction for purposes of the policies of the TSX and was subject to customary closing conditions, including the approval of the TSX. No finder fees were payable in connection with, and no change of control of the Company resulted from, the Transaction. The Transaction closed in September 2023.

The Vendor agreed to hold and to not transfer or trade the Consideration Shares for a period of twelve (12) months following the closing date of the Transaction. In addition, the Vendor agreed to notify and inform Jaguar if the Vendor intends to sell all or any of the Consideration Shares.

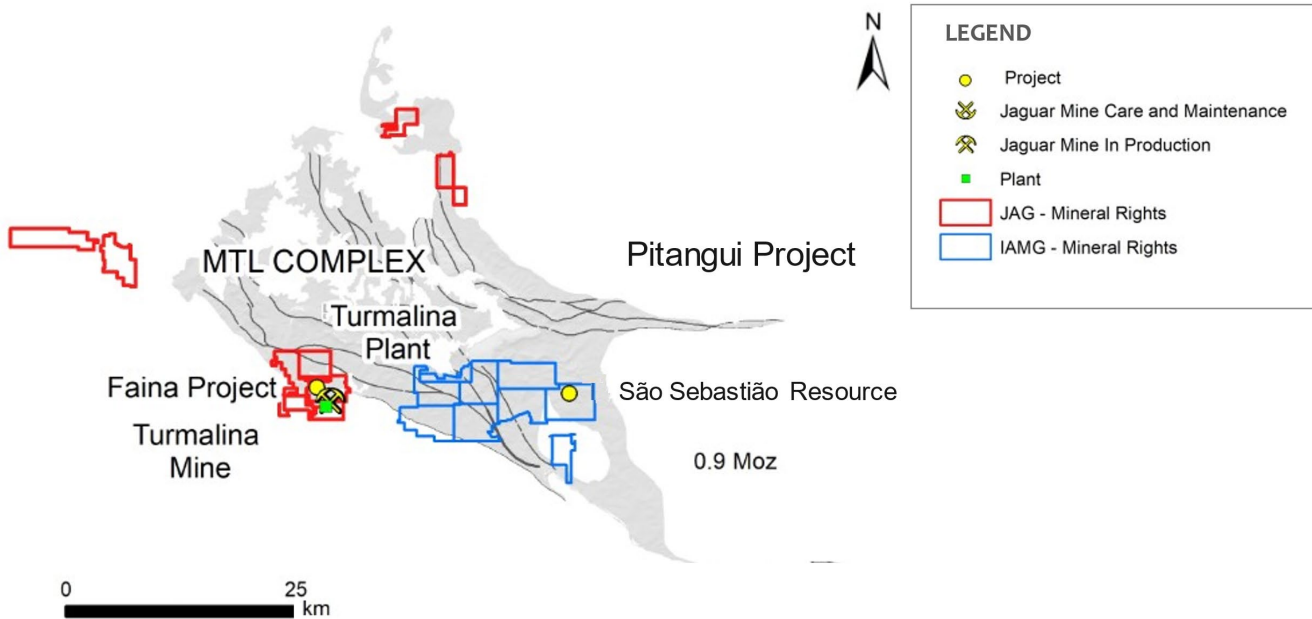
The Onças de Pitangui Project

The Onças de Pitangui Project is located approximately 110 kilometers northwest of the city of Belo Horizonte in Minas Gerais State, Brazil, and it comprises mineral exploration licenses and license applications covering the Archean-aged Onças de Pitangui greenstone belt, located near the Company's principal operating assets in the "Iron Quadrangle". The most recent technical report for the Onças de Pitangui project was signed on February 2, 2024 and is called Technical Report on the Turmalina Mining Complex, Minas Gerais, Brazil (the "Turmalina Technical Report") and was authored by SLR Consulting (Canada) Ltd.

Gold mineralization is hosted by a series of parallel and complexly folded horizons of banded iron formation (BIF) separated by mafic volcanic and minor sedimentary units within the lower greenstone belt stratigraphy. Within the iron formations, gold mineralization is associated with sulphide replacement of primary magnetite bands, characterized by the presence of pyrrhotite and lesser amounts of arsenopyrite, pyrite, and chalcopyrite. Drilling to date has identified two main mineralized horizons, referred to as "Biquinho" and "Pimentão", which occur approximately 100 metres apart vertically. On December 18, 2023, the Company published (see press release dated December 18, 2023) its updated Mineral Reserves and Mineral Resources (MRMR) for its MTL Complex which included those for the Onças de Pitangui Project – São Sebastião Mineral Resource, acquired from IAMGOLD. MRMR figures for the Onças de Pitangui Project are presented in Table 10 later in this AIF report.

The Onças de Pitangui Project – São Sebastião Mineral Resource block model was completed by SRK in 2019 and was modified by SLR for recent reporting in accordance with CIM Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines. The Mineral Resources endorsed by SLR have been reported within panels measuring 5m x 5m x 2m, based on a 2.25 g/t Au cut-off grade, satisfying the reasonable prospects for eventual economic extraction by reporting within a potentially mineable shape.

Figure 3: Proximity of Onças do Pitangui to Jaguar's Turmalina mine

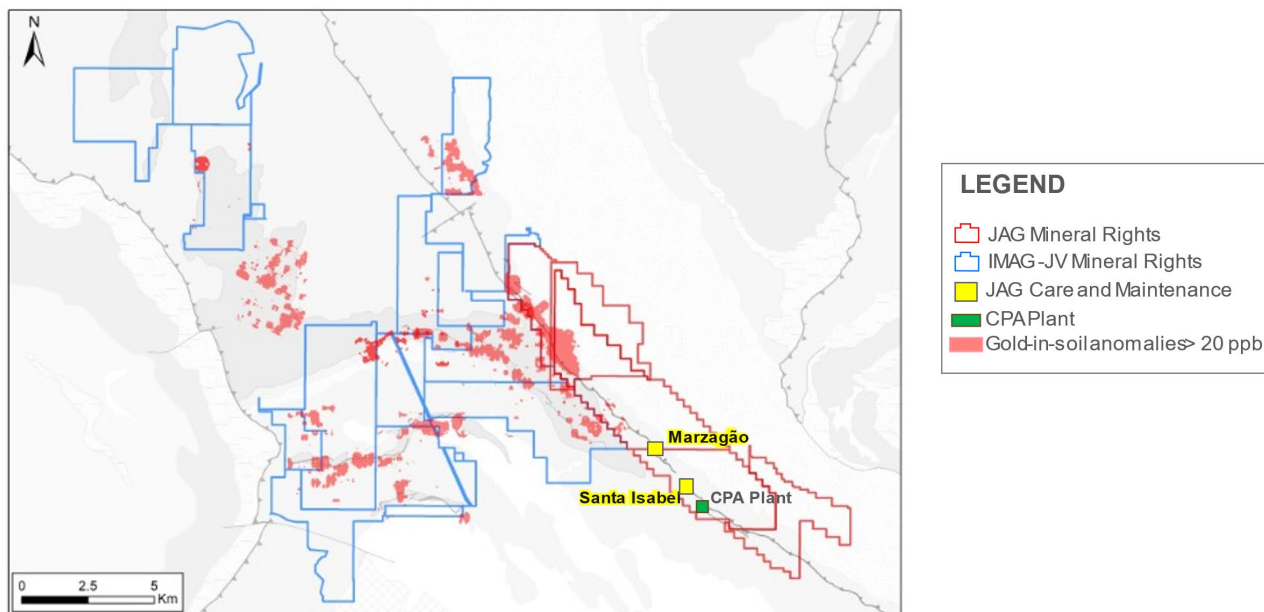


The Acurui Project

The Acurui Project was previously an exploration joint venture between Jaguar and IAMGOLD, where Jaguar was the operator. The project is comprised of exploration tenements located near the Company’s Paciência plant in the Iron Quadrangle. For further information regarding the background to the Acurui Project, please refer to the Company’s news releases dated August 26, 2020, August 30, 2021, and August 2, 2023 respectively, which are available on SEDAR+.

Location of the original Acurui Project Tenements previously encompassing the Acurui JV Agreement which are now incorporated into Jaguar’s Tenements portfolio and Paciência Complex (CPA)

Figure 4: Location of the original Acurui Project



2

Non-Cash Royalty Exchange with AngloGold Ashanti

In August 2023, (see press release dated August 14, 2023) the Company announced that it had reached an agreement with a subsidiary of AngloGold Ashanti Limited (NYSE: AU) (“AngloGold”) for a non-cash royalty exchange related to three mining rights on royalties previously attached to seven mining rights which comprises its Paciência Gold Mining Complex (“CPA”) under a historical accord. As a consideration of the partial waiver of the royalties by AngloGold, Jaguar assigned two mining rights (“Carrancas” and “Pacheca”) to AngloGold, located close to the AngloGold’s other operating assets (Lamego and Córrego do Sítio).

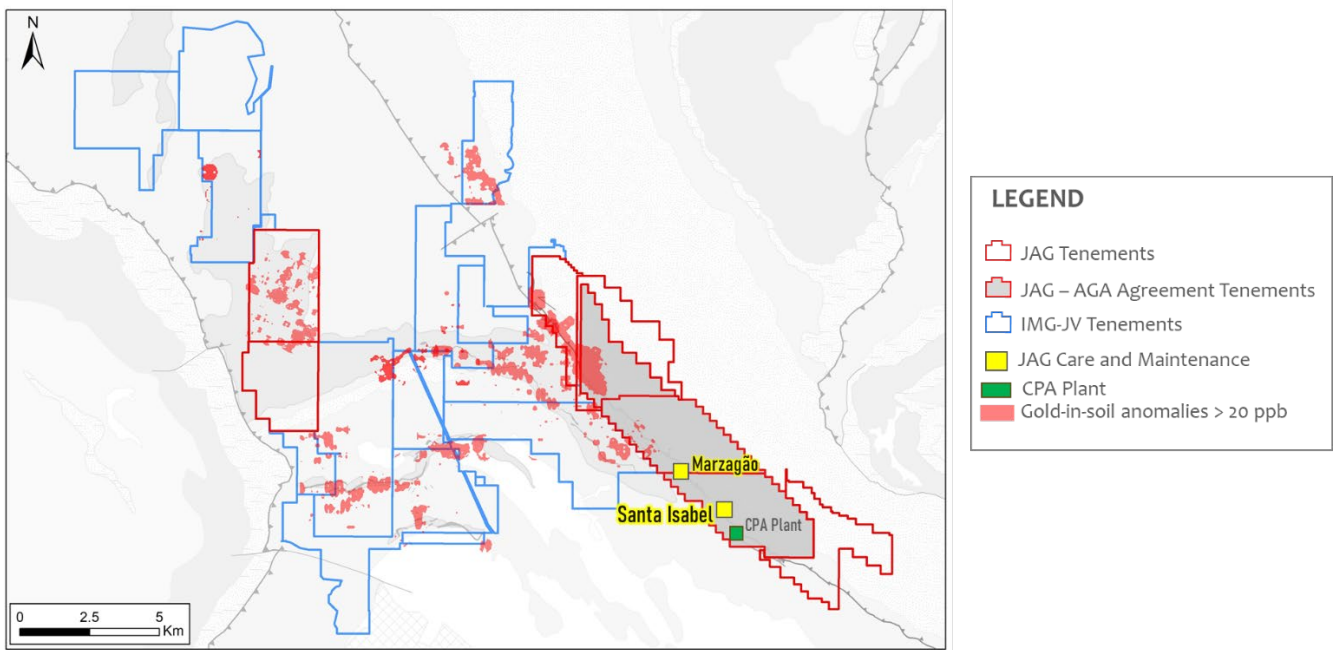
CPA is located along with two of the Company’s operating assets (Caeté and MTL Complexes) in the prolific Iron Quadrangle area of Minas Gerais, Brazil . The complex is comprised of two underground mines, Santa Isabel and Margazao, and a processing plant with capacity to treat approximately 1,750 tpd within approximately 9,000 Ha of contiguous permitted mining tenements. The CPA plant was commissioned in April 2008 and commercial production was declared in December 2008. Total production during this period is estimated at approximately 1,755 Mt at an average grade of 3.06 g/t Au containing approximately 154,000 ounces of gold. The operation has been on care and maintenance since 2012.

In the Company’s most recent NI43-101 disclosure, published in January 2024 (available on Sedar+), CPA has an estimated Inferred Mineral Resource of 1.80 Mt at an average grade of 4.06 g/t Au, containing approximately 235,000 ounces of gold.

In 2003, the Company executed a sale purchase agreement with AngloGold covering the three main individual tenements related to CPA. The agreement included payment, related commitments, and a up to 4.5% NSR Royalty that was payable to AngloGold from production at a gold price above US\$510 per ounce. The two companies have been in ongoing discussions regarding restructuring the NSR which, in its original form, did not reflect current or projected market conditions.

Detailed map of Jaguar’s Paciência Complex showing location of tenements impacted by the new agreement with AngloGold and contiguous tenements recently acquired from IAMGOLD.

Figure 5: Detailed Jaguar’s Paciência Complex location



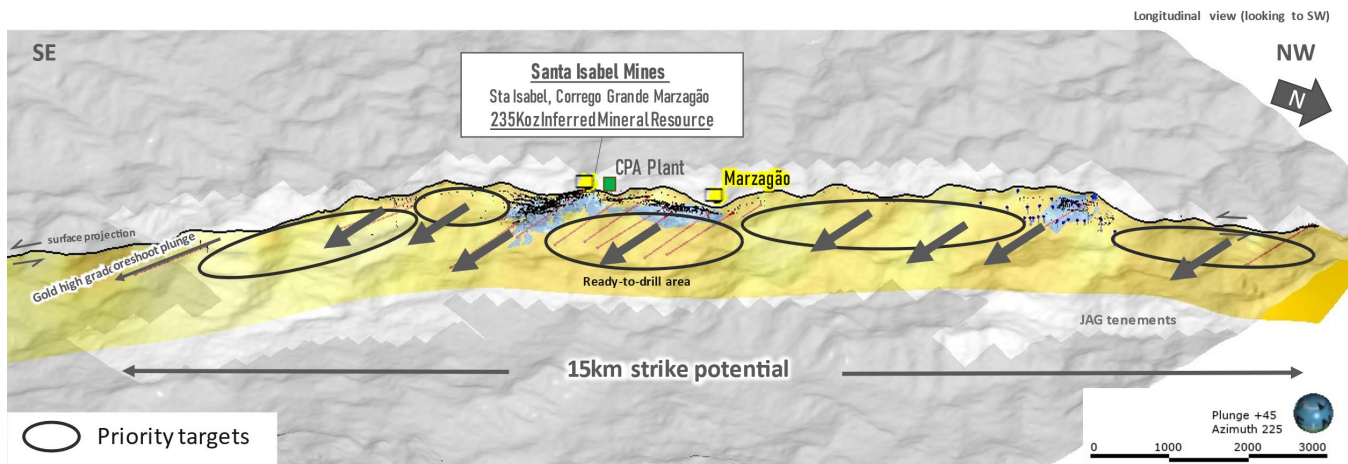
Historical mining activity at CPA has been focused on a relatively short 1.5 km strike length of Jaguar’s overall extensive tenement package which covers a highly prospective, 15 km strike segment of the regionally significant São Vicente/Paciência Lineament. This Lineament is a crustal scale shear zone that extends some 60 km across the Iron Quadrangle. Numerous gold deposits and prospects are spatially related along the entire length of this structure.

Gold mineralization is manifested as a regular series of shallowly dipping tabular sheets composed of quartz veins hosted in an altered matrix comprised of sericite/chlorite/carbonate schist with higher grades concentrated along structurally controlled plunging “oreshoots.” The length of these individual shoots varies between 10 m and 200 m along strike and can extend greater than hundreds of metres following the down plunge direction of continuity. (.

The mineralization is free milling with gold occurring as discrete, visible grains hosted by quartz veins and/or veinlets, or as tiny inclusions within sulphide crystals, mainly pyrite and arsenopyrite. Historical metallurgical recoveries have averaged 92.4%.

Long Section facing Southwest showing the location of the Santa Isabel Mine and the significant upside strike and dip potential along a 15km segment of the São Vicente/Paciência Lineament within Jaguar’s Tenement Package

Figure 6: Long Section facing Southwest - Santa Isabel Mine location



Turmalina Complex

2023 Review Mineral Reserves and Mineral Resources, Operations, Exploration

- Mineral Resources and Mineral Reserves**

For the purposes of this AIF, Mineral Reserves and Mineral Resources for Turmalina as at December 31, 2023, are reported based on an updated mine plan and based on 2022 resource model and mine plan informed by diamond drilling, development sampling and geological mapping completed during 2022.

Turmalina mine 2P Mineral Reserves (Proven & Probable) are reported as 144 koz of gold (1,323 kt @ 3.38 g/t Au). Proven Reserves total 60 koz (514 kt @ 3.61 g/t Au), while Probable Reserves total 84 koz (808 kt @ 3.24 g/t Au). 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 the Turmalina Technical Report. Faina’s Probable Mineral Reserves are reported as 132 koz of gold (787 kt @ 5.22 g/t Au).

Measured and Indicated Mineral Resources, as defined below, (as at December 31, 2023) at Turmalina Underground (includes the Faina, Pontal, Pontal South and Project Onças de Pintagui-São Sebastião inventories) total 1,143 koz of gold (8,411 kt @ 4.43 g/t Au). Inferred Resources as at December 31, 2023 at Turmalina total 849 koz of gold (6,862 kt @ 3.85 g/t Au).

Mineral Resources Estimates - Combined (Turmalina, Faina, Pontal, Pontal South and Onças do Pitangui Project)

Table 4 summarizes the MTL Gold Mine Complex Mineral Resources (underground) on December 31, 2023. The total Mineral Resources for the Turmalina Mine Complex is comprised of 1,143 koz of gold in the Measured and Indicated Resource categories (8,411 kt @ 4.23 g/t Au), and 849 koz of gold (6,862 kt @ 3.85 g/t Au) in the Inferred Mineral Resource category. These Mineral Resources figures include Turmalina and three other underground “satellite” deposits (Faina, Pontal and Pontal South) also includes the new Onças do Pitangui Project – São Sebastião. A cut-off grade of 1.79 g/t Au was used to report the Mineral Resources for the Turmalina Mine, and cut-off grades of 2.65 g/t Au, 3.00 g/t Au and 3.00 g/t Au were used to report the Mineral Resources for the

Faina, Pontal and Pontal South deposits, respectively. For Onças de Pitangui Project – São Sebastião the cut-off grade of 2.25 g/t was used to report resources.

The conceptual operational scenarios considered during the preparation of previous Mineral Resources estimates for the Faina and Pontal and Pontal South deposits envisioned that the fresh, unoxidized mineralization would be excavated on a “satellite” deposit basis and transported by truck to the existing Turmalina Plant for processing.

Table 4: Summary of Mineral Resources as at December 31, 2023

December 31, 2023	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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 MTL 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	0	0.00	0	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
Onças do Pitangui Project (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

- Notes:**
1. CIM (2014) definitions were followed for the classification of Mineral Resources.
 2. Mineral Resources are inclusive of the Mineral Reserves at Turmalina, Faina. No Mineral Reserves are currently present at the Pontal, Zona Basal and São Sebastião deposits.
 3. Mineral Resources include the Turmalina, Faina, Pontal, Onças de Pitangui underground mineral resources and the Zona Basal, open-pit mineral resources.
 4. 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.
 5. 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 São Sebastião deposit include drill hole information current as of July 29, 2019.
 6. Mineral Resources are estimated using a long-term gold price of US\$1,800/oz Au for the Turmalina, Faina, Pontal, Zona Basal, US\$1,500/oz Au for the São Sebastião deposit.
 7. 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.
 8. Minimum width of approximately 2.00 m was used for Turmalina, Faina and Pontal deposits. A minimum height of 2.00 m was applied to São Sebastião using reporting panels. Zona Basal open pit mineral resources was constrained with pit optimizations using Lerchs-Grossmann algorithm.
 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
 10. Numbers may not add due to rounding.

Mineral Resources Estimate - Turmalina Mine Only

The Mineral Resources estimate was generated from a block model constrained by three-dimensional (3D) wireframe models constructed by Jaguar using a minimum width of 2 m. The gold grades have been interpolated using several interpolation algorithms using capped composited assays. A capping value of 50 g/t Au was applied for all three Orebodies. The Mineral Resources figures are reported using the gold grades estimated by the Ordinary Kriging (OK) method. The wireframe models of the mineralization and excavated material for the Turmalina mine were also constructed by Jaguar.

The mineralized material for each individual Orebody was classified into the Measured, Indicated, or Inferred Mineral Resource categories on the basis of the search ellipse ranges obtained from the variography study, of the observed continuity of the mineralization, of the drill hole and channel sample density, and previous production experience with the known 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.

Additional Mineral Resources are present that reside beyond the Mineral Reserves. For these areas, mineral resources are reported using constraining panels, after depletion, using the excavated wireframes, and considering a cut-off grade of 1.79 g/t Au. Jaguar's staff estimates that the Mineral Resources at Turmalina comprise 432koz of gold (3,295 kt @ 4.08 g/t Au) in the Measured and Indicated Resources categories; and 133 koz of gold (1,271 kt @ 3.26 g/t Au) in the Inferred Mineral Resources category. The Mineral Resources for the Turmalina mine only are presented in further detail in Table 5.

Table 5: Summary of Mineral Resources by Orebody as at December 31, 2023

December 31, 2023	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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 MTL 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

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Turmalina Underground Mine.
3. Mineral Resources at the Turmalina Mine are estimated at a cut-off grade of 1.79 g/t Au.
4. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounces at the Turmalina Mine
5. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.20 Brazilian Reals: 1 US Dollar for the Turmalina Mine.
6. A minimum mining width of 2.00 m was used at the Turmalina Mine.
7. Mineral Resources are inclusive of Mineral Reserves at the Turmalina Mine.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Numbers may not add, due to rounding.

Mineral Reserves Estimate – MTL Complex

Mineral Reserves reported below for MTL Complex are on December 31, 2023. Table 6 summarizes the Mineral Reserves as estimated by Jaguar.

Table 6: Turmalina Mineral Reserves as at December 31st, 2023

	Proven Reserves			Probable Reserves			Proven & Probable Reserves		
	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	4.57	18	56	3.26	6	177	4.16	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

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 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.
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.
5. Numbers may not add due to rounding.

The Mineral Reserves consist of selected portions of the Measured and Indicated Resources within designed stopes and associated development, under Jeff Sepp’s supervision, an employee of SLR Consulting (Canada) Ltd. who is an independent Qualified Person within the definition of the NI 43-101 for Mineral Reserves.

Dilution and extraction (mining recovery) have been included in the reserves estimate as follows:

1. Areas within the stope grade below COG of 2.39 g/t Au. The resources wireframes were constructed at a cut-off grade of 0.50 g/t Au, and therefore they include material below the reserve cut-off grade for continuity.
2. Planned dilution includes areas where the stope designs run outside of the Mineral Resources wireframe, to achieve minimum width and due to irregularities in geometry. Additional volume included in this manner averages approximately 14% across the Mineral Reserves.
3. Extraction is assumed to be 0.95 for stopes, 0.9 for various other activities, and 0.5 for rib pillars. Although some losses are encountered during blasting and mucking, they are minimal, and reconciliation to mill results indicates that high dilution/high extraction assumptions match up well.

Cut-Off Grade

A break-even cut-off grade of 2.39 g/t Au was estimated for Mineral Reserves, using a gold price of \$1,650/oz, an average gold recovery of 86%, and the 2023 cost data for the Turmalina mine (operating costs of BRL\$410/t) and cost data for the Faina project (operating costs of BRL\$449/t). Gold prices used for reserves are based on consensus, long-term forecasts from banks, financial institutions, and other sources.

Cost data was stated in US dollars, using the exchange rate at the time of the reporting (approximately 5.20 BRL to the US dollar). A majority of MTL Complex costs are denominated in BRL.

The tables/illustrations 7 and 8 below (longitudinal projections of the Turmalina deposit) are panoramas of the resources and reserves inventory of the Turmalina operation by the end of the 2023 Year and by the end of the 2022 Year, respectively. In both illustrations, the more updated 2023 image on the left shows the lateral development advanced to the west, towards the Faina deposit.

Table/illustration 9 and 10 below (longitudinal projections of the Faina deposit) are a panorama of the resources and reserves inventory of the Faina deposit by the end of the 2023.

Figure 7: Turmalina Mineral Resources on December 31, 2023 and on December 31, 2022

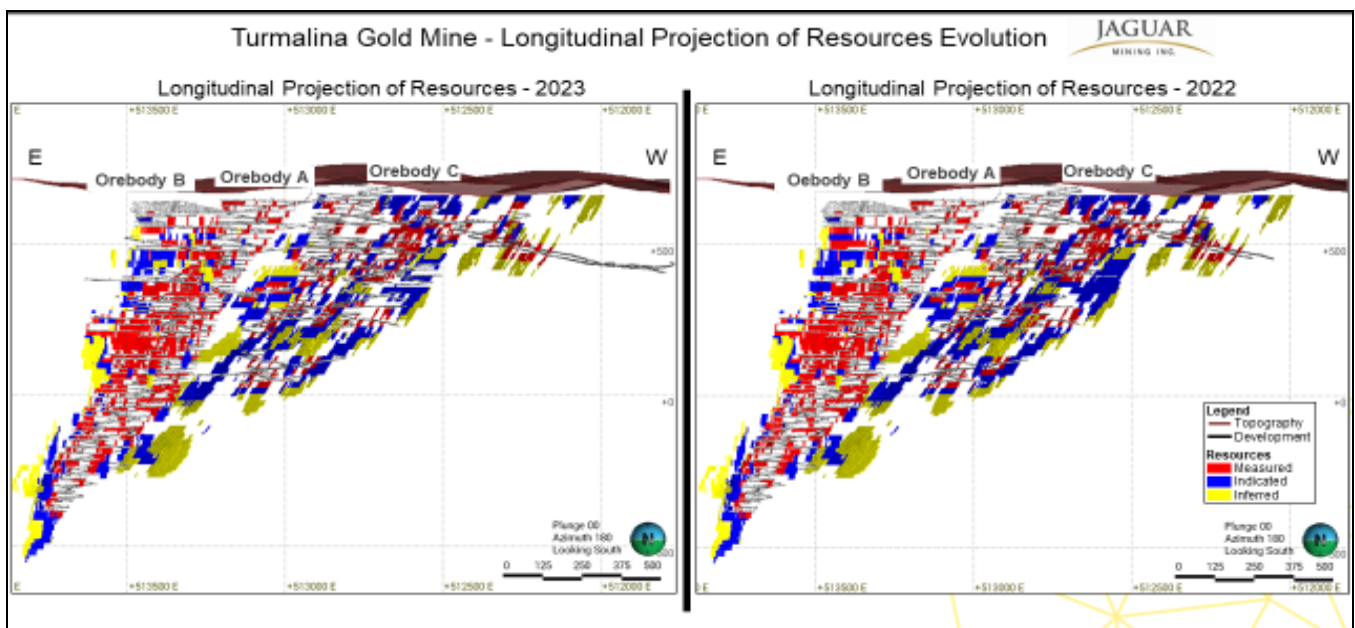


Figure 8: Illustration: Turmalina Mineral Reserves on December 31, 2023, and on December 31, 2022

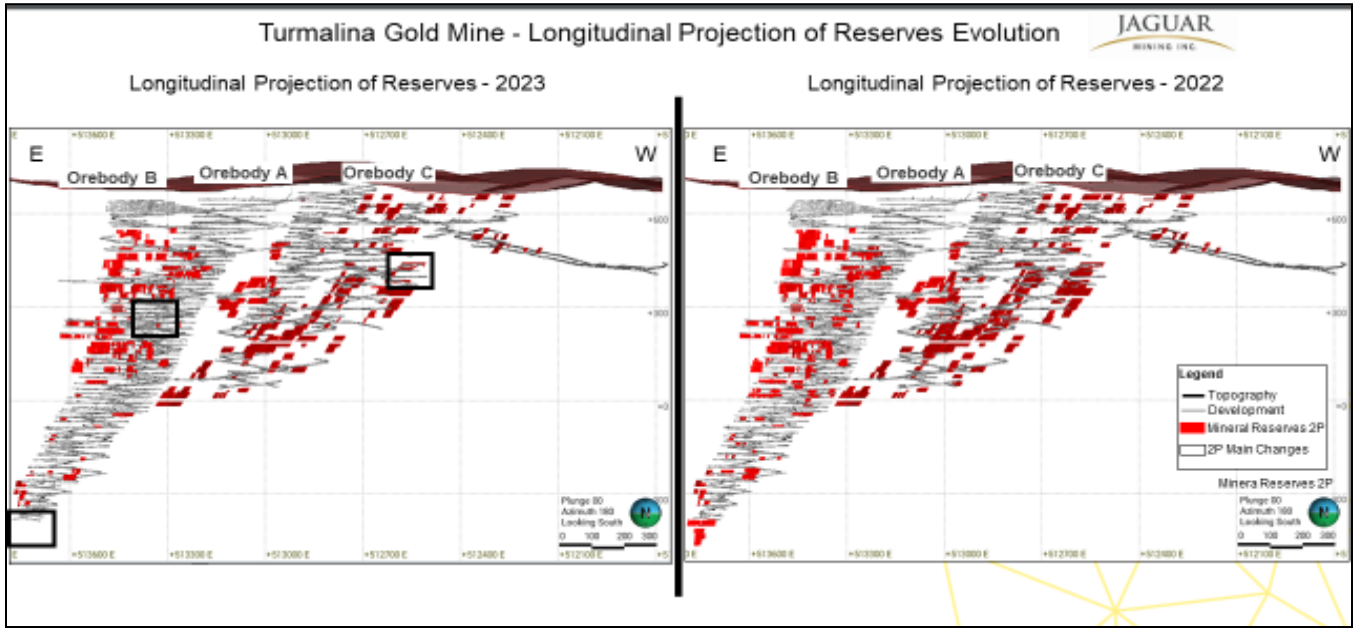


Figure 9: Long Section showing Faina Mineral Resources as at December 31, 2023, unchanged from the prior year disclosure

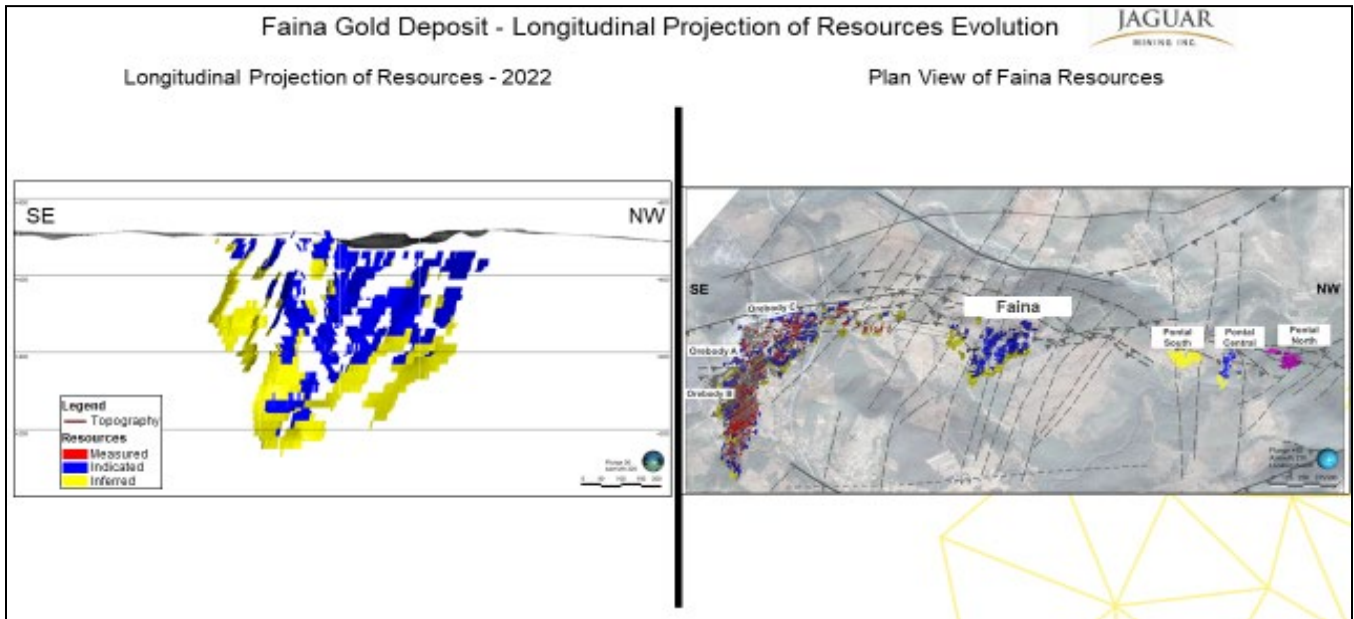
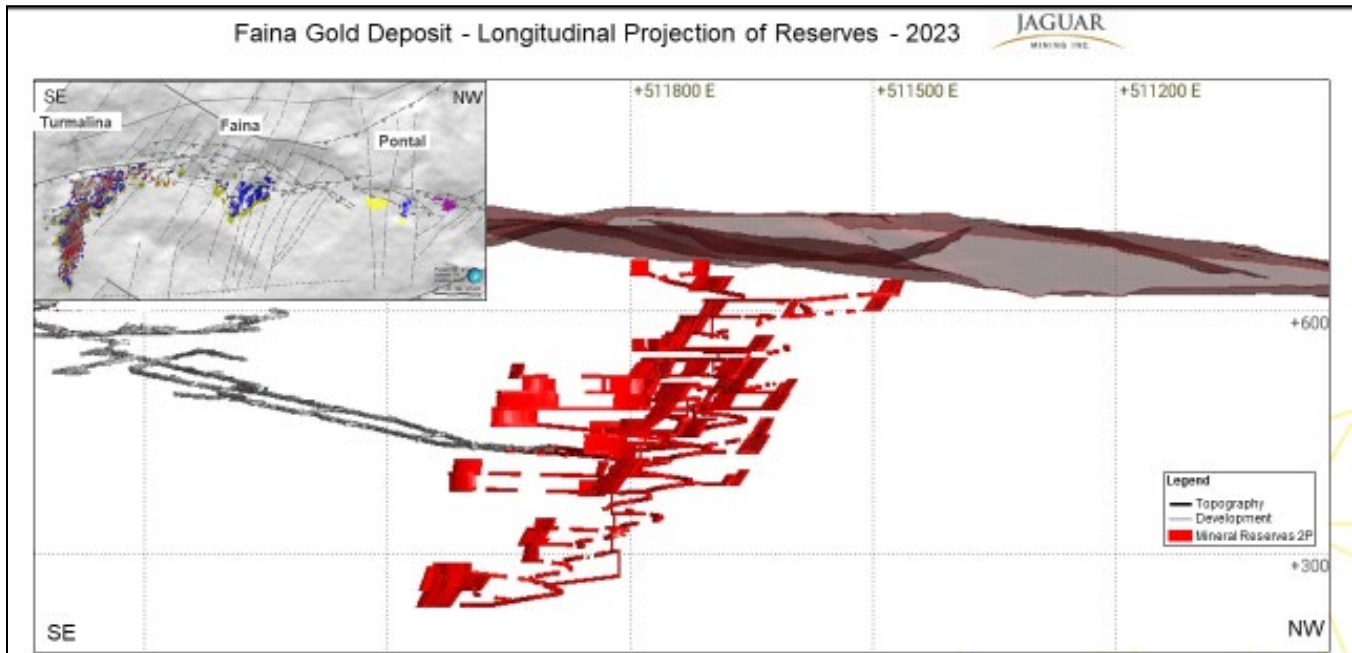


Figure 10: Faina Mineral Reserves on December 31, 2023



Mining Operations and Metallurgical Process

The MTL Complex includes the processing plant, and a dry-stacking disposal area. Electrical power is obtained from the national grid. Ancillary buildings located near the mine entrance include the gate house with a reception area and waiting room, administration building, maintenance shops, cafeteria, warehouse, change room, first aid room, and compressor room. The explosives warehouse is located 1.2 km away from the Turmalina mine area, in compliance with the regulations set forth by the Brazilian Army. There is no camp at the Turmalina mine site.

Mining Method and Mine Infrastructure

The Turmalina underground operations consist of several zones grouped into four orebodies – Orebodies A, B, C, and Faina. At present, the Turmalina mine produces on average 1,350 tpd from Orebodies A, B, C, and Faina. Underground operations at depth in Orebody A have been temporarily paused due to unfavorable economic conditions.

Orebody A is folded and steeply east dipping, with a strike length of approximately 250 m to 300 m and an average thickness of six metres. Mineralization has been outlined to depths of 900 m below surface. The southern portion of Orebody A is composed of two parallel narrow veins. The northern portion of Orebody A is much the same as the southern portion, however, the two parallel zones nearly, or completely, merge, forming a wider zone (up to 10 m) known as the Principal Zone.

Orebody B includes three thinner, lower grade lenses parallel to Orebody A. Two of the lenses are located approximately 50 m to 75 m to the east in the hanging wall and are accessed by a series of crosscuts that are driven from Orebody A. The mineralization in this deposit has been outlined along a strike length of approximately 350 m to 400 m and to depths of 900 m below surface. Orebody B is narrow along its entire strike length.

Orebody C is a series of 26 lenses that are located to the southwest in the structural footwall of Orebody A and are generally of lower grade. They strike northwest and dip steeply to the northeast. Orebody C has replaced Orebody A as the Complex's principal production source. The mineralization in this deposit has been outlined along a strike length of approximately 800 m to 850 m and to depths of 700 m to 750 m below surface.

Orebody Faina is a new orebody that development from Orebody C is currently approaching. There is a series of parallel structures similar to Orebody C that extend from surface to depth. A unique feature of the deposit is an offsetting striking lens based on the current geological interpretation. Mining will be done using SLOS retreat mining, bottom up, with delayed backfill.

The focus of mining at Turmalina is shifting from Orebodies A and B to Orebody C and Faina. Orebody C continues to grow with successful conversion of Resources to Reserves and Faina is a new orebody.

Recovery Methods

The Turmalina Plant has a current nominal processing capacity of 2,000 tpd, or 720,000 tpa. Since inception, the Turmalina plant has been achieving annual overall recoveries of between 87% and 92%. The process flowsheet includes two-stage crushing and screening to minus 9.5 mm (-3/8 in), primary grinding, thickening, cyanide leaching, CIP, elution, and electrowinning. The electrowinning product is transported to a third party for smelting and refining. The tailings flow by gravity to a detoxification unit for arsenic removal and cyanide destruction and then are pumped to the paste fill plant to be used either for mine backfill or deposited on a purpose-built dry stack storage area. Process tailings have also been stored in completed open pits on the mine site.

ROM material is stored in a surge pile and fed to the primary jaw crusher using a front-end loader at a nominal rate of 140 tonnes per hour (tph). The crushing plant has a design capacity of 180 tph (3,700 tpd at 85% operating time). Oversized material is managed with a grizzly and rock breaker. The primary crusher product is fed to secondary cone crushers. The final product, minus 9.5 mm (-3/8 in), is stored in a fine ore storage surge bin. The fine ore storage bin allows the crushing plant to operate only the number of hours per day to satisfy daily mine tonnage available to conserve energy and costs while the grinding and CIP circuit runs continuously.

The Turmalina plant has been operating one of three installed ball mills since 2017 to conserve energy and reduce costs. The combined grinding capacity of all three mills, 3,400 tpd at 92% operating time, could facilitate a production expansion if required.

The feed grade to the grinding mills is determined by sampling with an automatic sampler. Material is fed from the surge bin to the grinding circuit. The milling products are sized with cyclones to 80% passing 200 mesh (P80 = 200 mesh), with the overflow passing on to the thickener and the underflow recycled. The grinding circuit is automated. The secondary cyclone overflow stream is fed to a 30.5 m ϕ (100 ft ϕ) thickener where flocculants are added to optimize the settling rate of the pulp. The thickener underflow, 53% solids by weight, is pumped to the pulp conditioning system of the CIP plant, which is instrumented to maintain the pulp at a density of approximately 48% to 50% solids by weight. The water addition flow rate is monitored and controlled by a magnetic flow meter and pulp densitometer. The thickener overflow is directed to the process water tank as make-up water.

The leaching circuit consists of seven agitation tanks. Lime is added to the first tank to adjust the pH. Cyanidation begins in the first tank with the addition of sodium cyanide (NaCN). Lead nitrate is also added in the grinding circuit to control excessive NaCN consumption. Compressed air is injected in all the tanks by slamjets, as the process consumes large amounts of oxygen. The residence time in the leaching circuit is approximately 25 hours.

The adsorption circuit is a conventional CIP circuit. The gold bearing pulp passes through five adsorption tanks arranged in series. Activated carbon with a size range of 3.35 mm to 1.70 mm and a minimum pulp concentration of 20 g/L is added to the last in the series of tanks and is pumped from tank to tank in the opposite direction from the slurry flow. Thus, the carbon adsorbs the gold from the pulp as the process continues. When the adsorption cycle is completed, approximately ten hours, the loaded carbon, containing approximately 1.5 kg of gold per tonne of carbon, is pumped from the bottom of the first tank in the series to the elution and electrowinning circuit.

The loaded carbon is screened, and the minus 28 mesh material is redirected back to the adsorption circuit. The screen oversize feeds the elution circuit, comprising four columns operating in batch mode, two of which are stripping while the other two are loading. Loaded carbon is stripped using caustic soda, injected into the elution columns from bottom to top at a concentration of 1% by weight with 200 L of ethylic alcohol (per batch) kept at 95°C. The pregnant solution is stored in a tank, with overflow to feed the electrowinning circuit. The electrowinning circuit consists of seven cathodes and nine anodes, energized with a 360 A current and a voltage of 3.5 V to 4.0 V. Jaguar ships the electrowinning sludge to a third party for smelting and refining.

The activated carbon first undergoes a stripping process in the elution columns, where the adsorbed gold is removed by a 1% (by

weight) NaOH solution at 95°C. It is then conveyed to a surge tank via an ejector directed towards a 28 mesh screen for the removal of fines (undersize). The screen oversize is conveyed to an 8 m³ fiberglass acid washing tank. The acid washing is completed by passing an acid solution of HCl at 10%, removing the impurities that diminish the capacity of the carbon to adsorb gold, mainly carbonates and basic metals.

The acid solution of HCl at 10% (by weight) is prepared in a fiberglass HCl solution tank by adding water and HCl at 33% by weight. This solution is injected at the bottom and discharged at the top of the acid washing tank by overflow, returning to the HCl solution tank by gravity. The time involved in the acid washing is approximately 5 hours. Once acid washing is completed, the acid solution is drained towards a neutralization tank. Thereafter, the carbon is washed with water in an open circuit with regards to the neutralization pond. This operation lasts approximately two hours. After these stages, the carbon is transferred to the 20 mesh screen and can be conveyed to the carbon addition circuit in the volumetric control vessel, and then to the last adsorption tank in the CIP circuit. A furnace is not employed for carbon regeneration as the expected performance in regeneration was not successfully achieved.

The CIP adsorption tank tailings (86 tph at 42% solids) are conveyed by gravity to a belt screen to avoid carbon loss and then to a tailings pulp treatment plant (TTP or Detox plant) and then to the filter and paste fill plant. Caro's acid (a mixture of concentrated sulfuric acid and hydrogen peroxide) is used in the Detox plant for cyanide destruction.

Power requirements for the processing facilities are not anticipated to change significantly in the foreseeable future from the current energy requirements (approximately 51,200 MWh). Water consumption is not expected to change significantly from the recent historical water usage (1.94 million m³) and no supply concerns have been noted. Key reagents used in the process include hydrated lime, cyanide, caustic soda, hydrochloric acid, sulfuric acid, liquid oxygen, and hydrogen peroxide.

Environmental Considerations and Permitting - Turmalina

Environmental studies related to the acid mine drainage potential are being made as requested by SUPRAM on LO 012/2008 ("Licença de Operação" - Operation Licence). Those studies will be performed until the end of mining and milling operations at Turmalina. All environmental costs for the Turmalina mine are associated with obligations laid out in the various licences.

The Company has all the necessary environmental licences for the operation of the Turmalina mining complex.

Environmental monitoring for verification of environmental control systems is in progress, in compliance with the conditions established in the licences and in conformity with all material legal requirements.

In 2021, the Environmental Performance Assessment Report was developed by the Company to provide guidance and a protocol for confirming whether all controls in the mine permit are being followed according to the legal standards.

In 2022, the Company obtained an environmental permit to increase the fuel station at the Turmalina mine. The new permit number is LAS 3800/2022, which doubled the unit's diesel storage capacity, and is valid until October 19, 2032. The civil works are ongoing with the engineering works.

Taxes

Income taxes are 34% of taxable profit, including a 25% corporate tax rate and a 9% social contribution. In addition to direct operating costs, royalty payments and depreciation are deductible in determining taxable profit.

Mine Life

The current LOMP, based on the Mineral Reserves inventory, schedules mining operations at MTL Gold Complex into 2027. There is, however, potential to extend the mine life with exploration and infill drilling.

Markets

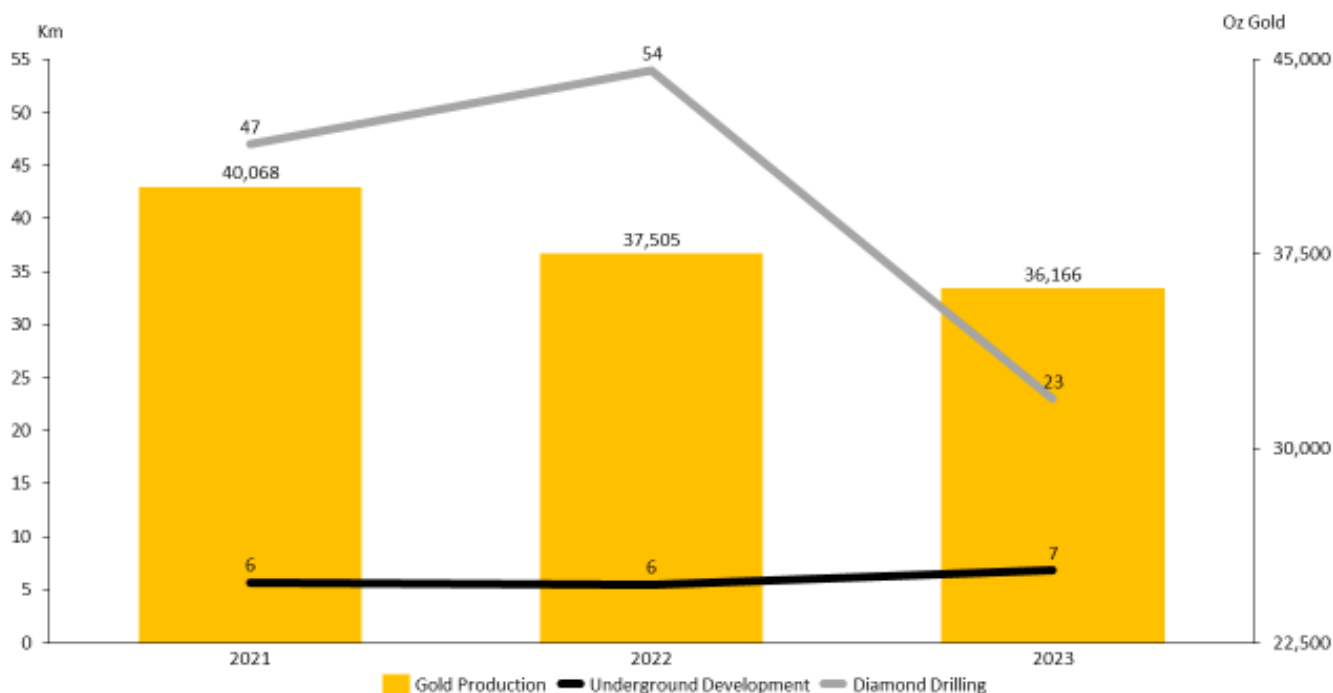
The principal commodity at Turmalina is freely traded, at prices that are widely known, so that prospects for sale of any production are virtually assured. A gold price of \$1,650 per ounce was used for estimation of Mineral Reserves.

Operations Review

Gold production at Turmalina was 36,166 oz. in 2023, 37,505 oz. in 2022, and 40,068 oz. in 2021.

Underground development at Turmalina totalled 6.8 km in 2023, 5.5 km in 2022, and 5.7 km in 2021. During 2023, a total of 22.9 km of underground delineation drilling, infill drilling and exploratory drilling was completed at the mine.

Graph 1: MTL Complex Physicals



The Faina surface diamond drilling program was completed in 2022 resulting in reduced drilling in 2023. The mining method utilized at the Turmalina underground mine is sublevel open stopping with backfill. The Company's priority is to stabilize production while reducing unit costs and maintaining good mining practices. The longer-term goal is to increase Turmalina production as Faina production ramps up and with exploration success.

Description of the Mine and Process Operations

Ore produced at Turmalina is transported to the adjacent Carbon-In-Leach ("CIL") processing plant. In 2023, the plant processed 403 ktonnes (kt) at an average grade of 2.92 g/t Au; as compared to 2022, when the plant processed 393 kt at an average grade of 3.28 g/t Au.

Overall, the processing plant maintained a recovery rate of 87% during 2023, 88% during 2022, and 89% during 2021. Using only Mill #3, Turmalina can process the entire current and planned mine production with a lower operating cost. Mills #1 and #2 are kept on standby mode to reduce electric power consumption. The Turmalina combined grinding capacity of all 3 mills at 3,400 tonnes per day could facilitate a production expansion if warranted by future exploration success.

In and Near-Mine Exploration

Exploration Highlights - Turmalina

Definitions: ETW – estimated true width, g/t Au – grams per tonne gold, m – metres, Grade (g/t Au) x Thickness (m) = GM (gram – metres).

Orebodies “A”, “B”, “C” and “Faina”

At Turmalina, infill and growth exploration diamond drilling targeted both Mineral Resource to Mineral Reserve conversion and the generation of new Inferred Mineral Resources (as defined below) throughout 2023. The Company's objective is to replace mined depletion through infill and growth-focused diamond drilling, along with regular sampling of mining development.

Growth Exploration is focusing on Faina. Faina development is accessing the orebody approximately 300 meters below surface, allowing diamond drilling both up and down plunge. Orebody C Growth exploration is extending further northwest, as well as identifying parallel lenses with high potential in the remaining portions of Orebody C. Growth Exploration drilling has also been exploring the down-dip/plunge extensions of mineralization associated with Orebody B.

Results from Growth Exploration corporate drilling in 2022/2023 at Turmalina showed intercepts indicating high potential down-plunge, encouraging new mine developments in the CNW portion in 2023. Underground infill diamond drilling of the Orebodies C Structure intersected a series of new higher-grade "lenses" near current underground development and approximately 300 m below the surface. Geological and structural logging of drill core, along with mapping of nearby underground development, defined two higher-grade, structurally controlled mineralized zones. The mine has initiated development into this higher-grade area to better understand the structural controls. Step-out drilling testing the projected plunge continuity is successfully expanding the higher-grade footprints of the Orebodies C Structure in a series of structurally controlled prospective zones.

A drilling program is planned to start in 2024, concurrently with detailed mapping work at a 1:200 scale, aimed at refining the geological-structural controls in higher-grade mineralization.

Caeté Complex

2023 Review, Mineral Reserves and Mineral Resources, Operations, Exploration

The Caeté Gold Mine Complex has two underground mines: Pilar gold mine (“Pilar”) and Roça Grande gold mine (“RG”). Pilar primarily uses sublevel open stoping with backfill. On March 22, 2018, RG was placed on care and maintenance.

Ore produced from Pilar is transported to the Caeté processing plant adjacent to RG, a total distance of approximately 40 km by road. The Caeté plant has a nominal capacity of 2,200 tpd. The plant flowsheet includes gravity, flotation and CIP treatment of flotation concentrate. During 2022, the Caeté plant achieved a gold recovery of 88%. Optimization of the plant offers opportunities for both increased gold extraction and reduced unit processing costs. Various options are being explored and evaluated to better use the currently underutilized processing capacity.

- **Mineral Resources and Mineral Reserves**

In 2023, the growth exploration diamond drilling programs continued at Pilar. The results from these programs were combined with infill drilling and development sampling activities undertaken from 2021 and 2022 and ongoing mining activities to update the geological and mineral resource models. For the purposes of this AIF, the Mineral Reserves and Mineral Resources figures for Pilar are reflected as at July 31, 2023. Figures reported are based on the most recent long-term Mineral Resource model after mined depletion during 2023.

As at December 31, 2023, 2P Mineral Reserves for Pilar (Proven & Probable) were 194 koz of gold (1,906 kt @ 3.17 g/t Au), after mined depletion from 2022. Proven Reserves total 89 koz of gold (833 kt @ 3.33 g/t Au), while Probable Reserves total 105 koz of gold (1,073

kt @ 3.05 g/t Au).

As at December 31, 2023, Measured and Indicated Mineral Resources for the Pilar mine totalled 413 koz of gold (3,260 kt @ 3.93 g/t Au). Inferred Resources for Pilar at the same date were 343 koz of gold (2,771 kt @ 3.87 g/t Au).

Mineral Resources Estimates (Combined - Pilar and Roça Grande Mines, and Córrego Brandão Target)

Table 11 summarizes the Mineral Resources as at December 31, 2023, based on a \$1,950/oz. gold price for the Pilar mine. The Roça Grande mine and the Córrego Brandão surficial deposit are based on a \$1,800/oz gold price. The total Mineral Resources for the Caeté Mine Complex (Pilar and Roça Grande mines only), as estimated by Jaguar, comprise 314 koz of gold (2,586 kt @ 3.77 g/t Au) in the Measured and Indicated Resources categories; and 460 koz of gold (3,660 kt @ 3.92 g/t Au) in the Inferred Mineral Resource category. The Mineral Resources include the Roça Grande and Pilar mines altogether. A cut-off grade of 1.86 g/t Au was used to report the Mineral Resources for Pilar. A cut-off grade of 1.80 g/t Au was used to report the Mineral Resources for Roça Grande. After the completion of the 2021-2022 exploratory diamond drilling campaigns, an initial Inferred Mineral Resource -base for the surficial Córrego Brandão target was estimated as 51 koz of gold (1,072 kt @ 1.48 g/t Au) unchanged from the prior disclosure.

Table 7: Summary of Mineral Resources as at December 31, 2023

	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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 MTL Gold Complex												
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 BF	441	4.51	64	240	3.88	30	682	4.29	94	406	3.74	49
Ore Body BFII	217	4.50	31	100	3.75	12	316	4.26	43	65	3.55	7
Ore Body BFIII	6	4.55	1	57	4.08	8	63	4.12	8	46	3.90	6
Ore Body LPA	116	4.03	15	97	5.17	16	214	4.54	31	254	4.25	35
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	3.66	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 Complex UG	1637	4.19	220	2586	3.77	314	4222	3.92	534	3660	3.92	460

- Notes:**
1. CIM (2014) definitions were followed for the classification of Mineral Resources.
 2. Mineral Resources are inclusive of the Mineral Reserves at Pilar. No Mineral Reserves are currently present at the, Roça Grande and Córrego Brandão deposits.
 3. Mineral Resources include Pilar and Roça Grande underground mineral resources and Córrego Brandão open-pit mineral resources.
 4. Mineral Resources are estimated at a cut-off grade of 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.
 5. 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 December 31, 2018. Mineral Resources at the Córrego Brandão deposit include drill hole information current as of June 8, 2021.
 6. Mineral Resources are estimated using a long-term gold price of US\$1,950/oz Au for the Pilar deposit. And US\$ 1,800/oz for Roça Grande and Córrego Brandão deposits.
 7. Mineral Resources are estimated using an average long term exchange rate of R\$4.90:US\$1.00 for the Pilar deposit and R\$ 5.20 for Roça Grande and Córrego Brandão.
 8. Minimum width of approximately 2.00 m was used for Pilar and Roça Grande deposits. Córrego Brandão, open pit mineral resources was constrained with pit optimizations using Lerchs-Grossmann algorithm.
 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
 10. Numbers may not add due to rounding.

Mineral Resources Estimates - Roça Grande

The estimate was generated from a block model constrained by three-dimensional (3D) wireframe models that were constructed using a cut-off grade of 0.50 g/t and minimum width of 1 m. The purpose of the minimum width criteria was to attempt to identify any areas of high-grade mineralization that could be candidates for extraction using highly selective underground mining methods. The gold grades are estimated using the ordinary kriging and capped composited assays. A capping value of 30 g/t Au was applied for the RG01

and RG06 orebodies, 17 g/t Au for the RG02, 13 g/t Au for the RG03 and 60 g/t Au for the RG07. The wireframe models of the mineralization and excavated material for Roça Grande were constructed using the excavation information as of December 31, 2018.

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

A cut-off grade of 1.80 g/t Au is being used for reporting of Mineral Resources. This cut-off grade was calculated using a gold price of \$1,800/oz. of an average gold recovery of 88%, and with 2021 cost data.

At a cut-off grade of 1.80 g/t Au, the current Measured and Indicated Mineral Resources of RG total 121 koz of gold (962 kt @ 3.90 g/t Au) and Inferred Mineral Resources total 117 koz of gold (889 kt @ 4.08 g/t Au).

The Roça Grande Mineral Resources estimates were prepared in a professional and diligent manner by qualified professionals and that the estimates comply with the CIM (2014).

Mineral Resource Estimates - Pilar

The estimate was generated from a block model constrained by three-dimensional (3D) wireframe models that were constructed using a minimum width of 2 metres. Various capping values were applied to each of the different orebodies, ranging from 50 g/t Au for some BF and BA Orebodies to 10 g/t Au for the São Jorge and LHW Orebodies. The Mineral Resources are reported using the gold grades estimated by the Ordinary Kriging (OK) method. The wireframe models of the mineralization and excavated material for Pilar were constructed using the excavation information as at December 31, 2023.

The 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, of the observed continuity of the mineralization, of the drill hole and channel sample density, and with previous production experience with this deposit.

The Pilar Mineral Resources estimates were prepared in a professional and diligent manner by qualified professionals and the estimates comply with CIM (2014).

Mineral Reserve Estimates

Table 8 summarizes the Mineral Reserves for Pilar as at December 31, 2023, based on a gold price of \$1,800 per ounce. A break-even cut-off grade of 2.44 g/t Au was used to report the Mineral Reserves for Pilar. The 2P Reserves (Proven & Probable) are at December 31, 2023 and were estimated based on additions and depletions recorded by the excavation solids generated by the operation up until December 2023.

Mineral Reserves have not been estimated for the Roça Grande Mine

Table 8: Pilar Mineral Reserves as at December 31, 2023

	Proven Reserves			Probable Reserves			Proven & Probable Reserves		
	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 Caeté Gold Complex									
Pilar									
Ore Body BA	119	3.26	12	118	3.45	13	237	3.36	26
Ore Body BF	283	3.45	31	167	3.08	17	450	3.31	48
Ore Body BFII	124	3.30	13	89	2.99	9	213	3.17	22
Ore Body BFIII	1	4.39	0	36	3.13	4	37	3.14	4
Ore Body LPA	71	3.12	7	98	3.58	11	169	3.39	18
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	3.04	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

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a cut-off grade of 2.44 g/t Au for Pilar deposit.
3. Mineral Reserves are estimated using 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 2.50 m at Pilar.
5. Numbers may not add due to rounding.

Dilution was addressed in two ways: internal or planned dilution was included in the design solids where they extend beyond the resource wireframe. This occurs in order to respect the minimum width for development or keep stope walls to minable shapes. Additional dilution volumes which included an extra half a meter in the hanging-wall and another extra half a meter in the footwall of the orebodies - in this manner across the Mineral Reserves.

The Mineral Reserves consist of selected portions of the Measured and Indicated Resources within designed stopes and associated development, under Jeff Sepp's supervision, an employee of SLR Consulting (Canada) Ltd. who is an independent Qualified Person within the definition of the NI 43-101 for Mineral Reserves.

Dilution and extraction (mining recovery) have been included in the reserves estimate as follows:

1. Areas within the stope marginal COG of 2.02 g/t Au. The resources wireframes were constructed at a cut-off grade of 0.50 g/t Au, and therefore they include material below the reserve cut-off grade for continuity.
2. Planned dilution encompasses areas where stope designs extend beyond the Mineral Resources wireframe to achieve a minimum width and due to irregularities in geometry. This planned dilution includes voids and inferred material above the 20% limit inside the stopes. For this inferred material, a grade of zero was assigned.
3. The extraction assumptions vary depending on stope characteristics: 95% for general stopes, 75% for those with less than a 10m pillar to mined stopes or less than 4m sill pillars, 90% for blind stopes, 50% for rib pillars above level 14, and 0% for rib pillars below this level.

Cut-Off Grade

Mineral Reserves were calculated using a break-even cut-off grade of 2.44 g/t Au, calculated using the following inputs:

- Gold price of \$1,800/oz.
- Exchange rate of US\$1.00: BRL\$4.90

- Metallurgical recovery of 88%
- Operating costs of BRL\$505/t

Metal prices used for reserves match well with consensus, long-term forecasts from banks, financial institutions, and other sources, and with the prices currently being used by major gold producers. Exchange rates are based on bank forecasts. Metallurgical recovery is in line with recent operating results, as are the operating costs used.

The Pilar Mineral Reserves estimates were prepared in a professional and diligent manner by qualified professionals, and the estimates comply with CIM (2014).

The figures 11 and 12 below (longitudinal projections of the Pilar deposit) are panoramas of the Mineral Resources and Mineral Reserves inventory of the Pilar operation as at the end of the 2023 and the end of the 2022, respectively.

Figure 11: Pilar Mineral Resources on December 31, 2023 and on December 31, 2022

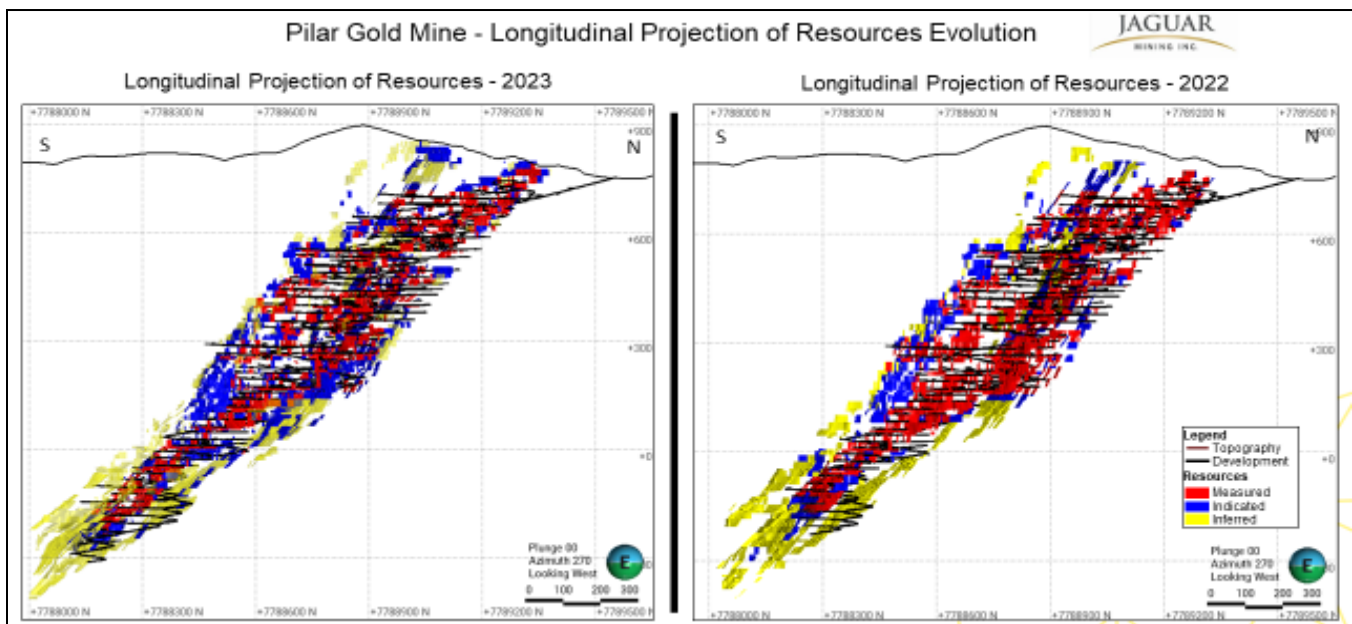
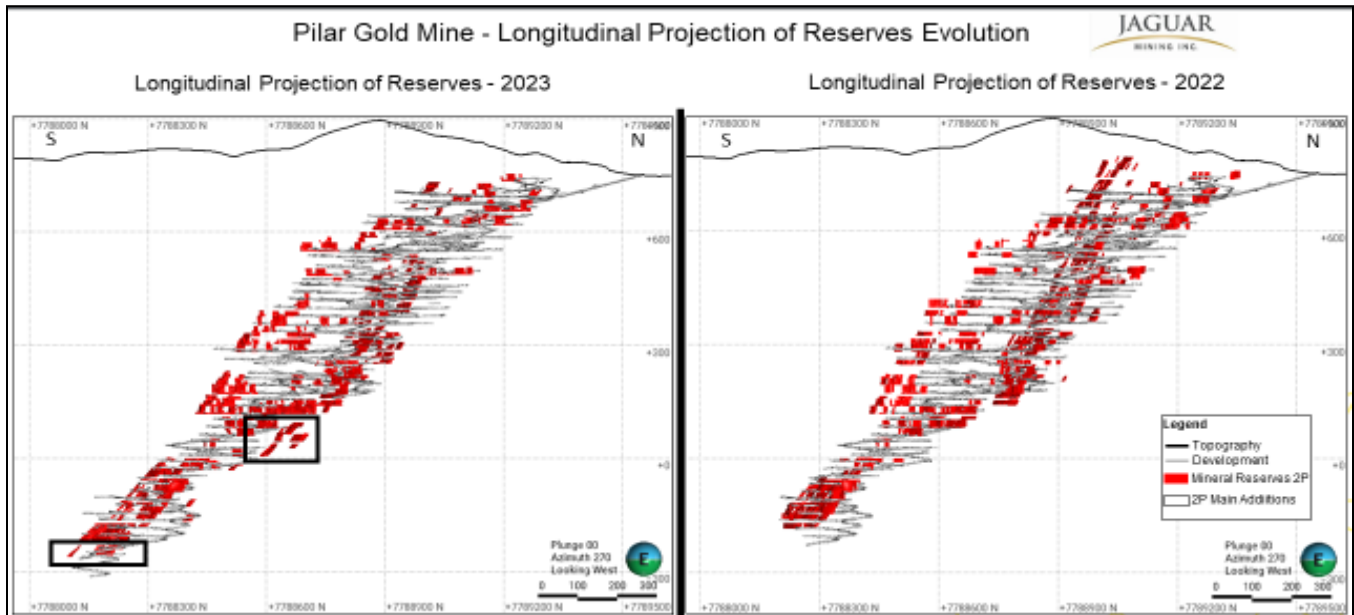


Figure 12: Pilar Mineral Reserves on December 31, 2023 and on December 31, 2022



Mining Operations and Metallurgical Process

The Caeté Gold Mining Complex includes a processing plant at the Roça Grande mine with a nominal capacity of 2,050 tpd, with separate tailings disposal areas for both fine flotation tailings and CIP tailings. Ore from Pilar is transported by truck 40 km to the Caeté Gold Complex for processing.

Mining Methods and Mine Infrastructure

There are two mining methods in use. The current LOMP forecasts longhole mining with delayed backfill for the majority of the Mineral Reserves. Mechanical cut and fill mining was commenced during 2023 where ore geometry does not favour longhole mining. The Pilar deposit is mined in horizons between sublevels. Each horizon is mined in retreating fashion, starting at the end of the mineralized zone, and progressing towards the central crosscuts.

Access to the stopes is provided by sublevel development driven from the ramp, with sublevel intervals of 20 m. Crosscuts near the mineralized zone centre are advanced to the hanging wall contact at each level and sublevel. From there, ore drives are driven in both directions along strike, under geological control for alignment, exposing the footwall and hanging wall contacts until reaching the limits of the deposit. This approach provides for two working faces per sublevel.

The hanging wall is supported with cable bolts before stoping begins. Stope mining on a horizon retreat from the ends of the Pilar deposit towards the central access. The stopes are up to 50 m long along strike and are separated by three to five metres wide rib pillars, depending on the thickness of the zone. When there are adjacent stopes in parallel, pillars measuring five metres high by five metres long are strategically left in the stope to reduce external dilution. When the stope is mined out, the opening is backfilled with unconsolidated rockfill consisting of development waste. The waste volume generated by mine development matches well with the required backfill volume. Occasionally, waste rock is either hauled to surface or from surface to an underground stope being filled due to timing discrepancies.

Mining then proceeds upward to the next sublevel, and the sequence is repeated until the sill pillar is reached. The horizons between sill pillars are mined in a bottom-up sequence, and a three-metre-thick sill pillar is left between levels. Sill pillars are spaced nominally at 60 m vertical level intervals. Stopes are mined from several levels simultaneously, thereby providing the required number of active workplaces to meet production targets.

Ground support generally consists of 2.4 m long bolts, which are either resin grouted rebar or Swellex depending on the excavation type. Screening is installed if required by the ground conditions. Cable bolts are installed at intersections and at stope hanging walls. The main decline, portions of which were developed up to ten to fifteen years ago, did not exhibit any roof or wall deterioration.

The addition of ground control engineers to Jaguar's workforce has resulted in improved quality of backfill and overall ground support at the mines. Changes to the stope designs with strategic pillars have reduced dilution and increased stability. Regular ground support maintenance (QA/QC testing) has been implemented at the mines on the main infrastructure. Maintenance includes bolt testing, proper cable bolt designs, and empirical stope design analysis.

Pilar is accessed via a five metre by a 5 m ramp situated in the deposit's footwall. All ore is hauled to surface via the ramp. The portal's elevation is at 760 MASL. Pilar is divided into levels, with Level 1 situated at 690 MASL. The level spacing is 75 m vertical, with Level 2 at 615 MASL, Level 3 at 540 MASL, and so on.

Pilar's ventilation system is a pull type system. Intake air is drawn down the ramp, and return air is exhausted via two ventilation raises. Each of these raises has two ventilation fans at the collar. Auxiliary fans and ventilation ducting provide ventilation on the levels. Water is pumped level to level and then to surface using submersible pumps.

Pilar is highly mechanized, utilizing a fleet of four jumbos, including two jumbos with two booms and two jumbos with one boom, all electric-hydraulic. Two jumbos are dedicated to face drilling, while the other two handle bolting. Additionally, Pilar employs two DL421 longhole drill rigs and one DL331 longhole drill rig for production drilling and cable bolting. The operation also features five load-haul-dump units (LHDs) with a tramming capacity of 10 tons. Haulage is managed by a fleet of six Volvo FMX trucks. The development contractor contributes two Sandvik jumbos, two Volvo L120 front-end loaders, and four Mercedes Benz 25-ton trucks.

Recovery Methods

The Caeté plant has a design capacity of 720,000 tpa of ROM ore. The overall recovery rate achieved in 2023 was 88%. The process flowsheet consists primarily of the following unit operations:

- o Crushing
- o Grinding
- o Gravity Gold Recovery
- o Flotation
- o Flotation Concentrate Leaching and CIP
- o Gold Recovery by elution and electrowinning process
- o Cyanidated tailings filtration
- o Tailings Disposal

Pilar ore is transported by trucks to the crushing circuit and placed in the ROM stockpile. The crushing circuit is comprised of a CJ411 - 111 kW primary jaw crusher in open circuit and secondary (CH440-223 kW) cone crusher operating in closed circuit. The tertiary crushing circuit is temporarily stopped after techno-financial studies for the current processing rate. ROM stockpile ore is fed to the jaw crusher with a front-end loader through a grizzly and vibrating feeder. The jaw crusher discharge feeds a multi deck screen (3,500 mm x 1,800 mm – with three panel decks consisting of 75 mm, 35 mm, and 20 mm apertures, respectively top to bottom), the oversize of each deck feeds secondary crushing or the final product conveyor respectively. The secondary cone crusher operates in closed circuit with a double deck screen (5,700 mm x 2,400 mm – with two panel decks consisting of 35 mm and 20 mm apertures). Product from the double deck screen either recirculates back to the secondary crusher or proceeds to the final product conveyor, which discharges onto the crushed ore stockpile. The final maximum particle size of the crushing process is 20 mm.

The grinding circuit consists of a 2,240 kW ball mill (5 m diameter [Ø] x 6 m effective grinding length [EGL]) with a capacity of up to 100 tonnes per hour (tph), operating in closed circuit with a set of five hydrocyclones operating in parallel. The overflow from the hydrocyclones (-200 mesh or -74 µm) proceeds to the flotation circuit, and the underflow (+200 mesh or +74 µm) either feeds the gravity concentration circuit (75%) or is recycled to the ball mill feed (25%).

Gravity concentration uses a Knelson centrifugal gravity concentrator to recover fine particles of free gold. The gravity concentrate

proceeds to an Acacia intensive cyanidation reactor, from which the gold pregnant solution is pumped directly to a dedicated set of electrolytic cells. Precipitate from the cells is transported to a third-party smelter/refinery where it is processed into refined gold bars.

The flotation circuit consists of a series of twelve 14.1 m³ (500 ft³) flotation cells, the first three operating as roughers, three operating as primary scavengers, three operating as secondary scavengers, and the last three operating as tertiary scavenger cells. The concentrate produced by the primary scavenger cells is returned to the roughers, and the secondary and tertiary scavenger concentrate is recirculated to the primary scavenger circuit. The final gold bearing concentrate (70% to 80% -400 mesh or -38 µm), from the rougher concentrate is sent to a concentrate thickener to achieve an underflow density of approximately 40% solids (w/w). Tailings from the tertiary scavenger cells are sent to a series of hydrocyclones for separation. The cyclone underflow is sent to dewatering piles where it remains until dry, and then it is sent to RG Tailing Pile. The cyclone overflow is sent to a tailings thickener, with the thickened underflow pumped to the RG02 West or East (W/E) TSFs. The thickener overflow is recycled for use as process water. The total tailings capacity for the RG02W TSF is 556,000 m³ and RG02E TSF 250,000 m³.

The concentrate thickener underflow slurry (40% solids w/w) is pumped to three starter tanks for pre-oxidation using oxygen and lime only and then to one leaching tank using cyanide, lime, and oxygen. The lime is used to maintain the pH between 10.0 to 10.5, in order to minimize the generation of hydrogen cyanide gas. Cyanide is used to dissolve the gold from the solids in the slurry. Cyanide can be added to any of the leach tanks as required. Oxygen is introduced through spargers to enhance the dissolution of gold and the oxidation of unstable sulphides (e.g., pyrrhotite). This oxidation reduces cyanide consumption and increases gold recovery. The slurry from the last leach tank flows by gravity to a series of four agitated CIP tanks that are arranged in series.

The four CIP tanks allow slurry to flow from tank to tank, while retaining activated carbon in each tank. The carbon adsorbs the gold cyanide complex created in the leach tanks. The slurry flows downstream from Tank 1 to Tank 4. The desorption frequency is determined by the loading of gold on the carbon. The highest loaded carbon from Tank 1 is pumped over a screen, with the slurry returning to the tank and the loaded carbon proceeding to gold desorption. Regenerated carbon is added to the tank from which carbon was retired for the elution process or is transferred to it carbon from other tanks and added fresh carbon in this latter tank. Slurry exiting the last CIP tank passes through a safety screen (1mm- 0,5 mm) that recovers any carbon that may have left the tank.

The loaded carbon is transferred to a desorption column. A hot solution (approximately 98°C) of 1.5% caustic soda and 0.5% cyanide concentration is pumped upwardly through the elution column to desorb the gold cyanide complex from the carbon. The gold bearing solution leaves the top of the column and feeds an electrolytic cell, where the gold is deposited onto steel wool and stainless-steel cathodes. The solution from the electrolytic cell return to the heating tank and reused. The solution is recirculated through the electrolytic cell for approximately 24 hours to remove most of the gold from solution.

After the desorption cycle, the sludge is washed from the stainless-steel wool cathodes and pumped to a pressure filter. The cake (8-20% humidity and 50-70% gold) is sent to the refinery for smelting, obtaining bullions with 80 to 90% gold and subsequent refining to produce doré bars containing 99,999% gold.

After elution, the carbon is washed with hydrochloric acid to remove inorganic contaminants, neutralized and then is regenerated at 700°C in a kiln to remove organic material and return the ability of the carbon to adsorb gold. This regenerated carbon is classified on screen (1mm) and pumped to the last tank in the CIP circuit. Periodically, fresh carbon is added to the tank, as some degradation of the carbon occurs, resulting in the need for replacement.

Slurry tailing contained cyanide is directed to leaching tailings (LT) thickener to achieve an underflow density of approximately 60% solids (w/w). Its underflow is sent to a set of pressure filters, from where the solids are trucked to the Moita TSF, a lined tailings facility in an exhausted open pit in which a dam was constructed to increase the storage capacity (366,000 m³). The filtrate is sent back to the LT thickener. The LT thickener overflow and reclaimed water from Moita TS are pumped to a series of two pre-treatment ponds. Hydrogen peroxide is added to this flow. The pre-treatment ponds are used to reduce the cyanide concentration using ultraviolet radiation from the sun.

Water reclaimed from the pre-treatment ponds initially passes through a carbon filled tank to recover any soluble gold left in solution. The activated carbon is periodically recovered and sent to desorption circuit to recover the gold. Overflow from this tank proceeds to a tank where ferrous chloride and lime are added, to reduce the arsenic content in the water. The reaction forms a ferric arsenate precipitate, contained in a slurry that is sent to a Lamella type thickener, where flocculant is added to help settle the precipitate. The

underflow from this thickener is sent back to the LT thickener feed, where it mixes with the CIP tailings. Tailings from the CIP circuit are treated for cyanide removal, filtered, and transported by trucks piped to the Moita TSF, a lined tailings facility in an exhausted open pit in which a dam was constructed to increase the storage capacity. The CIP tailings filtration and water treatment facilities were commissioned in 2023. In this new concept, CIP tailings are detoxified, filtered, and dry stacked, and the water is treated and recycled to the process plant. The Lamella thickener overflow is treated with a copper sulphate solution and flocculant and allowed to settle in a series of decantation tanks. Overflow from the last tank is pumped to the flotation tailings thickener for use in the plant as required. The tanks are cleaned periodically as required to remove any solids.

Annual power requirements for the processing facilities are approximately 21,800 MWh. Water consumption is not expected to change significantly from the recent historical water usage (520,400 m³). Key reagents used in the process include floatation reagents, hydrated lime, cyanide, caustic soda, copper sulphate, ferrous chloride, hydrochloric acid, and liquid oxygen.

Environmental Considerations and Permitting - Pilar and Caeté

The mining title for Pilar (claim ANM 830.463/1983) initially belonged to the Vale S.A. (“Vale”), which initiated the environmental licencing process in 1999 and obtained a preliminary licence for the open-pit mining of the oxidized ore. Due to strategic changes of Vale, they decided at that time to cease progress at the mining project.

In 2003, Vale transferred the mineral rights to the MSOL, who then took over the environmental licencing process to implement the open-pit mining project. Thus, MSOL obtained the Preliminary Licence, Construction Licence and, finally, the Operating Licence on June 27, 2006, through the COPAM process N° 00132/1999/003/2005.

In preparation for permitting the underground mine, MSOL acquired a preliminary licence for the activity by COPAM process 00132/1999/004/2007. SUPRAM issued the preliminary licence on August 16, 2007, under certificate number 021/2007.

MSOL subsequently carried out the required environmental studies and submitted an application for a construction licence under COPAM process number 00132/1999/006/2008. SUPRAM issued the construction licence for the mining and processing of sulphide ores by the CIP-ADR process flowsheet on August 25, 2008, under certificate number 152/2008.

On September 22, 2009, MSOL applied for an operating permit that was subsequently issued by SUPRAM on June 30, 2010, under certificate number 153/2010, COPAM process 00132/1999/007/2009. On February 23, 2016, MSOL applied for a renewal of the operating licence, COPAM process 00132/1999/009/2016, and the renewal application is currently under review.

In 2021, MSOL worked with the environmental agency (Superintendência Regional de Meio Ambiente Leste Mineiro – SUPRAM LM) to revalidate the operating license for the Pilar mine. As a result, the Company obtained the new Operating License N°. 006/2021 on November 24, 2021, which is valid until November 23, 2027. In the same year, a license to expand Pilar's production by 100,000 tons per year was also obtained, administrative process SEI 1370.01.0001756/2020-03, LAS RAS 1.299/2021 issued on November 25, 2021, with the same validity as the previous license (November 23, 2027). The valid operating licenses for the Pilar unit are LO 006/2021 and LO 1.299/2021.

The ore extracted from Pilar is transported by roads to the Roça Grande Unit (RG), municipality of Caeté, where it is processed. At RG, besides the process plant, there are two tailing dams in operation (Moita dam and RG2W dam), one dry stack pile and one paralyzed open-pit (RG2E) that receives non-hazardous flotation tailings. All these facilities are covered by pertinent licences: number 090/2010 for the process plant; number 117/2010 for the Moita Dam; number 218/2010 for the RG2W Dam, number 058/2020 for the RG2E, all as components of the COPAM process number 10022/2003. The tailings stack pile is covered by a new permit, LO 30/2021, which was obtained on August 2, 2021, valid for 10 years, until July, 30, 2031, administrative process 10022/2003/017/2013. The mandatory renewal applications are under analysis by SUPRAM and will be unified in a single licence. In 2021, MSOL developed a new project for fulfilling the open-pit for RG06A and RG06B with flotation tailings. This project was submitted to the environmental agency Superintendência Regional de Meio Ambiente Central Metropolitana – SUPRAM Central, and Jaguar obtained a new permit, LAS RAS 3.566/2021 on November 12, 2021, process SEI 2090.01.0004742/2021-80, valid for ten years, until November 29, 2031.

In 2022, Jaguar obtained an environmental permit which allows the increase of the capacity of the fuel station at the Pilar mine. The new permit number is LAS 3095/2022; and it supports the duplication of the unit's diesel storage capacity (valid until October 23, 2027).

Taxes

Income taxes are 34% of taxable profit, including a 25% corporate tax rate and a 9% social contribution. In addition to direct operating costs, royalty payments and depreciation are deductible in determining taxable profit.

Mine Life

The current Life of Mine Plan (LOMP), based on the Mineral Reserves inventory, extends over 4 years into 2027, maintaining the current production rates and extends to 2030 with lower rates. However, there is potential to extend the mine life with further exploration and infill drilling.

Markets

All gold produced at the Caeté operation is transported to Nova Lima - MG on a weekly basis for refining and sale at market prices.

Mineral Resources Update - Roça Grande

At Roça Grande, the assessment of the available datasets, geological models and resources estimations included the RG1, RG2, RG3, RG6 and RG7 deposits. Roça Grande currently has no Mineral Reserves, and the mine remains under care and maintenance.

As at December 31, 2023, the total Measured and Indicated Mineral Resources for the RG mine totaled 121 koz of gold (962 kt @ 3.90 g/t Au) and Inferred Mineral Resources total 117 koz of gold (889 kt @ 4.08 g/t Au) unchanged from the prior disclosure.

Mineral Resources Update - Córrego Brandão

As at December 31, 2023, the inferred mineral resource for the Córrego Brandão target is reported as 51 koz of gold (1,072 kt @ 1.48 g/t Au).

Operations Review

In 2023, Pilar faced mining challenges due to changes in ore geometry, resulting in lower recovered grades and fewer tonnes compared to 2022. Despite these difficulties, the Company has taken adaptive measures, such as modifying mining plans to adopt conventional cut and fill stoping where ore widths make long-hole stoping uneconomic.

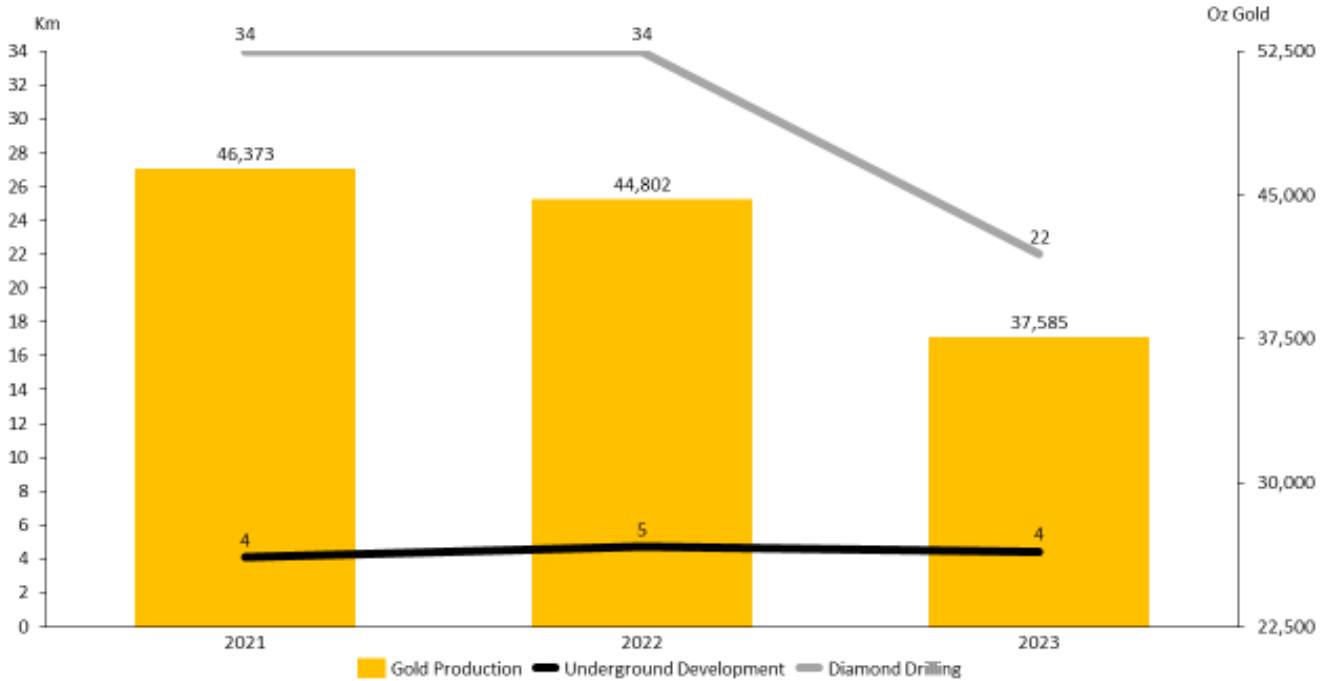
The Company is focused on operational efficiency, with strong development. Cost reduction measures have been implemented, leading to a reduction in operating costs, and these initiatives have continued into 2024.

Excitingly, the geologic team at Pilar have identified a promising opportunity in the BA-Torre structure, showing potential for substantial mineral resources both above and below current development levels. This structure, historically a main producing ore-zone, is being explored at deeper levels, and initial drilling indicates the potential for significant incremental gold production. The BA-Torre structure is expected to become a vital new production area for Pilar and the Company in 2024.

The historical significance of BA-Torre, its revival in terms of high-grade mineralization on levels 15 and 16, and the ongoing diamond drilling suggest a relatively short time frame for potential production improvement.

In summary, the Company is actively addressing operational challenges, executing strategic cost reduction measures, and diligently investigating prospects, notably the BA-Torre structure. These initiatives aim to improve production efficiencies make meaningful contributions to the overall success of the Company going forward.

Graph 2: Caeté Complex Physicals



Ore Transport

Improvements to the 40 km haulage route from the Pilar mine to the Caeté processing plant achieved in the past continue to have a positive impact on the operations.

Mining - Roça Grande

In March 2018, as part of refocusing its attention on improvements to the Turmalina and Pilar mines, and exploration growth activities, the Company made a strategic decision to suspend its Roça Grande mine operations. The Company has commenced a review of the Roça Grande asset with a view to evaluating the various financial and technical scenarios that might lead to the future recommencement of production from this area.

Processing

Gold production at Caeté was 37,585 oz. in 2023, 44,802 oz. in 2022, 46,373 oz. in 2021, and 51,050 oz. in 2020. Underground development at Pilar totalled 4.4 km in 2023, 4.7 km in 2022, 4.1 km in 2021, and 4.1 km in 2020. During 2023, a total of 22 km of underground delineation drilling, infill drilling and exploratory drilling was conducted across the complex.

During 2023, the Caeté plant achieved gold recovery of 88% utilizing gravity, flotation, and CIP treatment of the flotation concentrate. Optimization of the plant offers opportunities for both increased gold extraction and reduced unit processing costs.

In and Near-Mine Exploration

At Pilar, the focus in 2023 was on converting Mineral Resources to Mineral Reserves, aiming to replace mined depletion. To achieve this, extensive infill diamond drilling and channel sampling were conducted throughout the year.

The growth exploration efforts in 2023 targeted the depth extensions of various mineralized orebodies, prioritizing BF, BA, LPA, BFIII,

and SW. Higher grades in BIF-hosted mineralization were primarily discovered in the extensions of BA.

Pilar's diamond drilling in 2023 also aimed to comprehend the migration of mineralization, revealing that the most prolific mineralized zones in Pilar tend to migrate southeast, towards the BA structure. Furthermore, efforts were made to confirm the connection between the BA structure and the LPA structure through mining works and diamond drilling. Other study objectives included understanding the stretching and loss of thickness of mineralized orebodies, the identification of a second mineralized structure in depth, mapping and modeling the migration of the synform BFII towards the southwest, and exploration towards BFIII and SW for geological reconnaissance and the definition of future targets.

The results obtained in 2023 revealed promising intersections throughout the mineral resources. This instills confidence in the continuity of mineralized zones at depth. In early 2024 the Pilar mining team developed a drift on the 15.2 level attempting to intersect a promising drill intercept in the BA ore body from earlier in 2023. This development reached a 135-metre-long section of the BA ore body which was channel sampled and shows a contiguous mineralized material zone with 5 metre widths and an uncut average grade of over 9 grams per tonne. The directional drilling program planned for 2023 was postponed due to operational challenges.

Paciência Complex

2023 Review, Mineral Reserves and Mineral Resources, Operations, Exploration

The Paciência Gold Mining Complex ("CPA") is located in the Acurui district, which is a part of the municipality of Itabirito in the central area of the Iron Quadrangle. The CPA underground mines and process plant are currently on care and maintenance (since 2012). Exploration is ongoing and Mineral Resources have been updated.

The Paciência Gold Mining Complex comprises a number of contiguous mineral rights holdings granted by the Agência Nacional de Mineração (ANM/DNPM) that cover an area of 9,005.35 ha of permits ("mining concessions" and "exploration authorizations" altogether). The Paciência Mining Complex includes a nominal 1,750 tpd processing plant and tailings disposal area. From 2008 to 2012, the Paciência Mining Complex has processed ore material from various local deposits, including the Santa Izabel, Marzagão and Córrego Grande underground mines, which are hosted by the Paciência lineament/trend, and from other more distant deposits in the immediate region (e.g.: Ouro Fino, Rio de Peixe, Palmital, and Pilar).

Mineral Resources and Mineral Reserves

- As at December 31st, 2023, the underground Inferred Mineral Resources for the Santa Izabel, Marzagão and Bahú deposits are estimated as follows:
- -- Santa Izabel/Córrego Grande: a total of 126 koz of gold (978 kt @ 4.01 g/t Au);
- -- Marzagão: a total of 63 koz of gold (445 kt @ 4.44 g/t Au);
- -- Bahú (Underground Resources): a total of 43 koz of gold (333 kt @ 3.99 g/t Au).

Mineral Resources Estimates - Combined (Santa Izabel, Marzagão and Bahú)

The estimate was generated from a block model constrained by three-dimensional (3D) wireframe models that were constructed using a minimum width of 2 metres. The Mineral Resources are reported by Jaguar using the gold grades estimated by the Ordinary Kriging (OK) method.

The mineralized material for each orezone was classified by Jaguar into Inferred Mineral Resources only, 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 with previous production experience with this deposit. Inferred Mineral Resources for Santa Izabel, Córrego Grande and Marzagão are reported from clipped wireframes created using a cut-off grade of 2.75 g/t Au. Inferred Mineral Resources for the Bahú deposit also are reported using constraining panels that were created using a cut-off grade of 1.85 g/t Au. The Mineral Resources for the Bahú

deposit also include a small contribution from open pit material that is estimated by application of an optimized pit shell and a cut-off grade of 0.74 g/t Au. These cut-off grades were calculated with the use of a gold price of \$1,800/oz.

Jaguar estimates of the Underground Inferred Mineral Resources of the Paciência Mining Complex as at December 31st, 2022 are as follows:

- Santa Isabel/Córrego Grande: a total of 126 koz of gold (978 kt @ 4.01 g/t Au);
- Marzagão: a total of 63 koz of gold (445 kt @ 4.44 g/t Au);
- Bahú (Underground): a total of 43 koz of gold (333 kt @ 3.99 g/t Au). Bahú also has a small additional total of 3 koz of gold (43 kt @ 2.08 g/t Au) as open pit, oxidized Inferred Mineral Resource.

The Mineral Resources are presented in further detail in Table 9 below.

Table 9: Santa Isabel, Marzagão and Bahú Mineral Resources as at December 31, 2023 unchanged from prior disclosure

	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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 Paciência Gold Complex												
Santa Isabel/Corrego Grande										978	4.01	126
Marzagão										445	4.44	63
Bahú										333	3.99	43
Total - Paciência Complex UG										1756	4.12	232

- Notes:**
1. CIM (2014) definitions were followed for the classification of Mineral Resources.
 2. No Mineral Reserves are currently present at the Santa Isabel, Marzagão, Bahú deposits.
 3. Mineral Resources include the Santa Isabel, Marzagão, Bahú underground mineral resources and the Bahú open-pit mineral resources.
 4. Mineral Resources are estimated at a cut-off grade of 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 Bahú.
 5. Mineral Resources at the Santa Isabel and the Marzagão deposits include drill hole information current as of September 2022. Mineral Resources at the Bahú deposit include drill hole information current as of November 2022.
 6. Mineral Resources are estimated using a long-term gold price of US\$1,800/oz Au for Santa Isabel, Marzagão and Bahú.
 7. Mineral Resources are estimated using an average long term exchange rate of R\$5.20:US\$1.00 for Santa Isabel, Marzagão, and Bahú.
 8. Minimum width of approximately 2.00 m was used for Santa Isabel, Marzagão, and Bahú using reporting panels. Bahú open pit mineral resources were constrained with pit optimizations using Lerchs-Grossmann algorithm.
 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
 10. Numbers may not add due to rounding.

It is Jaguar's opinion that the Paciência Mineral Resources estimates were prepared in a professional and diligent manner by qualified professionals and that the estimates comply with the CIM (2014).

Mineral Resource figures (as at December 31, 2023) were reviewed and approved (i) in respect of the estimated Mineral Resources by Pierre Landry, P. Geo. and Reno Pressacco, P. Geo., of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7. SLR is an independent mining consultancy and Mr. Landry and Mr. Pressacco are each Qualified Persons within the definition of NI 43-101.

The figures 13 and 14 below (longitudinal projections of the Mineral Resources) are panoramas of the resources inventory of the Santa Isabel, Marzagão and Bahú deposits by the end of the 2023 Year.

Figure 13: Santa Isabel and Marzagão Mineral Resources on December 31, 2023, unchanged from the prior year's disclosure

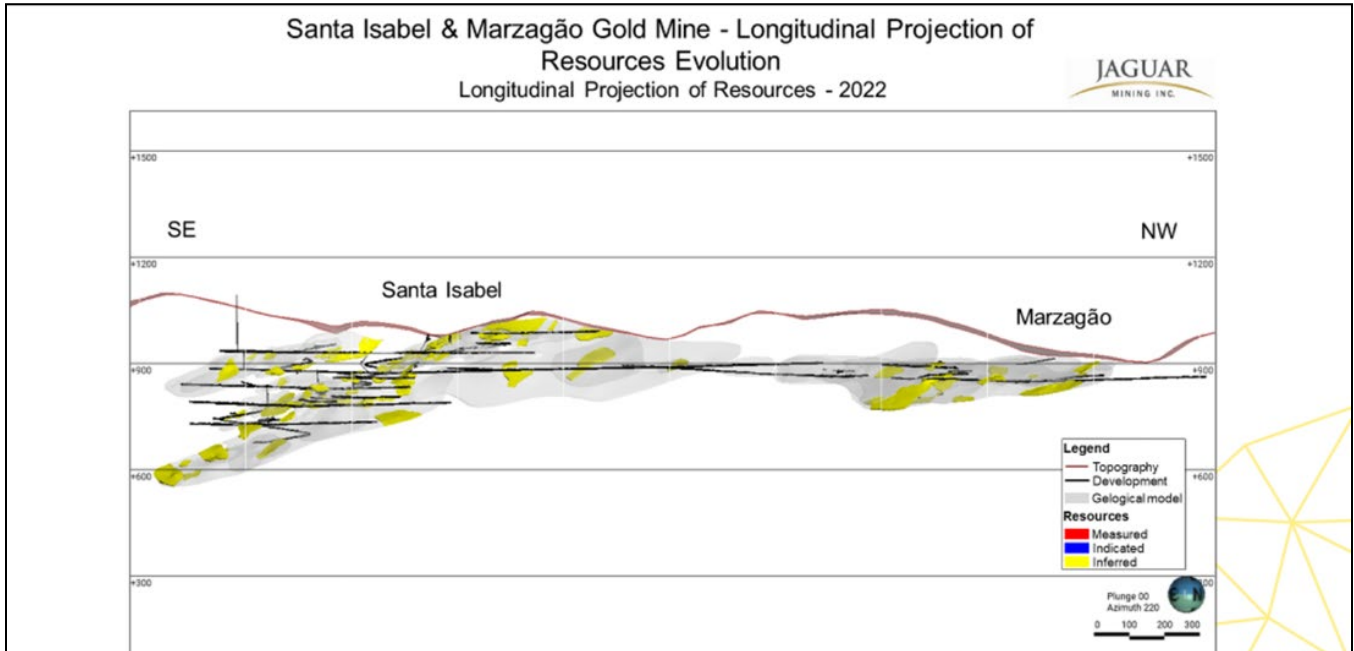
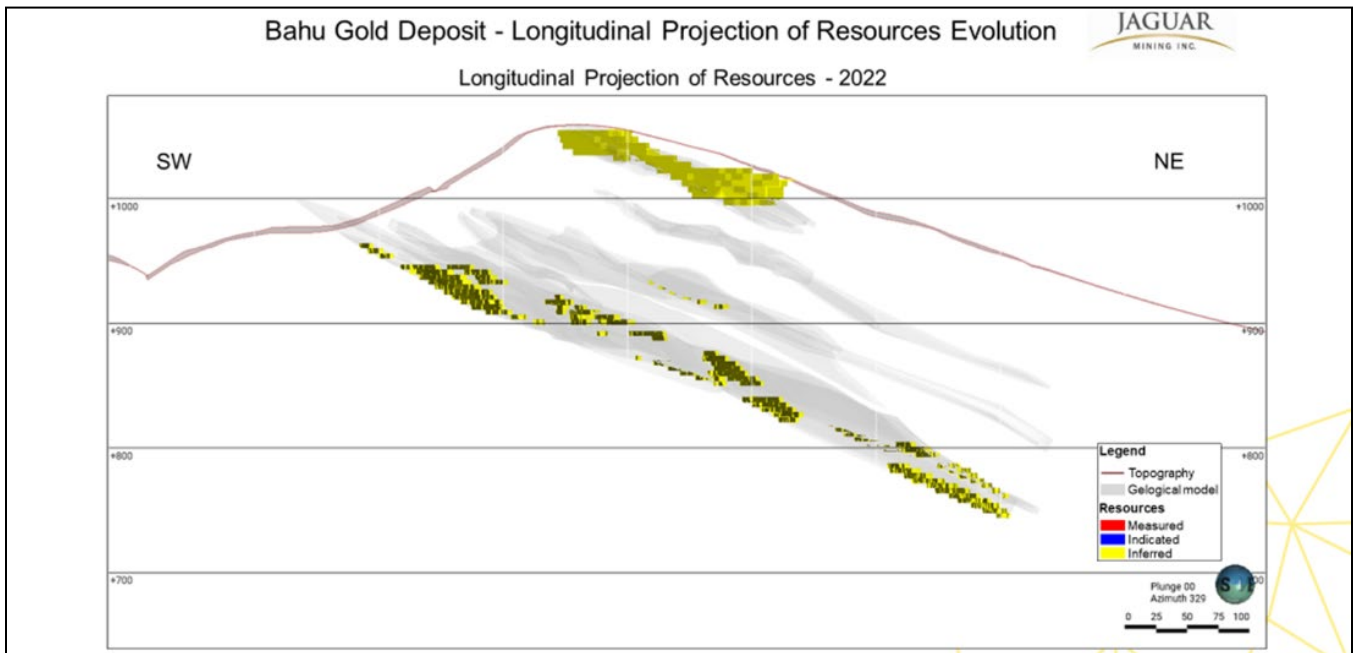


Figure 14: Illustration: Bahú Mineral Resources on December 31, 2023, unchanged from the prior year's disclosure



Mining Methods and Mine Infrastructure

The mining method previously used for the Paciência Mine was cut-and-fill, which removes ore in horizontal slices, starting from the bottom undercut and advancing upwards (overhand cut and fill). For the fill, the coarse portion of the treated tailings is used, plus development waste and waste that exists between the mineralization lenses, extracted during the excavation of the mine panels.

The mine is accessed from a five metre by five metre primary decline located in the footwall of the deposit. The portal is located at elevation 972 m. The mine is divided into levels. Level 01 was developed at elevation 930 m and Level 02 is at elevation 870 m, 60 vertical m below Level 01. Starting at this level, the vertical clearance is 75 m, i.e., Level 03 is at elevation 795 m, Level 04 at elevation 720 m, and so on. A five-meter-thick sill pillar is left between levels.

At each level, drifts were developed in the mineralized zone to expose the footwall and the hanging wall contacts. The drift was extended along strike, continuing to expose the contacts until the limits of the orebody are reached. Upon completion of the level development, overhand stopping of the ore panel was initiated. The excavation was completed using 3.20 m long, 2 in. diameter, and 70° to 80° upward drilling. Once mining of the cut was completed, the excavation was filled using a combination of development waste and hydraulically placed cemented classified tailings. Initially, a drainage bund was constructed using development waste to contain the backfill. The backfill was then placed in the mined-out cut. Once drained of excess water and allowed to cure, the backfill surface was smoothed, and excavation of a subsequent cut is initiated. The sequence continues until the sill pillar separating the various levels was reached.

Each mining panel (75 m vertical clearance) is sub-divided into three parts (vertically). For the first 24 vertical metres, the access to the panel is from the main level (at the base of the panel). As backfilling progresses, a 20% slope ramp was constructed in the fill to provide access to the next cut above the previously placed backfill. As this internal stope ramp was constructed, the roof immediately above it was raised, maintaining a clearance of 4.2 m. In order to limit the length of the internal stope ramps, two additional access ways to the panel are developed from the main ramp. The first access way was driven 24 m above the main level and the second, 47 m above the main level.

Recovery Methods

The process plant at the Paciência Mining Complex has the following sequence of macro unit operations:

- Crushing and Screening.
- Grinding and Cycloning.
- Leaching/Adsorption via Carbon-in-Pulp (CIP) Process of the reground/thickened flotation concentrate.
- Elution (Desorption) of CIP loaded carbon.
- Electrowinning.
- Detox Plant for CIP Tailings pulp.
- Paste Fill Plant.

Environmental Considerations and Permitting - Paciência Complex on Care and Maintenance since 2012

The Paciência Mining Complex, when operating, met all the necessary environmental conditions, permits, and ongoing monitoring activities required by the Brazilian Federal laws, as well as those required by the state of Minas Gerais. Moreover, all of the necessary and mandatory permitting, monitoring and supervision works expected to be completed during the care-and-maintenance stage of such a mining complex (from 2012 to 2023) are being followed strictly, and in a timely manner, by the Jaguar's technical and administrative teams.

Operations Review

- The Paciência Mining Complex has been on care and maintenance since 2012 and there are no operations currently.

In and Near Mine Exploration

In 2023, the Paciência trend, a significant mineralized crustal shear zone spanning approximately 15km across the Company's Paciência complex tenement package, was a focal point of exploration activities. A comprehensive soil sampling program, involving 1,200 samples, targeted the previously untested southern extensions of the mineralized Paciência trend, stretching from the presently closed Santa Isabel mine southwards to the tenement limit.

The outcomes of this program have proven to be highly successful. A robust gold in-soil anomaly, named Chamé – Cedro, characterized by gold concentrations exceeding 100ppb Au, was identified. This anomaly extends the potential mineralization trend southwards along the Paciência structure by an additional 4km. Subsequent follow-up activities, including surface mapping and rock chip sampling, have yielded promising results. To date, over 10 samples have been reported with gold values surpassing 5 g/t Au, reaching a peak grade of 22 g/t Au. These findings highlight the prospectivity and mineralization potential of the Chamé – Cedro anomaly within the broader Paciência trend.

Growth Projects

- **Faina Project**

MRMR

The Company published updated Mineral Reserves and Mineral Resources for the Faina deposit (November 30, 2023) with Probable Reserves of 132 koz (787 kt @ 5.22g/t), Indicated Mineral Resource of some 233 koz of gold (1,427 Kt @ 5.08 g/t Au) and an Inferred Mineral Resource of some 232 koz of gold (1,420 kt @ 5.09 g/t Au). The Faina Mineral Reserves is being accessed from Turmalina current underground workings, extending northwest from the Orebody C-NW zone some 1,000 m further along strike.

The shallow oxide portions of the Faina deposit were previously mined via an open pit. The sulphide mineralization beneath the oxide zone, the fresh (non-weathered) deeper portion of the deposit, remains to be exploited. The Faina deposit remains open, with exploration potential along strike and extending to depth.

In late 2021, Jaguar reported plans for a campaign of infill diamond drilling comprising 15,000 m of diamond drilling commencing in Q1-2022, aimed at the conversion of a great portion of the inferred mineral resource inventory at Faina into the indicated mineral resource category. As planned, 15,359 m of infill drilling (46 diamond drill holes) were completed in 2022. This infill drilling campaign confirmed the down-plunge continuity and higher-grade characteristics of this deposit which has informed a full update of the geological and grade models to support the progression of this project through various potential development scenarios. The 2022 drilling activities also provided representative samples for comprehensive metallurgical test work that will inform ongoing technical and non-technical studies.

During 2022 and 2023, the ongoing underground development project focussed on accessing and exposing the footprint of the Faina deposit (originating from the margins of the northwesternmost C-NW Orezone of the Turmalina operation), which development made good progress, with a total of 1,655 meters developed in 2023 and 1,637.5 metres in 2022 meters of linear development (full-sized, 5.0 by 5.5 meters access drifts/ramps). By December 2023, the development reached the Faina deposit, which is being drilled and mine planning conducted, with the first ore production expected in the second half of 2024, to be processed at the Turmalina operation.

The progression of the Faina growth project can be summarised as follows:

Processing and metallurgical studies:

Faina sulphide ore is semi-refractory. Test results indicate metallurgical recoveries in the 55% range using the current Turmalina plant

carbon-in-leach process without process modifications. Faina ore could contribute positive operating margins with the current Turmalina process due to the high gold grade. Faina mining and processing could start without process modifications. Process modifications could be added later to improve metallurgical recovery and project economics after studies are completed and knowledge of the deposit improves.

Jaguar has performed extensive bench and/or pilot process testing studies with Faina sulphide ore samples to improve the metallurgical recovery and project economics. Test work includes flotation concentration and pre-oxidation (Alkaline POX, Acid POX and Roasting) of the concentrate prior to leaching. Plant modifications could be added for on-site concentrate pre-oxidation prior to leaching. Alternately, flotation concentrate could be shipped to a third party for treatment.

In parallel, Jaguar is also testing in Brazilian laboratories other processes and potential upgrades to the current Turmalina plant structure, such as: gravity concentration, ultrafine grinding plus direct leaching, grind size vs recovery curves, CIL/CIP residence time vs recovery, CIL/CIP reagent (oxygen, CN) optimization, and detox improvements.

Results from a June 2021 preliminary metallurgical test work study on Faina sulphide samples selected from several large-diameter (PQ) diamond drill holes demonstrate metallurgical recoveries > 85% from a combination of gravity concentration followed by flotation of gravity tails.

Results from 2022 tests for the Acid POX method were obtained (27 tests were completed), and the best gold recovery encountered has been 98.68%. For the Alkaline POX method, 26 tests were completed, resulting in a best gold recovery of 80.64%. A total of 26 tests evaluated the Roasting route, with a best gold recovery of only 83.49% being revealed.

Following the process stages, for 2023 Faina ore was tested at Sherrit Technologies in Canada, in order to confirm the best process route, Acid Pox, with a most representative sample. Pressure oxidation batch test performed at Sherrit were finalized with great results. All scenarios tested reach Gold Recovery higher than 98% after 40 minutes of oxidation at the autoclave. Also, the sulfide oxidation reaches more than 98% oxidation as well.

For 2024, Jaguar's Process team will keep developing metallurgical testing of Faina ore, the focus will be on flotation studies, performing pilot test with Turmalina ore, in order to improve the Turmalina plant in stages. Faina ore from initial stope mining will be available in the second half of 2024 for pilot plant and commercial scale testing. The Company understands that improving the MTL process plant with a flotation plant in the next years will generate additional benefits in process and tailing management. Flotation concentrate could be processed onsite or shipped to a third party for offsite treatment.

Engineering studies:

Jaguar developed "FEL 1-level or Conceptual" engineering studies during the second half of the 2022 year. The main objective of such an initial, however comprehensive, group of studies is to design and plan the two main alternatives for plant changes and upgrades at the current Turmalina processing facilities. The first alternative would consider the construction of a flotation circuit only, and the future selling of concentrates. A second alternative would include the construction of a POX circuit on the site. The engineering work comprised preliminary field surveys, the conceptual design of the general infrastructure arrangement for both metallurgical process scenarios on the site, and the completion of initial conceptual studies in various engineering disciplines (mechanics, civil, infrastructure, architecture, electrical, automation, etc.). The 2022 FEL1-level/Basic engineering studies altogether have also been used for the initial estimation of the future capital expenditures of the whole Faina project.

In 2023, Jaguar develop "FEL2-level or Basic" engineering studies, these studies were an evolution from previously ones, with more information generated by process, the engineering team developed more accurate estimations. This work was done for both scenarios, build a POX plant to treat Faina ore inhouse and the second scenario, to build a flotation plant to sell concentrate. The second scenario is a part of the first one, as for the POX scenario the same flotation plant will be needed. For both scenarios the follow disciplines were developed, mechanics, civil, infrastructure, architecture, electrical, automation.

For 2024, Jaguar plan to do the "FEL3-level or detailed" engineering studies to develop the flotation plant, following the strategy to improve MTL plant in stages.

Geotechnical and rock-mechanics studies:

Jaguar carried out robust geotechnical studies and evaluations during 2022. These studies included external laboratory testing (triaxial compression experiments) of drill-cores, systematic geotechnical drill-core logging activities during the 2022 infill drilling campaign, construction of geomechanics models, and geomechanical analysis of the hypothetical/future mining stopes. The main conclusion to be made from these studies altogether would be that most of the Faina underground gold deposit should be ranked geotechnically as Class 2 (RMR). That classification is an indication of good rock mechanics conditions for a future underground operation that will adopt the sublevel stopping mining method, the method that has been widely and historically used at the Turmalina mine.

Underground ventilation studies:

Howden Ltd. has been commissioned by Jaguar, to conduct project ventilation studies for a future Faina project. Some of the keystones and major objectives of this ongoing study are to:

- Follow all the laws and specific governmental mining regulations, therefore ensuring ideal work and health conditions for all employees and contractors underground.
- Integrate the Faina deposit with the current ventilation system and infrastructure already in place for the Turmalina operation.
- Leverage the existing ventilation infrastructure, as a way to minimize future capital expenditures.

The ventilation study, considering Faina reserves, were finished in 2023, with success. The airflow requirement was lower than expected. Also, the location of new exhaustion raise was located near the current orebody C exhaustor, was a great opportunity to reduce vertical meters. Additional opportunity identified for a near future was the relocation of Orebody A exhaustor for Faina Orebody. Those both opportunities reduce drastically the major costs for ventilation.

The Faina Project will have the potential to add quality ounces not only to Jaguar's production profile in the current five-year plan, but well into the future, since additional drilling and geological investigations will also be carried out along the down-plunge and strike continuity of the currently defined portions of the Faina deposit during the following years.

- **Onças de Pitangui**

MRMR

The style of iron formation-hosted gold mineralization in the São Sebastião deposit suggests that robust geological controls are essential for the development of resource domains. Continuous zones of gold mineralization are presumed to be primarily spatially associated with the replacement of magnetite within the banded iron formation (BIF), while the presence of mineralized samples outside the BIF in the host rocks signifies disseminated mineralization linked primarily to gold remobilization processes. The geological/domain modeling involved two stages:

1. Geological modeling of the lithology units.
2. Development of the mineralized zones within BIF lithology.

The lithology model for the São Sebastião deposit encompasses four main geological units:

1. BIF domains, divided into three stratigraphic levels (from top to bottom): a) Tomate b) Biquinho c) Pimentão.
2. Ultramafic rocks.
3. Metasedimentary rocks.
4. Schists.

The utilization of potentially mineable shapes in reporting the Mineral Resource at Onças do Pitangui serves the purpose of ensuring Reasonable Prospects for Eventual Economic Extraction (RPEEE) through three key mechanisms. Firstly, by employing panels with a minimum height of two meters, the report addresses the reasonable prospects of material not originally modeled to this thickness, incorporating necessary dilution for a minimum mining height. Secondly, the use of a block cut-off allows exclusion of material below the cut-off grade closely intertwined with higher-grade material, minimizing the risk of inaccuracies due to internal dilution. Thirdly, the block cut-off approach facilitates the recovery of isolated higher-grade blocks that may be challenging and costly to extract using traditional underground mining methods. In the case of Onças do Pitangui, a deliberate exclusion of isolated higher-grade blocks generating reporting panels was made in the final Mineral Resource statement.

Jaguar has published updated Mineral Resources for the Onças do Pitangui Project (São Sebastião Deposit as of November 30, 2023), with an Indicated Mineral Resource of approximately 448 koz of gold (3,423 Kt @ 4.07 g/t Au) and an Inferred Mineral Resource of approximately 379 koz of gold (3,343 kt @ 3.53 g/t Au).

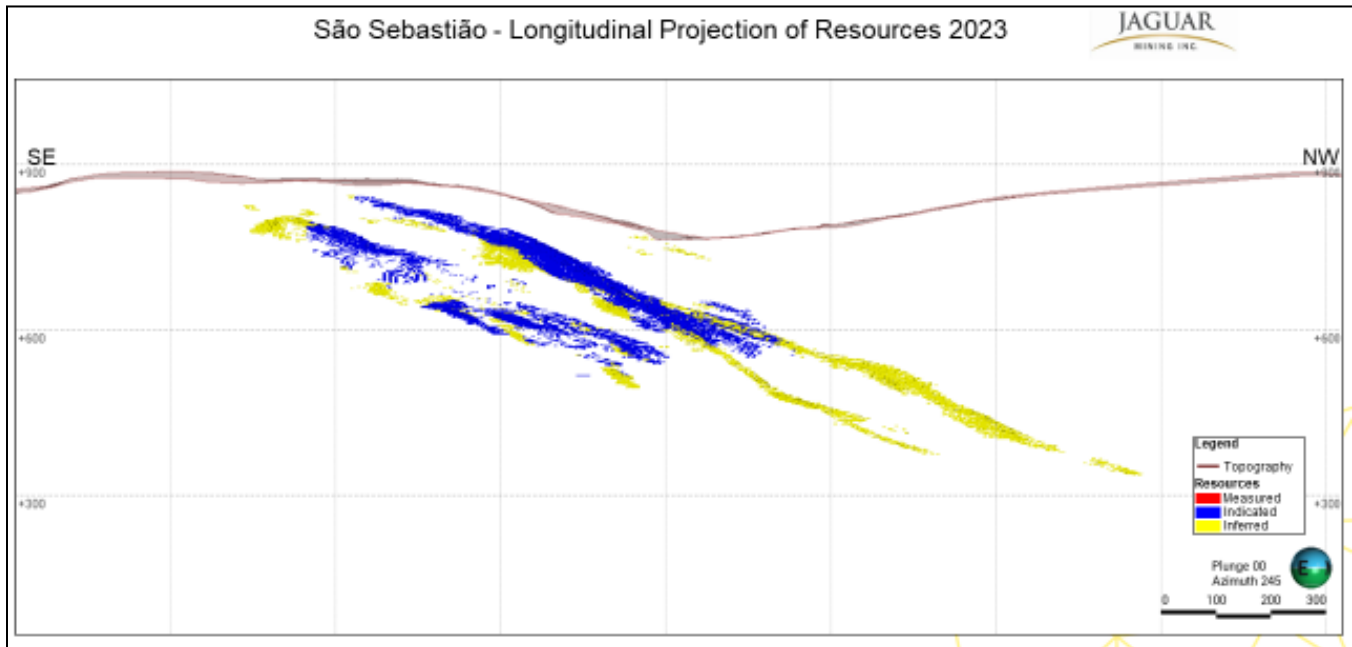
Table 10: Onças do Pitangui Mineral Resources as at December 31, 2023

	Measured Resources			Indicated Resources			Measured & Indicated Resources			Inferred Resources		
	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 MTL Gold Complex												
Onças do Pitangui Project (São Sebastião)				3423	4.07	448	3423	4.07	448	3343	3.53	379

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are inclusive of Mineral Reserves.
3. Mineral Resources are estimated at a cut-off grade of 2.25 g/t Au for the São Sebastião deposit.
4. Mineral Resources at the São Sebastião deposit include all drill hole and channel sample data as of July 29, 2019.
5. Mineral Resources are estimated using a long-term gold price of US\$1,800/oz Au.
6. Mineral Resources are estimated using an average long term foreign exchange rate of R\$5.20 : US\$1.00.
7. A minimum mining width of approximately two metres was used.
8. Gold grades are estimated by the OK and the Inverse Distance, Power 2 interpolation algorithms using capped composite.
9. samples.
10. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
11. Numbers may not sum due to rounding.

Figure 15: Onças do Pitangui (São Sebastião) Mineral Resources on December 31, 2023



Since Jaguar acquired the Onças de Pitangui Project, the technical team (Growth Projects, Exploration, Environmental and others) carry out a detailed review of the strategy and documentations available. After the first review, was defined to maintain the environmental strategy defined proposed by lamgold, to start with a “Guia de Utilização” (trial mine), considering a fast access to the orebody, with small infrastructure and production in the area for the first’s years, and an expansion afterword. It allows Jaguar to conduct technical studies during this time and test the performance of the ore at Turmalina process plant. During 2024, Jaguar will conduct several technical studies in order to increase the knowledge of the project for a fast start, it will include mine studies, metallurgical testwork (bench), geological modeling and resource estimation, location and engineering arrangements, geotechnical review, infrastructures review, water supply, electricity supply and etc.

Generative Exploration

- **Rocinha - Carrancas - Carneiros**

This mineralized trend is 9km to the east of the Company’s Caeté plant and have been mapped and sampled over approximately 5km of strike length between historical works as done by WMC (Western Mining Corporation) & Coffey Mining (Omega-Gamma) and most recent works made by the Company’s Exploration Team. The Rocinha – Carrancas – Carneiros trend is approximately 7 km east from Lamego mine and 6.6 km southeast from Cuiabá mine. The region is historically known for its gold occurrences and, more highlighted, the armed conflicts that Carrancas-Rocinha area hosted in early XVIII concerning the control of the area and its gold production, called *Guerra dos Emboabas*. In fact, the whole trend features excavations and galleries from different ages and orientations which is used as exploratory proxies in all work up to date.

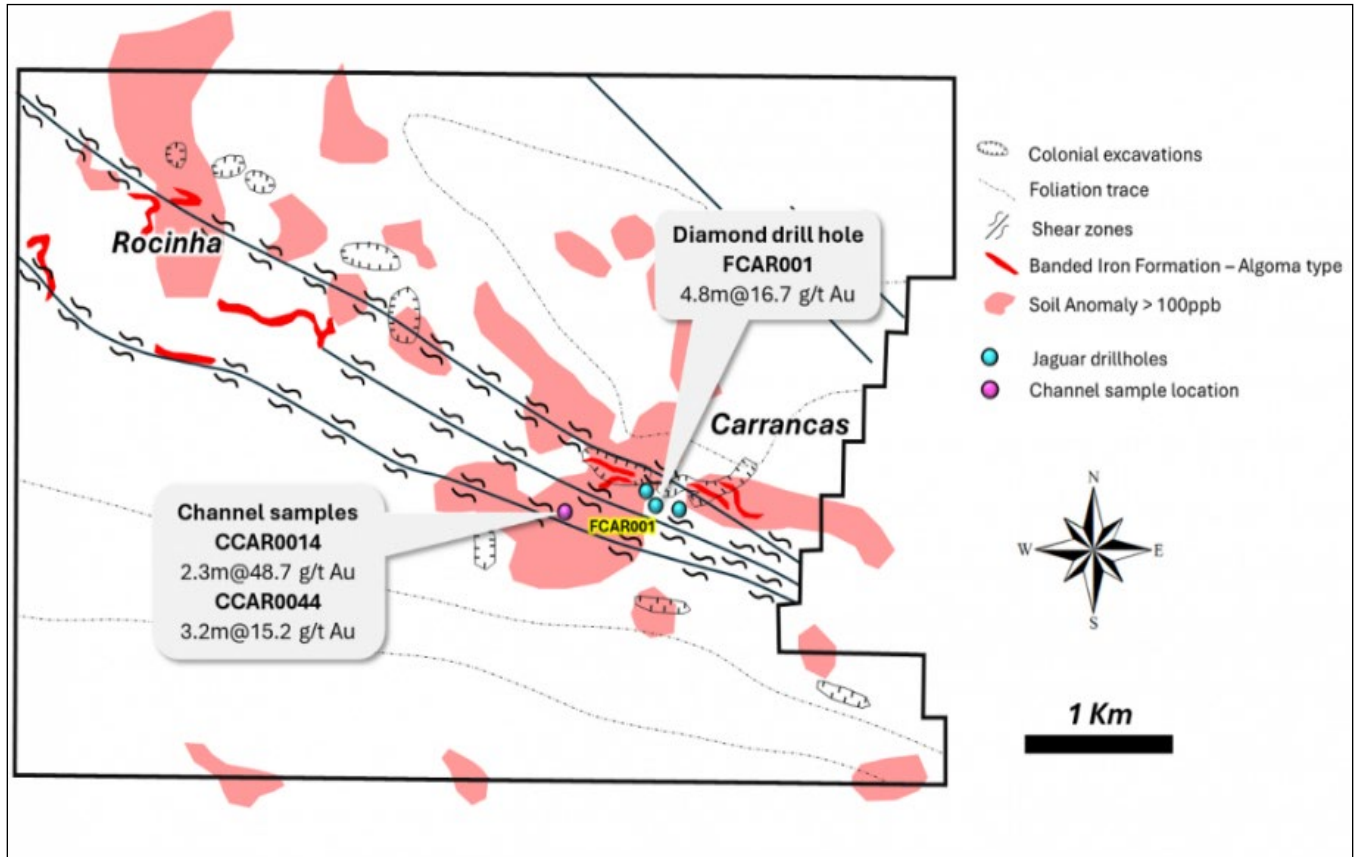
Rock chip channel sampling of historical underground excavations reported several very high-grade samples over intervals ranging from 0.7m to over 3m in true thickness. The mineralization is associated with silicification and quartz veining and quartz-sericite-chlorite-carbonate alteration with associated fine disseminated pyrite within a series of shallow-dipping shear zones which traverse the host greenschist sequence at a shallow angle. The host greenschists comprise both metavolcanic and metasedimentary units and, less often, interlayered banded iron formation. Rock chip channel samples collected from the underground excavations with grade x thickness (GT) >10 is tabulated below in Table 11.

Table 11: Summary table of best composites in Rocinha - Carrancas - Carneiros Trend.

Summary of significant channel sampling intervals with GTs (average grade x thickness) greater than 10 (in 2023) - Exploratory Drilling Carrancas and Rocinha Targets					
CHANNEL	Channel Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT (ETW)	Potential Orebody Zone
CCAR0014	2.3	2.3	48.70	112.02	Pele de Onça
CCAR0044	3.2	3.2	15.25	48.80	Pele de Onça
CRO-CG-0091	1.4	1.4	27.93	39.10	Carrancas
CCAR0035	2.1	2.1	12.98	27.26	Pele de Onça
CRO-CG-0048	1.6	1.6	14.46	23.14	Carrancas
CRO-CG-0053	0.5	0.5	23.28	11.64	Carrancas
CRO-CG-0054	0.6	0.6	16.97	10.18	Carrancas

In 2023 the Company concluded a shallow campaign with 5 drillholes totalizing 347 m drilled to recognize and confirm mineralization geometry, orientation, and its relations with host rocks in Carrancas target. The Company got encouraging intercepts as in FCAR001 with 4.8 m @ 16.69 g/t and others subordinated intercepts as in FCAR003 with 1.24 m @ 2.67 g/t. The Exploration Team lead a multielement re-logging work to help understand and simplify the local geology giving light to future works investigating possible intersections between BIF-Quartz veins with potential for major disseminations within Carrancas area.

Figure 16: Schematic map of Rocinha - Carrancas - Carneiros Trend with location of best intercepts and samples



- **BIF North – Mata do Trovões – Urubu – Rio dos Peixes**

The Rio de Peixe trend is located on the Northwestern portion of the Jaguar’s tenements in the Paciência complex and is composed of a series of targets distributed in a 3km fold structures with the main targets BIF North, Mata dos Trovões, Urubu, and Rio de Peixe North. The location of these areas is close to the paved road MG-356, near to Itabirito city. The exploration works in this area during 2023 was dedicated to checking old gold anomalies with trenches and rock chip sampling over outcrops, being recognized mineralized zones with strong potential for gold high-grade intersections, as in the first results around 10.4m@8.9 g/t Au in the Mata dos Trovões target, and 13.2m@1.2 Au g/t in Urubu target, corresponding to saccharoidal quartz-sulfide veins with strong deformation features and lineation of down plunge direction to N90/25, and disseminated sulfides in weathered talc-quartz schist, respectively. In the Northern part of the trend were identified in rock-chip sampling gold grades between 9 and 21.9 Au g/t in a new type of gold host-rock in this Central part of the Iron Quadrangle, related to metavolcanic agglomerates, with pelitic clasts cemented by massive fresh pyrite (Figure 23 and table 24).

The rocks of the base of the Rio das Velhas greenstone belt, belonging to the Ouro Fino Formation, occur in all areas of Rio de Peixe, and represent an important stratigraphic marker for geological mapping, helping us to define the potential extension of the mineralization on strike.

The next steps of exploration works in the area will be realize geological mapping over all the trend, perform some guidelines of soil sampling with multi elementary analysis in support of geochemical pathfinders of the mineralization and 3D geological modeling of the BIF North old open pit mine for an accurate measurement of the Mineral Resources potential and endowment for the region.

Figure 17: Map showing the location of trench samples and rock chip samples from outcrop along the Rio de Peixe trend.

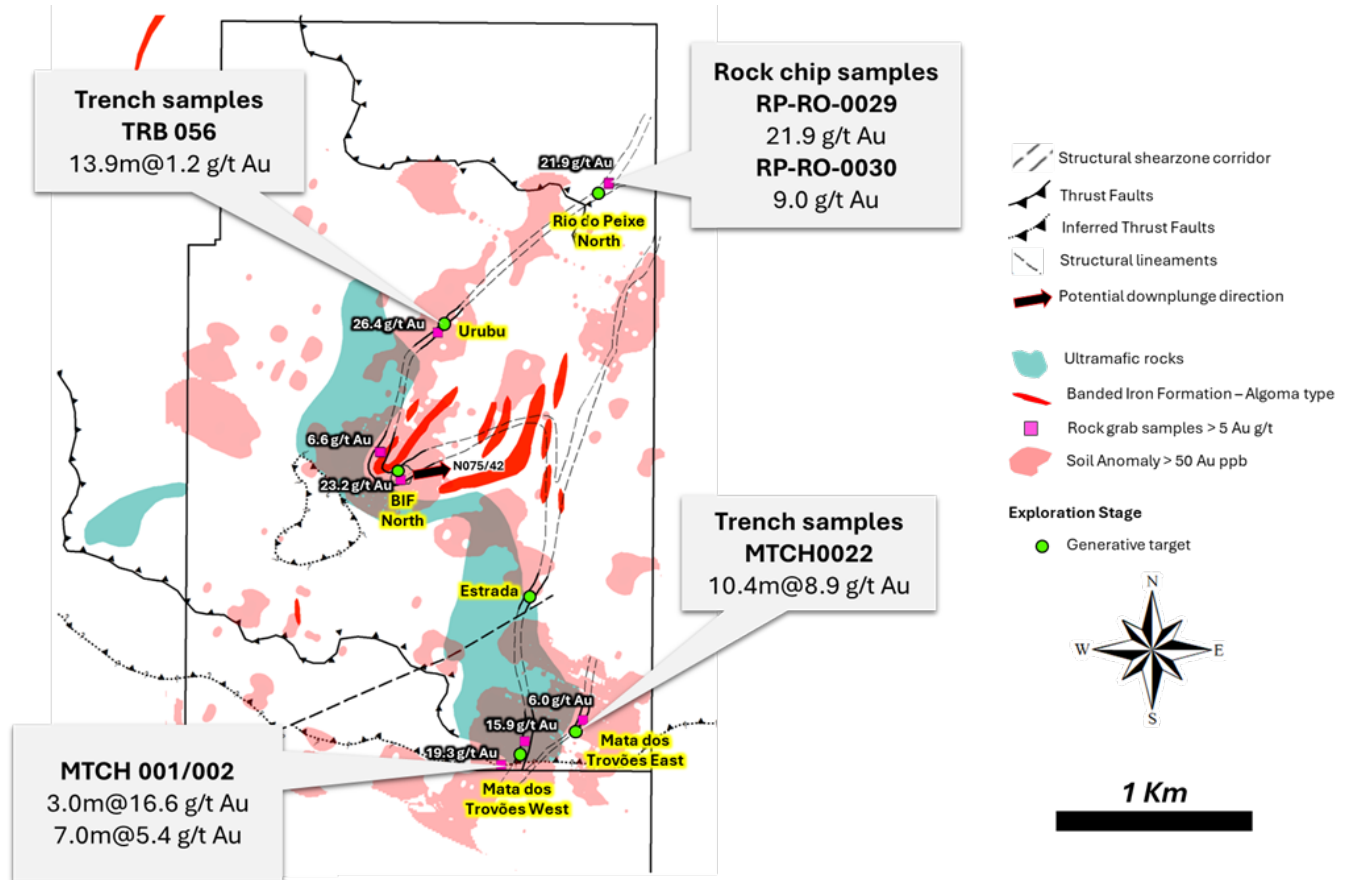


Table 12: Rock chip channel samples collected from the surface trenches with grade x thickness (GT) > 10 (ETW = Estimated True Width; GT=grade x thickness)

Summary of significant Drilling Intersections with GTs (average grade x thickness) greater than 15 (in 2023) – Exploratory Channel Sampling Rio de Peixe					
CHANNEL	Channel Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT (ETW)	Zone
MTCH001	3.00	3.00	16.63	49.89	Mata dos Trovoes
MTCH002	7.00	7.00	5.42	37.94	Mata dos Trovoes
MTCH022	10.40	10.40	8.90	92.56	Mata dos Trovoes
TRB 056	13.90	13.90	1.20	16.68	Urubu

- Cedro - Chamé**

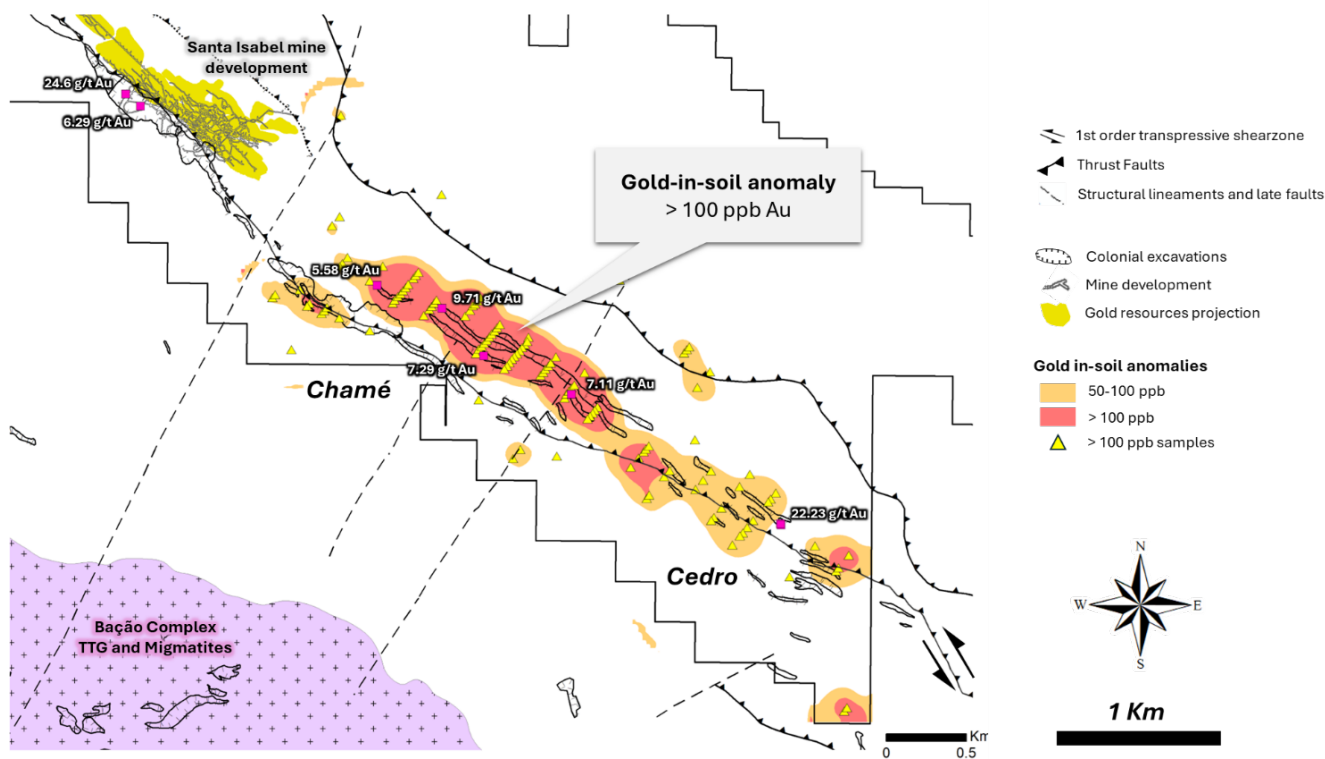
The Chamé–Cedro trend belongs to the Paciência Complex, located near Acuruí village, in Itabirito city. This trend was recently worked with soil sampling as a high-priority target along the São Vicente lineament structure, a major mineralized crustal shear zone with around 15km of occurrence into the Jaguar’s tenements.

In 2023 were completed the soil sampling with more than 1,200 samples, defining a robust gold-in-soil anomaly extending positive results greater than 100 ppb for some 4km in the southeast direction from the Santa Isabel mine. The soil anomaly was confirmed

by rock-chip sampling reaching gold results around 5 to 7 g/t Au, reaching peaks of 22 and 24 g/t Au (Figure 18), composed of quartz-carbonate-sulfides veins, associated with mylonites and quartz-sericite schists. The most typical hydrothermal alteration is carbonatation (ankerite and calcite) and sulfidation (pyrite, pyrrhotite and minor arsenopyrite). The geological mapping confirms structural measurements of N110/25 for some intersection lineation, setting the main direction of down-plunge direction of potential gold oreshoots.

The gold potential of this trend remains open on strike and depth, with some historical shallow drillholes returning interesting gold composites around 4.2m@5.76 g/t Au. The Jaguar company has plans to continue the geochemical survey throughout the hangingwall of the main structure, in advance to identify new parallel gold zones, as the geochemical anomalies occurs in other targets along the trend (e.g. Bahú target).

Figure 18: Map showing the 4km gold-in-soil anomaly Chamé - Cedro above 100 ppb Au, extending to the southeast of the Santa Isabel mine



- **Córrego Brandão - Catita**

The Córrego Brandão exploration target is located approximately 5 km from the CCA (Caeté) plant and RG mine infrastructure and was generated by soil sampling over a regional conceptual target identified during late 2018. Anomalous gold in soil sampling results (> 100 ppb Au) over a strike length of some 400 m were followed up in 2019 with soil sampling, geological mapping, trenching and shallow auger drilling, with encouraging results.

The soil sampling and associated exploration work subsequently extended a zone, anomalous in gold, arsenic, antimony, tellurium and silver, to over 5 km in strike extent.

Follow-up, vertical shallow auger drilling intersected ferruginous-gossanous material with widespread boxwork textures (after sulphides) and highly encouraging mineralized sample intervals reporting assays of 38.71 g/t Au over a 5.8 m vertical interval (including 60.08 g/t Au over 3.0 m), while an adjacent hole 25 m across strike reported 16.91 g/t Au over a 3.8 m vertical interval (including 28.70 g/t Au over 2.0 m).

Surface diamond drilling commenced at Córrego Brandão in late November 2020 to evaluate its potential for near-term, open pit (and underground) mineable Mineral Resource additions. The area drilled to date at the Córrego Brandão target has tested a relatively restricted portion of the semi-regional-scale fold structure mapped and targeted by Jaguar since 2020.

Forty-seven (47) diamond drill holes have been completed to date, totalling 7,536.10 m in length at Córrego Brandão. The drilling campaigns have broadly defined, through a series of step out holes, a strike length of roughly 500 m of potentially economic oxide gold mineralization, with average thicknesses of 20-40 m. Moreover, the initially intercepted mineralized zones remain open both laterally and down-plunge.

Three deep diamond drilling holes were completed during 2022, comprising a total length of 1,865.70 m. The 2022 holes confirmed that the mineralisation remains open at depths greater than 400 m along a potential shear zone of NE-SW direction.

Based on drilling activities completed from late 2020 to late 2022 at Córrego Brandão, a maiden Inferred Mineral Resource for the target was reported as containing 51 koz of gold (1,072 kt @ 1.48 g/t Au).

The Córrego Brandão target, together with the adjacent Jaguar's deactivated Catita open-pit operation, have near-surface open pit potential to add feedstock to the nearby Jaguar's Caeté processing plant. The depths, thicknesses, grades and initial resources estimates have been very encouraging. Jaguar currently expects to be positioned to fast track the evaluation and permitting process, while we fully evaluate the size and grade potential of a Córrego Brandão-Catita combined project. Such an envisaged project is expected to be one more initiative to support the Jaguar strategy for organic growth by filling the Company's operating processing plants to capacity.

In terms of stratigraphic setting, the gold mineralization at both the Córrego Brandão target and the Catita deposit corresponds to a highly altered and mineralogically "exotic" conformable horizon of roughly 20-40 m in true thickness that occurs right at the sheared contact between a meta-mafic volcanic package and a meta-ultramafic volcanic package. This targeted exotic altered and sheared horizon has been easily distinguished during the exploratory drilling activities by the modal presence of indicator minerals that would-should not be stable under the typical low-greenschist metamorphic grade recorded in the Caeté region; such as garnet, biotite and iron-rich carbonates.

Recent surface mapping activities completed around the Córrego Brandão target area have indicated that an extra, perhaps localized, folding event affected the Córrego Brandão and Catita mineralized bodies, as well as the "exotic" altered/sheared mineralized horizon that was drill-tested mainly during 2021. Moreover, the Córrego Brandão and Catita gold occurrences do certainly represent the same 20-to-40 m-thick exotic, altered/sheared refolded horizon. Córrego Brandão is hosted by a synform structure, and Catita is hosted by a more complex anticlinorium structure. Exploration activities at the Catita open-pit and underground project were placed on hold by Jaguar during the 2011-2012 period mainly due to a poor understanding of both the folded geometries and the potentially variable down-plunge orientations of the potentially economic mineralized zones.

The Córrego Brandão mineralization defined by the maiden mineral resource exhibits complex fold geometries associated with the mapped higher-amplitude Córrego Brandão synform ("M-type" asymmetries and associated parasitic folding). High-grade and more extensive mineralization occurs where there are visible concentrations of smaller-scale parasitic folding to the higher amplitude, easily mappable, overturned plunging synforms and antiforms. The economic mineralized zones and bodies at the Córrego Brandão deposit/target apparently plunge and progress spatially with double-plunging orientations, as a result of a refolded and re-oriented structural pattern from a previous/earlier structural deformation event.

A small diamond drilling campaign was carried out at the Catita deposit area in 2022, comprising of only three holes (a total of 1,105.60 m drilled). These additional holes tested a new understanding of the plunge, possibly locally refolded by a folding interference pattern. Significant intercepts were obtained during this campaign. Hole FCAT045 returned with 9.51 g/t Au over 4.8 m, including 15.24 g/t Au over 3.2 m. This recent success is of great importance for the Company, as it will subsidize the effectiveness of the upcoming exploratory and infill drilling campaigns that will target these two deposits combined during 2023-2024.

In a second phase, between April – July 2023, were made 9 drillholes in Catita aiming a better orebody delineation according to the last conceptual understanding and to infill the area for better sampling support. That second phase campaign totalized

722.45m and confirmed its conceptual coherence with encouraging intercepts as in FCAT054 with 8.46m @ 8.69 g/t including 5.07 m @ 13.72 g/t or in FCAT051 with 4.0 m @ 3.16 g/t. Those target intercepts gave us higher confidence on the geometry and continuity of its orebodies in a complex geometrical distribution in Catita area.

Gold Production and Sales

Gold production in 2023 totalled 70,704 oz. at cash operating cost of \$1,126 per ounce sold, in 2022 totalled 80,968 oz. at cash operating cost of \$1,052 per ounce sold, and in 2021 totalled 83,878 oz. at cash operating cost of \$831 per ounce sold.

Gold sales reported in 2023 totalled 70,525 oz., in 2022 totalled 80,050 oz., and in 2021 totalled 84,623 oz.

Employees

As at December 31, 2023, Jaguar had 1,056 employees compared to 1,167 employees in 2022 and 1,224 employees in 2021. All but two employees are located in Brazil.

All of Jaguar's employees in Brazil are members of a union. Jaguar expects to enter into a new union agreement on terms and conditions similar to those of the union agreement currently in place and considering inflation, set to expire on May 31, 2024. Discussions regarding the new union agreement are anticipated to commence in April 2024.

Foreign Operations

All of Jaguar's mineral projects are owned and operated through its wholly-owned Brazilian subsidiary, MSOL. Jaguar's properties are located in the states of Minas Gerais in Brazil. Jaguar is entirely dependent on its foreign operations for the exploration and development of gold properties and for the production of gold.

Unlike MSOL, Jaguar is domiciled in Canada and not Brazil. The Brazilian Civil Code grants all management powers of MSOL to its sole shareholder (Jaguar), and there are no material concerns about the ability of investors to exercise statutory rights and remedies under Canadian securities law as it pertains to Jaguar and MSOL.

Customers and Suppliers

The Company sells its refined gold in the gold spot market and has a single customer for the sale of its final product. The Company engages various suppliers from time to time in relation to its mining, processing, transportation and sale of refined gold bars. The Company supply-chain policies in place to ensure that there is no incidence of modern slavery, human trafficking, forced or compulsory labour occurring within its operations or supply chain. The process used in the selection of suppliers is based on price, quality, and ethical practices (including implementation of fair practices, lack of child and slave labour, equality of women rights) and more traditional factors including business ethics/anti-corruption, human rights protection, health and safety and environmental practices. None of the Company's major suppliers, or the directors or executive officers of such entities, are related to the Company or its directors or executive officers.

Health, Safety and Environmental

Policy and Procedures

People are the most valuable asset of the Company. Jaguar sets the life and welfare of its employees, their families, and communities as a top priority. A safe, healthy, and stimulating work environment is essential so that people feel secure, can thrive, and do a good job. Jaguar has a Health, Safety and Environment policy based the actions, decisions, and activities of company. Two manuals present the guidelines and the procedures for conducting the process to guarantee zero harm and sustainability for the employees, community, and environment. All these documents are available on the Company website.

Inspections, audits and risk management

Jaguar has the Integrated Management System that enables inspections and audits of the operations to ensure compliance with legal requirements and internal procedures. The system is routinely used, and the results communicated. All the reporting emerging from the system is incorporated into Jaguar processed with a focus on continuous improvement.

Jaguar ESG strategy (tailings storage facilities)

Jaguar initiated Research and Development (R&D) projects with parties from different sectors, involving Jaguar and its partners with federal universities, national technology centers and the private sector. Projects and environmental studies started in 2023 that have great environmental relevance and include the optimization of effluent treatment plant, research on hazardous tailings treatments for circular economy and in pit disposal opportunities associated with open-pit closure. All those projects are in the initial phases of development by the engineering sector and environmental studies by the health, safety, environment, and community HSEC sector.

Health and Safety

Jaguar reviews all safety aspects in terms of its Golden Rules: five rules specified by Jaguar for preventing accidents in the operations. The rules deal with rock collapse, blocking dangerous energy, work at heights, cargo handling and vehicles and equipment. A key goal is the reduction of total accidents.

Environmental

The Company maintains an environmental management system that monitors surface and underground water, noise, atmospheric emissions, effluent discharges, and other aspects. The main routine focus includes waste and water management, the protection of biodiversity including the fauna monitoring, permit process and the environmental education actions with employees and communities.

Jaguar's regular operational focus includes ongoing monitoring of environmental reclamation actions. Important initiatives started in 2023 are the implementation of plans and options for the historic open pits RG6A and RG06B, and the continuous Moita dam closure, all in the Roça Grande unit. For Turmalina operation, the closure of the Turmalina Dam is also a continuous focus.

RISK FACTORS

I. Risk Factors Relating to the Gold Industry

Gold prices are volatile, and there can be no assurance that a profitable market for gold will exist.

Jaguar's business and profitability are significantly affected by the world market price of gold. Jaguar's gold production is sold into the spot market. Gold prices have fluctuated widely in recent years. These fluctuations can be material and can occur over short periods of time and are affected by numerous factors, all of which are beyond Jaguar's control. Gold prices are subject to changes resulting from a variety of factors including international economic and political trends, expectations of inflation, global and regional supply and demand and consumption patterns, stock levels maintained by producers and others, currency exchange fluctuations, inflation rates, interest rates and increased production due to improved mining and production methods. Future production from Jaguar's mining properties is dependent on gold prices that are adequate to make these properties economically viable.

If the market price of gold were to drop and prices realized by Jaguar were to decrease substantially and remain at such level for any substantial period, Jaguar's profitability and cash flow would be negatively affected. Jaguar may determine that it is not economically feasible to continue commercial production at some or all of its operations or the development of some or all of its current projects, as applicable, which could have an adverse impact on Jaguar's financial performance and results of operations. In such a circumstance, Jaguar may also curtail or suspend some or all of its exploration activities, with the result that depleted reserves are not replaced. In addition, the market value of Jaguar's gold inventory may be reduced, and existing reserves may be reduced to the extent that ore cannot be mined and processed economically at the prevailing prices.

Mining is inherently a risky business.

Mining operations entail various types of risks and hazards, comprising:

- environmental hazards;
- unforeseen geological challenges such as such as rock bursts, structural cave-ins or slides;
- natural disasters like flooding and fires;
- labour disruptions;
- industrial accidents;
- unexpected mining dilution;
- metallurgical processing problems; and/or
- metal losses and periodic interruptions due to inclement or hazardous weather conditions.

The consequences of these risks may encompass property damage, facility destruction, personal harm, environmental damage, mining delays, increased production costs, financial losses and potential legal liability.

Mineral Reserve and Mineral Resources Estimates

Jaguar's Mineral Reserves and Mineral Resources presented herein are estimates, and no assurance can be given that the estimated reserves and resources are accurate or that the indicated level of gold or any other mineral will be produced. Such estimates are, in large part, based on interpretations of geological data obtained from drill holes and other sampling techniques. Actual mineralization or formations may be different from those predicted. Further, it may take many years from the initial phase of drilling before production is possible, and during that time the economic feasibility of exploiting a discovery may change.

As Jaguar adheres to the disclosure standards mandated by Canadian securities law, its Annual Information Form includes resource estimates as required by NI 43-101. These estimates for mineral resource on properties yet to commence production often rely on sparse and widely spaced drill hole data, which may not accurately reflect conditions between and around drill holes. Consequently, these estimates may need adjustment as additional drilling data is gathered, as actual production experience is gained or as modifications are made to its mining methods.

There can be no assurance Jaguar's mineral resources, in whole or in part, will qualify as reserves or be converted into reserves. Fluctuations in market price of gold alongside increased production and capital costs or reduced recovery rates, may render Jaguar's proven and probable reserves uneconomical to develop at a particular site or sites for periods of time, or may render mineral reserves containing relatively lower grade mineralization uneconomical. Moreover, short-term operating factors such as the need for the orderly development of ore bodies, the processing of varying ore grades, technical complexity of ore bodies, unusual or unexpected ore body formations, ore dilution or diverse metallurgical and other ore characteristics may lead to reserve reductions or unprofitability for Jaguar in certain accounting periods. Estimation on reserves may have to be recalculated based on actual production experiences, metal price fluctuations, or changes in underlying assumptions. Any of these factors may require Jaguar to reduce its mineral reserves (or ore reserves) and resources, which could have a negative impact on Jaguar's financial results.

Significant uncertainty exists related to Inferred Mineral Resources.

There is a risk that Inferred Mineral Resources referred to in this MD&A cannot be converted into Measured or Indicated Mineral Resources. Due to the uncertainty relating to Inferred Mineral Resources, there is no assurance that Inferred Mineral Resources will be upgraded to resources with sufficient geological and grade continuity to constitute measured and indicated resources as a result of continued exploration.

Replacement of depleted reserve

Jaguar's mineral reserves must be replaced to maintain production levels over the long-term. Reserves can be replaced by expanding known ore bodies, locating new deposits or making acquisitions. Exploration is highly speculative in nature and identifying new ore bodies is becoming increasingly difficult. Jaguar's exploration projects involve many risks and are frequently unsuccessful. Once a site

with mineralization is discovered, it may take several years from the initial phases of drilling until production is possible, during which time the economic feasibility of production may change. Substantial expenditures are required to establish proven and probable reserves and to construct mining and processing facilities. As a result, there is no assurance that current or future exploration programs will be successful. Depletion of reserves may not be offset by discoveries or acquisitions and divestitures of assets could lead to a lower reserve base. Reserves estimated in accordance with NI 43-101 may also decrease due to economic factors such as the use of a lower metal price assumption. However, such a decline would not be a reduction in the actual mineral base of the Company, as the ounces or pounds removed from Jaguar’s reserves due to the use of a lower gold assumption would be transferred to resources, preserving the option to access them in the future at higher gold prices. The mineral base of Jaguar will decline if reserves are mined without adequate replacement and Jaguar may not be able to sustain production to or beyond the currently contemplated mine lives, based on current production rates.

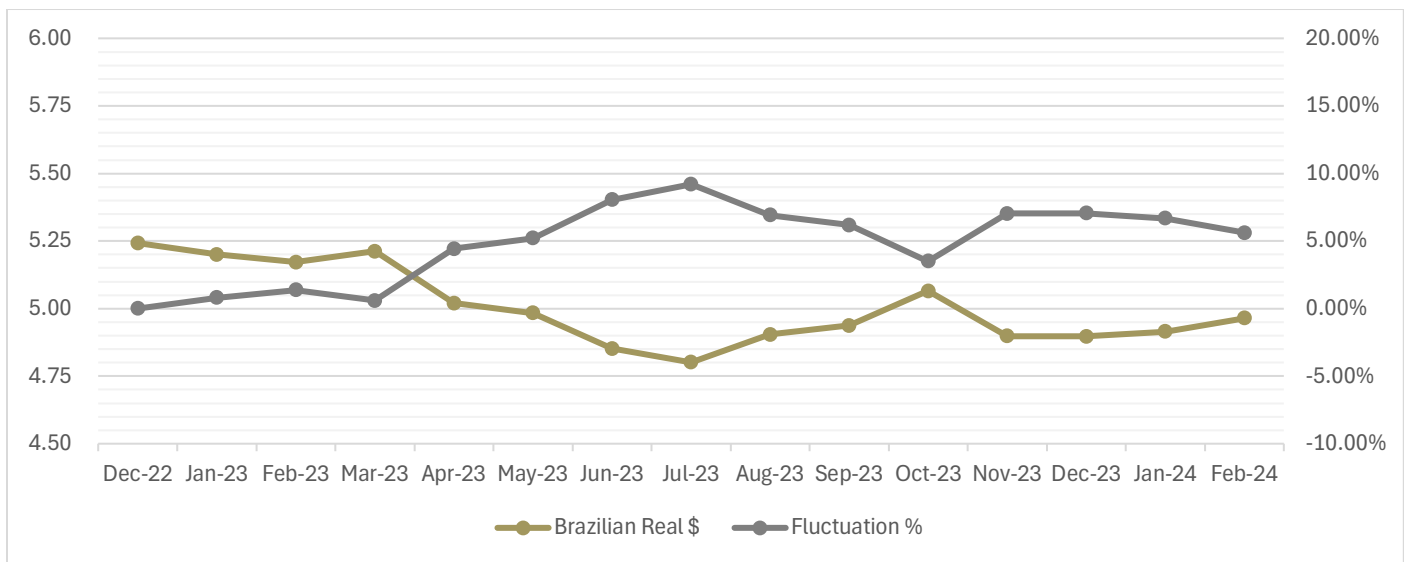
II. Risks Relating to Jaguar’s Business

Fluctuations in currency exchange rates may adversely affect Jaguar’s financial position and results of operations. Fluctuations in currency exchange rates, particularly as applied to translate operating costs denominated in currencies other than US dollars, may significantly impact Jaguar’s financial position and results of operations. Jaguar generally sells its gold based on a US dollar price, but the vast majority of Jaguar’s operating expenses are incurred in non-US currencies. In addition, the appreciation of the Brazilian Real against the US dollar could further increase the dollar costs of gold production at Jaguar’s mining operations in Brazil, which could materially and adversely affect Jaguar’s earnings and financial condition.

US Dollar - Market Update

The following summarizes the movement in key currencies vis-à-vis the US dollar (source: Central Bank of Brazil)

Graph 3: US Dollar vs Brazilian Real



During the year ended December 31, 2023, the Brazilian Real strengthened against the US dollar.

Competition

The gold mining industry is characterized by intense competition. Significant and increasing competition exists for gold and other mineral acquisition opportunities worldwide. Many competitors are well-established mining companies with significantly more financial resources, operational expertise, and technical capabilities. Consequently, Jaguar may face challenges in securing rights to desirable mining properties on terms it considers acceptable. Increased competition may also hinder Jaguar's capacity to attract essential capital funding or acquire an interest in additional operations that would yield Mineral Reserves or result in commercial mining operations.

Reliance on management and key personnel

Jaguar relies heavily on its management. Recruiting and retaining qualified personnel is critical to Jaguar's success. The number of persons skilled in the acquisition, exploration and development of mining properties is limited, and competition for the services of such persons is intense. In addition, as Jaguar's business activity grows, it may require additional key financial, administrative, technical, and mining personnel. Jaguar does not maintain "key-man" insurance. The failure to attract and/or retain such personnel to manage growth effectively could have a material adverse effect on Jaguar's business, prospects, financial condition, and results of operations.

Actual operating and financial results may differ from plans

Capital and operating costs, production and economic returns, and other estimates contained in the feasibility studies and life of mine plans for Jaguar's projects may differ significantly from those anticipated by Jaguar's current studies and estimates, and there can be no assurance that Jaguar's actual capital and operating costs will not be higher than currently anticipated. In addition, delays to construction schedules may negatively impact the net present value and internal rates of return of Jaguar's mineral properties as set forth in the applicable feasibility studies.

Jaguar's cash operating costs per ounce sold¹ and all-in sustaining costs per ounce sold¹ for the years ending December 31, 2023, 2022, and 2021 were as follows:

Table 13: Cash operating cost and AISC per ounce sold

		2023	2022	2021
Turmalina	Cash operating costs per ounce sold ¹	\$ 1,099	\$ 1,105	\$ 881
	All-in sustaining costs per ounce sold ¹	\$ 1,550	\$ 1,475	\$ 1,251
Pilar	Cash operating costs per ounce sold ¹	\$ 1,150	\$ 1,010	\$ 790
	All-in sustaining costs per ounce sold ¹	\$ 1,486	\$ 1,297	\$ 1,031
Consolidated	Cash operating costs per ounce sold ¹	\$ 1,126	\$ 1,052	\$ 831
	All-in sustaining costs per ounce sold ¹	\$ 1,618	\$ 1,483	\$ 1,215

¹ Cash operating costs per ounce sold, and all-in sustaining costs per ounce sold, are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the Non-GAAP Financial Performance Measures section of the MD&A.

Energy supply and costs

Jaguar's operations are energy-intensive and rely upon third parties to supply the energy resources consumed in its operations. The prices for and availability of energy resources may be subject to change or curtailment, respectively, due to, among other things, new laws or regulations, imposition of new taxes or tariffs, interruptions in production by suppliers, worldwide price levels and market conditions. Disruptions in supply or increases in costs of energy resources could have a material adverse impact on Jaguar's financial condition and the results of operations.

Title defects

Jaguar's properties may be subject to prior recorded, and unrecorded agreements, transfers or claims, and title may be affected by, among other things, undetected defects. Title insurance is generally not available for mineral properties, and Jaguar's ability to ensure that it has obtained a secure claim to individual mining properties or mining concessions may be severely constrained. Jaguar has not conducted surveys of all of the claims in which it holds direct or indirect interests. A successful challenge to the precise area and location of these claims could result in Jaguar being unable to operate on its properties as permitted or unable to enforce its rights with respect to its properties. No assurance can be given that Jaguar's rights will not be revoked or significantly altered to its detriment. There can also be no assurance that third parties will not challenge or impede its rights.

Brazil government regulation and political instability

Jaguar holds mineral interests in Brazil that may be affected, in varying degrees, by political instability, government regulations relating to the mining industry and foreign investment therein, and the policies of other nations in respect to Brazil. Any changes in regulations or shifts in political conditions are beyond Jaguar's control and may adversely affect its business. Jaguar's operations may be affected in varying degrees by government regulations, including those with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, employment, land use, water use, environmental legislation and mine safety. The regulatory environment is in a state of continuous change, and new laws, regulations and requirements may be retroactive in their effect and implementation. Jaguar's operations may also be adversely affected in varying degrees by political and economic instability, economic or other sanctions imposed by other nations, terrorism, military repression, crime, extreme fluctuations in currency exchange rates and high inflation.

Brazil corruption index

The Company's principal operations and mineral properties are located in Brazil. There are additional business and financial risks inherent to doing business in Brazil compared to the United States or Canada. Since 1996, Transparency International has published the Corruption Perceptions Index ("CPI"), which annually ranks countries by their perceived levels of corruption, as determined by expert assessments and opinion surveys. The CPI ranks countries on a scale from 100 (very clean) to 0 (highly corrupt). In 2023, out of 180 countries in the world, Canada was ranked 12th with a CPI score of 76, the United States was ranked 24th with a CPI score of 69, and Brazil was ranked 104th with a CPI score of 36. The average score on the 2023 Corruption Perceptions Index was 43 out of 100. Anything below a score of 50 indicates governments are failing to tackle corruption and represents a challenge in those countries 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 procurement fraud, theft, embezzlement and other wrongs against the Company. While corruption, bribery and fraud risks can never be fully eliminated, the Company reviews and implements controls to reduce the likelihood of these irregularities occurring. The Company utilizes an internal auditor, third-party security services and closed-circuit video surveillance at its operations in Brazil.

Demanding environmental laws and regulations

All phases of Jaguar's operations are subject to environmental regulations in the jurisdictions in which it operates. These laws address emissions into the air, discharges into water, management of waste and hazardous substances, protection of natural resources and reclamation of lands disturbed by mining operations. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

In light of tailings dam accidents in Brazil in 2015 and 2019, federal lawmakers have proposed legislation aimed at addressing risks of future tailings dam failures. While there are a variety of measures under consideration, recently approved legislation at the federal and state level includes the potential increase of financial assurance requirements, increased fines and penalties for environmental damages and/or requiring the Company to further address risks to residents downstream. While regulations are pending on these

issues, these laws and regulations may adversely affect Jaguar's operations or increase the costs associated with those operations.

The properties in which Jaguar holds interests may contain environmental hazards, which are presently unknown to it, and which were caused by previous or existing owners or operators of the properties. Because of this risk in 2021, Jaguar started the Management of Mined Areas procedure, a system that previews for three years the elaboration of recovery and closing plans for all properties where Jaguar developed mines before. With this plan, it will be possible to update the asset retirement obligation cost considering the potential contamination and other impacts. All these processes remained compliant with the new legislation in Brazil by the National Mining Agency (ANM) in through the end of 2023.

Cyber security

The Company's information assets and critical infrastructure may be subject to cyber security risks. The Company is subject to a variety of information technology and system risks as part of its normal course of operations, including potential breakdown, invasion, virus, cyber-attack, cyber-fraud, ransomware, security breach, and destruction or interruption of the Company's information technology systems by third parties or insiders. Despite Jaguar's security measures and controls, which are designed to mitigate these risks, a breach of its security measures and/or a loss of information could occur and result in a loss of material and confidential information and damage to reputation, breach of privacy laws and a disruption to the Company's business activities by limiting its capacity to effectively monitor Jaguar's operations. Jaguar's failure to appropriately maintain the security of the data it holds, whether a result of its own error or the malfeasance or errors of others, could harm Jaguar's reputation or trigger legal liabilities and increased costs.

Employment regulations and labour disruptions

Employees of Jaguar's principal projects are unionized, and the collective bargaining agreements between Jaguar and the unions that represent these employees must be renegotiated on an annual basis. Although Jaguar believes it has good relations with its employees and with their unions, production at Jaguar's mining operations is dependent upon the continuous efforts of Jaguar's employees. In addition, relations between Jaguar and its employees may be affected by changes in the scheme of labour relations that may be introduced by the relevant governmental authorities in whose jurisdictions Jaguar carries on business. Labour disruptions or any changes in labour or employment legislation or in the relationship between Jaguar and its employees may have a materially adverse effect on Jaguar's business, results of operations and financial condition. Labour litigation in Brazil is an ongoing exposure for all companies working in Brazil, especially in the mining sector. Jaguar has a number of labour claims, and the settlement of such claims may result in significant cash outflow in future.

Jaguar may be subject to litigation

All industries, including the mining industry, are subject to legal claims, with and without merit. The Company may become involved in legal disputes in the future. Defense and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a materially adverse effect on the Company's financial position or results of operations.

Generally, the labour claims are due to disputed overtime, danger pay, wage parity, etc. Brazilian labour law is a complex system of statutes and regulations, which in general, favours employees of the Company. As such a key success factor in Brazilian-based operations is the minimization of the impact of labour claims.

Production and cost estimates

Jaguar prepares estimates of future production, total cash costs and capital costs of production for particular operations. No assurance can be given that such estimates will be achieved. Failure to achieve production or cost estimates or material increases in costs could have an adverse impact on Jaguar's future cash flows, profitability, results of operations and financial condition. Jaguar's actual production and costs may vary from estimates for a variety of reasons, including: actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short-term operating factors relating to mineral or ore reserves, such as the need for sequential development of ore bodies and the processing of new or different ore grades; revisions to mine plans; unusual or unexpected ore body formations; risks and hazards associated with mining; and unexpected labour shortages or strikes.

Road link between Pilar Mine and the Caeté plant

Jaguar has material properties located in the state of Minas Gerais, Brazil. Typically, the state's wet season is from November to April. During the wet season, the properties and surrounding infrastructure may be subject to unpredictable weather conditions such as heavy rains, strong winds, and flash flooding. Pilar is located approximately 40 km by road from the Caeté plant. Ore from Pilar is hauled to the Caeté plant for processing. Ore haulage activities may be slowed or delayed as roads may be temporarily flooded or if the maintenance or provision of such infrastructure is impacted by other events. Any delays could adversely affect Jaguar's operations, financial condition, and results of operations. Jaguar has undertaken to mitigate the potential effects of the wet season by discussing alternative routes with the neighbouring communities.

Repatriation of earnings

There is no assurance that any country in which the Company carries on business, or may carry on business in the future, will not impose restrictions on the repatriation of earnings to a foreign jurisdiction.

Termination of mining concessions

The Company's mining concessions may be terminated in certain circumstances. Under the laws of Brazil, Mineral Resources belong to the federal government and governmental concessions are required to explore for, and exploit, Mineral Reserves. The Company will hold mining, exploration and other related concessions in each of the jurisdictions where the Company operates and where it will carry on development projects and prospects. The concessions the Company will hold in respect to its operations, development projects and prospects may be terminated under certain circumstances. Termination of any one or more of the Company's mining, exploration or other concessions could have a material adverse effect on the Company's financial condition or results of operations.

Compliance with anticorruption laws

The Company's operations are governed by, and involve interaction with, many levels of government in Brazil. The Company is subject to various anti - corruption laws and regulations, such as the Canadian Corruption of Foreign Public Officials Act, which prohibits a company and its employees or intermediaries from bribing or making improper payments to foreign officials or other persons to obtain or retain business or gain some other business advantage. In addition, the Extractive Sector Transparency Measures Act recently introduced by the Canadian government contributes to global efforts to increase transparency and deter corruption in the extractive sector by requiring extractive entities active in Canada to publicly disclose, on an annual basis, specific payments made to all governments in Canada and abroad. According to Transparency International, Brazil is perceived as having fairly high levels of corruption relative to Canada. The Company cannot predict the nature, scope or effect of future regulatory requirements to which the Company's operations might be subject or the manner in which existing laws might be administered or interpreted.

In recent years, there has been a general increase in both the frequency of enforcement and the severity of penalties under such anti-corruption and anti-bribery laws, resulting in greater scrutiny and punishment of companies found in violation of such laws. Failure to comply with the applicable anti - corruption laws and regulations could expose the Company and its senior management to civil or criminal penalties or other sanctions, which could materially and adversely affect the Company's business, financial condition and results of operations. Likewise, any investigation of any alleged violations of the applicable anti - corruption legislation by Canadian or foreign authorities could also have an adverse impact on the Company's business, reputation, financial condition and results of operations. Although the Company has adopted policies to mitigate such risks, such measures may not be effective in ensuring that the Company, its employees or third - party agents will comply with such laws.

Reliance on local advisors and consultants in foreign jurisdictions

The Company holds mining and exploration properties in Brazil. The legal and regulatory requirements in Brazil with respect to conducting mineral exploration and mining activities, banking systems and controls, as well as local business culture and practices, are different from those in Canada and the United States. The officers and directors of the Company must rely, to a great extent, on the Company's local legal counsel and local consultants retained by the Company in order to keep abreast of material legal, regulatory and governmental developments as they pertain to and affect the Company's business operations, and to assist the Company with its

governmental relations. The Company must rely, to some extent, on those members of management and the Board who have previous experience working and conducting business in these countries in order to enhance its understanding of and appreciation for the local business culture and practices. The Company also relies on the advice of local experts and professionals in connection with current and new regulations that develop in respect of banking, financing, labour, litigation and tax matters in these countries. Any developments or changes in such legal, regulatory or governmental requirements or in local business practices are beyond the control of the Company. The impact of any such changes may adversely affect the business of the Company.

Pandemic and infectious disease

An outbreak of infectious disease, pandemic or a similar public health threat, such as the COVID-19 outbreak and the response thereto, could adversely impact the Company, both operationally and financially. Supply chain disruptions could result in a reduction or interruption of the Company's operations, including mine shutdowns or suspensions. The inability to transport and/or refine and process the Company's products could have a materially adverse effect on the Company's future cash flows, earnings, results of operations and financial condition.

Climate volatility and climate change

Climate risks are typically seen in the form of extreme weather and weather-related events, such as tropical storms, wildfires, droughts, and flooding, which may affect the Company from time to time, particularly during the rainy season in Brazil's state of Minas Gerais between November and April every year.

Recent increased attention regarding the risks of climate change may result in an increase in the stigmatization of the Company's industry (mineral resource development and mineral extraction and processing). This may result in reduced interest or investment participation by capital market participants and the Company, thereby making it more difficult for the Company to raise funding on terms that are acceptable to the Company. In addition, increased concerns about climate change and any negative sentiments about the Company's industry and sector may adversely affect the timing or ability to receive or maintain any required environmental permits. To address these risks, the Company considers the importance of environmental, social and governance (ESG) issues and outcomes in terms of the Company's business plans and activities, and their impacts on the Company's stakeholders. Although ESG considerations are embedded in the Company's current and future operational plans, the Company has not set a long-term emission reduction goal, and the Company does not have a formal decarbonization strategy.

Mining and insurance risks

Jaguar maintains insurance to cover some of the risks and hazards inherent to the underground mining business. The insurance is maintained in amounts that are believed to be reasonable depending on the circumstances surrounding the identified risk. No assurance can be given that such insurance will continue to be available, or that it will be available at economically feasible premiums, or that Jaguar will obtain or maintain such insurance. Jaguar's property, liability and other insurance may not provide sufficient coverage for losses related to these or other risks or hazards. In addition, Jaguar does not have coverage for certain environmental losses and other risks, as such coverage cannot be purchased at a commercially reasonable cost. The lack or insufficiency of insurance coverage could adversely affect Jaguar's cash flow and overall profitability.

Geotechnical challenges could impact profitability

Jaguar and the mining industry are facing continued geotechnical challenges associated with the aging of certain mines and the need to mine deeper pits and more complex deposits. This leads to more complex underground operations and increased exposure to geotechnical instability. As Jaguar's operations mature, the underground operations at certain sites are getting deeper. Seismic events can be a risk affecting the stability of underground infrastructure. No assurance can be given that unanticipated adverse geotechnical conditions, such as underground cave-ins and other ground-related instability, will not occur in the future or that such events will be detected in advance. Geotechnical instabilities can be difficult to predict and are often affected by risks beyond Jaguar's control, such as higher than average rainfall and seismicity.

The failure of tailings dam and storage facilities, and other impoundments at Jaguar's mine sites, could cause severe and potentially

catastrophic damage to property, the environment, persons, and Jaguar's reputation. The Company regularly reviews and inspects all Jaguar-owned or controlled tailings storage facilities for compliance with applicable legal requirements and global best practices; however, there can be no assurance that these events will not occur in the future. Tailings storage-facility failures can result in limited access to mine sites, suspension of operations, production delays, government investigations, increased costs, as well as injuries and deaths in the most extreme cases. All of these could adversely impact Jaguar's results of operations and financial position.

Ontario Securities Commission ("OSC") statement of allegations involving a board member

On November 9, 2022, the Ontario Securities Commission ("OSC") issued a Statement of Allegations involving William Jeffrey Kennedy, along with other capital market participants, regarding a capital markets transaction that occurred in March 2017, approximately 2.5 years prior to Mr. Kennedy joining Jaguar's board of directors in September 2019. The full text of the allegations and other documents related to the proceeding can be found on the website of the Capital Markets Tribunal at: <https://www.capitalmarketstribunal.ca/en/proceedings/cormark-securities-inc-re>. Although none of the OSC's allegations involves any business or capital markets activities of Jaguar and although Jaguar is not a respondent and Jaguar does not expect to be participating in the proceeding, there is a risk that the allegations and/or the outcome of the proceeding could result in some reputational harm to Mr. Kennedy and, perhaps indirectly, bad optics for Jaguar. In the Statement of Allegations, the OSC has requested that the Capital Markets Tribunal order, among other sanctions, that Mr. Kennedy resign any position he may hold as an officer or director of an issuer and that Mr. Kennedy be prohibited from becoming or acting as a director or officer of an issuer for a period to be specified by the Capital Markets Tribunal. Accordingly, there is a risk that Mr. Kennedy may be required to resign from his position as a chair and director of Jaguar at the conclusion of the proceedings. Jaguar will be paying close attention to the proceedings. Mr. Kennedy and the other respondents are defending the proceedings and the allegations have not been proven.

Supply chain risk

In May 2023, An Act to enact the Fighting Against Forced Labour and Child Labour in Supply Chains Act and to amend the Customs Tariff was passed and came into force on January 1, 2024. Pursuant to the new legislation, any company that is subject to the reporting requirements, including the Company, is required to conduct certain due diligence on its supply chains and to file an annual report accordingly. While the Company is currently unaware of any forced or child labour in any of its supply chains, the increased scrutiny on the supply chains of Canadian companies could uncover the risk or existence of forced or child labour in a supply chain to which the Company has a connection, which could negatively impact the reputation of the Company.

DIVIDENDS

During the pandemic years of 2020 through 2022, when gold prices and currency fluctuations underpinned strong cash flows for Jaguar, a total of \$29.6 million in cash dividends were paid (\$6.8 million during the year ended December 31, 2022, \$13.9 million during the year ended December 31, 2021, and \$8.9 million during the year ended December 31, 2020), returning capital to shareholders. On November 9, 2022, Jaguar announced that the Board of Directors and management of the Company had decided to suspend its regular quarterly dividend in order to prioritize the maximization of cashflow to invest in growth capital. This enabled the Company to develop the twin access drives at Turmalina that reached the Faina deposit at the end of 2023. Any future payment of dividends will be dependent upon the financial requirements of Jaguar to fund future projects, the financial condition of Jaguar and other factors that the Board, in its discretion, may consider appropriate under the circumstances. The declaration, timing, amount and payment of any future dividends remain at the discretion of the Board of Directors.

DESCRIPTION OF CAPITAL STRUCTURE

Jaguar is authorized to issue an unlimited number of common shares, of which there were 79,066,665 issued and outstanding as of December 31, 2023. Holders of Jaguar's common shares are entitled to receive notice of any meetings of shareholders, to attend and to cast one vote per common share at all such meetings. Holders of Jaguar's common shares do not have cumulative voting rights with respect to the election of directors, and holders of a majority of Jaguar's common shares entitled to vote in any election of directors may therefore elect all directors standing for election. Holders of Jaguar's common shares are entitled to receive, on a pro-rata basis, such dividends, if any, as and when declared by the Board of Directors at its discretion from funds legally available therefor and upon the liquidation, dissolution or winding up of Jaguar are entitled to receive on a pro-rata basis the net assets of Jaguar after payment of debts and other liabilities, in each case subject to the rights, privileges, restrictions and conditions attaching to any other series or

class of shares ranking senior in priority to or on a pro-rata basis with the holders of common shares with respect to dividends or liquidation. Jaguar's common shares do not carry any pre-emptive, subscription, redemption, or conversion rights, nor do they contain any sinking or purchase-fund provisions.

MARKET FOR SECURITIES

Jaguar's common shares were listed on the TSX-V until the common shares were listed on the TSX commencing August 3, 2016, under the symbol "JAG". For more information, refer to Jaguar's press release dated July 29, 2016.

The following table sets forth information relating to the trading of Jaguar's common shares on the TSX for the periods indicated. The trading prices and volume data were obtained from infoventuretsx.com.

Table 14: Traded Shares

Month	High (\$)	Low (\$)	Volume
January 2023	3.31	2.78	1,158,272
February 2023	2.93	2.56	591,498
March 2023	2.87	2.38	1,026,207
April 2023	2.85	2.38	701,962
May 2023	2.75	2.11	858,940
June 2023	2.4	2	755,414
July 2023	2.33	1.52	1,735,346
August 2023	1.8	1.47	748,853
September 2023	1.53	1.12	590,868
October 2023	1.52	1.22	682,214
November 2023	2.08	1.17	1,048,908
December 2023	2.26	1.71	705,358

Source: TSX InfoSuite™

PRIOR SALES

During the financial year ended December 31, 2023, the Company issued securities as follows:

Table 15: Securities Issued in 2023

Date of issuance	Type of Security	Number of Securities issues	Issuance / Price per Security (in \$)
February 21, 2023	Common Shares ⁽¹⁾	140,000	\$2.72
March 3, 2023	Common Shares ⁽²⁾	33,332	\$2.60
April 4, 2023	Common Shares ⁽²⁾	46,664	\$2.65
April 4, 2023	Common Shares ⁽²⁾	4,374	\$2.65
September 13, 2023	Common Shares ⁽³⁾	6,331,713	\$1.87

(1) Common Shares issued in connection with the exercise of DSUs.

(2) Common Shares issued in connection with the exercise of Stock Options.

(3) Common shares issued on the acquisition of IAMGOLD Prospecção Mineral Ltda.

DIRECTORS AND EXECUTIVE OFFICERS

Directors and Executive Officers

The table below outlines the Board members and key senior officers of Jaguar as at March 25, 2024. The present term of each director will expire at the next annual meeting of shareholders or upon such director's successor being elected or appointed.

Table 16: Directors and Executive Officers

Name Province / State of Residence	Position Date of Appointment	Principal Occupation (past five years)	Number of Common Shares Beneficially Owned	Percentage of Common Shares Beneficially Owned	Number of Deferred Share Units
Ben Guenther Nevada, United States	Director 07-Nov-2017	Manager at Platoro Mine Consulting LLC. Various Executive Positions at AngloGold Ashanti (1995-2017)	250,864	0.32%	94,423
John Ellis Arizona, United States	Director 24-Jun-2016	Director for Baru Gold Corp. Director for International Tower Mines and for Sunshines Silver Mines Corporation	175,497	0.22%	35,068
Luis Ricardo Miraglia Minas Gerais, Brazil	Director 27-Sep-2012	Senior Partner of Azeveto Sette Advogados, a Brazilian law firm, since 2004	63,967	0.08%	199,174
Shastri Ramnath Ontario, Canada	Director 11-Jun-2020	President and CEO of Exiro Minerals Corp. Chair of Orix Geoscience Corp Director 1911 Gold Corporation (TSX:V)	4,150	0.01%	91,817
Mary-Lynn Oke Ontario, Canada	Director 31-Aug-2021	Director Signal Gold Inc. Chief Financial Officer Optiva Inc.	5,500	0.01%	78,313
Thomas Weng New Jersey, United States	Director 01-Apr-2016	Co-founder of Alta Capital Partners. Lead Independent Director for Hycroft Mining Holding Corporation Lead Independent Director at International Tower Hill Mines	29,709	0.04%	178,350
William J. Kennedy Ontario, Canada	Director 06-Sep-2019	Managing Director Equity Capital Markets and Operations at Cormark Securities Inc.	60,000	0.08%	97,347
Vernon Baker Minas Gerais, Brazil	Officer 06-Aug-2019	Chief Executive Officer and Director, Jaguar Mining Inc. General Manager at Goldcorp's Cerro Negro Mine	99,346	0.13%	50,629
Alfred Colas Ontario, Canada	Officer 17-Sep-2023	Chief Financial Officer, Jaguar Mining Inc. Chief Financial Officer, GreenFirst Forest Products Chief Financial Officer, Excellon Resources Inc.	-	0.00%	-

As at March 25, 2024, the directors and executive officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control over, a total of 689,033 common shares, representing 0.9% of the issued and outstanding common shares of the Company, as well as a total of 825,121 deferred share units.

As of the date of this AIF, the board committees and members are as follows:

Audit and Risk Committee:

- Mary-Lynn Oke (Chair)
- Ben Guenther
- Thomas Weng

Corporate Governance & Compensation Committee:

- Thomas Weng (Chair)
- John Ellis
- Shastri Ramnath

Finance & Corporate Development Committee

- Luis Miraglia (Chair)
- Jeff Kennedy
- Thomas Weng
- Mary-Lynn Oke

Safety, Environmental, Technical & Reserves Committee

- Ben Guenther (Chair)
- John Ellis
- Shastri Ramnath
- Luis Miraglia

For information on Jaguar's Audit and Risk Committee, see the section below entitled "*Audit and Risk Committee and Audit Fees*".

Board and Management Experience

The knowledge and prior work experience of Jaguar's directors ensure that the Board is well-positioned to exercise its responsibilities while being knowledgeable of, and taking into account, the cultural and business practices of Brazil. Specifically:

- (a) The Chairman of the Board, Jeff Kennedy, previously served as the Managing Director Equity Capital Markets and Operations at Cormark Securities Inc., a leading independent investment dealer focused on providing comprehensive investment banking and research coverage of Canadian listed issuers, including those with operations in emerging market jurisdictions.
- (b) Thomas Weng was previously a Managing Director at Deutsche Bank and Head of Equity Capital Markets for Metals and Mining throughout the Americas and Latin America, across all industry segments.
- (c) Luis Miraglia is a native of Minas Gerais, Brazil and is a Senior Partner at Azevedo Sette Advogados, a well-established law firm located in Brazil. Mr. Miraglia is a member of the Corporate Law Committee of the Brazilian Bar Association, Chapter of Minas Gerais, and has advised numerous boards of privately and publicly held companies, both in Brazil and abroad, in connection with Brazilian law. Mr. Miraglia is fluent in both Portuguese and English.
- (d) Benjamin Guenther is a Mining Engineer with a wide range of management, executive, board, and consulting experience and over 40 years in the global mining industry. From October 1995 to June 2016, Mr. Guenther served as an executive officer of AngloGold Ashanti, which has material operations in Brazil.
- (e) John Ellis is a Professional Engineer with over 50 years of experience in the mining industry. He has previously served as a director and Chief Executive Officer of certain public mining companies, including those with operations in Brazil.

- (f) Shastri Ramnath is a professional geoscientist and entrepreneur with over 20 years of global experience and has worked in various technical and leadership roles. Until 2023, she served as a director of Meteoric Resources NL (ASX: MEI), which has mining operations in Brazil. Ms. Ramnath currently serves on the board of 1911 Gold Corporation.
- (g) Mary-Lynn Oke brings over 25 years of business experience built through a career that has included tax, finance, corporate, and senior leadership roles. She currently serves as Chief Financial Officer of Optiva Inc. Ms. Oke was previously with Hudbay Minerals Inc. where she was the Vice President, Finance and the Chief Financial Officer of the Manitoba Business Unit. Ms. Oke brings deep experience in financial reporting, business acquisitions and divestitures, tax, treasury, capital structuring, supply chain management, and organizational redesign.

Moreover:

- (a) The Company's Chief Executive Officer and Director, Vernon Baker, is a resident of Brazil and has over 35 years of mining industry experience, with extensive management and operations expertise at globally focused mid-tier and senior mining companies.
- (b) Alfred Colas joined Jaguar in September 2023 Chief Financial Officer and he has over 30 years of experience including over 20 years in the mining industry including extensive travels to Peru, Tanzania and an expatriate assignment in Argentina. Mr. Colas has been a CFO of mainly listed companies (TSX, NYSE) since 2013 and he travels to Brazil to meet with local management and visit the Company's material projects at a minimum six times per year. Mr. Colas is a native English and Spanish speaker and is fluent in Portuguese.
- (c) The Company's VP Exploration & Mine Geology, Jonathan Victor Hill, has over 35 years' experience of global exploration, mining operational and project development experience, including Africa, Australia and the Americas. Mr. Hill spent most of his formative years as a geologist with AngloGold Ashanti, which has mining operations in Brazil. He is also a non-executive director and Chairman of Royal Road Minerals Limited (TSX-V: RYR), and is a non-executive director of Lode Gold (CVE:LOD), Avanti Gold Corp (CCNSX: AGC), and Lavras Gold (CVE: LGC). He also provides exploration advisory services to international companies through Exploration Outcomes Ltda., which Mr. Hill founded in 2017.
- (d) Eric Duarte is the VP of Operations at Jaguar. He has considerable experience implementing and managing capital projects and underground and open-pit operations. Mr. Duarte is a geologist with over 20 years of experience working in gold, copper, zinc, lead and iron multinational mining companies. His international experience in the industry covers Brazil, South Africa, Australia, Chile, United States and Tanzania. Mr. Duarte is fluent in Portuguese, English and Spanish.
- (e) Marina Freitas is Jaguar's VP Projects, Engineering and Finance and has been at Jaguar for more than twelve years. Ms. Freitas is a citizen and resident of Brazil and is fluent in Portuguese and English.

In addition to the foregoing:

- (a) The Company has engaged English-speaking legal counsel at Azevedo Sette Advogados and Corrêa Ferreira Advogados as its legal counsel in Brazil. At any time, individuals are able to reach out to such legal counsel for advice and clarification.
- (b) The Company works with local professionals who have expertise in conducting business in Brazil, as well as industry experts with specialized knowledge to assist with complex matters arising in Brazil. The quality of their advice is assessed and reviewed by management and the Board on an ongoing basis.
- (c) The Company strongly encourages the sharing of knowledge and Brazilian business experience amongst the Company's directors and officers, and there is active communication among and between directors and officers, including regular updates on current events and business in Brazil.

All meetings of the Board and its committees, including the Audit and Risk Committee, are conducted in English. In addition, all material documents relating to the Company and MSOL that are provided to the Board are either prepared in English or are translated into English, if applicable. All external financial and corporate compliance reporting with respect to Jaguar and MSOL is completed in English.

Corporate Cease Trade Orders or Bankruptcies

No director or executive officer of Jaguar, or shareholder holding a sufficient number of securities of Jaguar to affect materially the control of Jaguar, is, as at the date of this AIF, or has been within ten (10) years before the date of this AIF, a director or executive officer of any company that, while that person was acting in that capacity:

- i. Was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than thirty (30) consecutive days except as set forth in the second and third to last paragraphs of this section.
- ii. Was subject to an event that resulted, after the director or executive officer ceased to be a director or executive officer, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than thirty (30) consecutive days; or
- iii. Within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Further, no director, executive officer, promoter or other member of management of Jaguar has within the ten years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the Nominee.

Audit and Risk Committee and Audit Fees

Audit and Risk Committee Charter

The Audit and Risk Committee Charter is attached as Appendix 5 to this AIF.

Composition of the Audit and Risk Committee

As at the date of this AIF, the members of the Audit and Risk Committee are Ms. Oke (chair) and Messrs. Guenther and Weng. All three members are independent and financially literate within the meaning of National Instrument 52-110 *Audit Committees* (“NI 52-110”). The relevant education and experience of each Audit and Risk Committee member are as follows:

Mary-Lynn Oke has over 25 years of business experience built through a career that has included tax, finance, corporate, and senior leadership roles. Ms. Oke is Chief Financial Officer of Optiva Inc. previously she was with Hudbay Minerals Inc. where she was the Vice President, Finance and the Chief Financial Officer of the Manitoba Business Unit. Ms. Oke brings deep experience in financial reporting, business acquisitions and divestitures, tax, treasury, capital structuring, supply chain management, and organizational redesign. Ms. Oke holds an Honours Bachelor of Arts in Business Administration from the Richard Ivey School of Business and is a Chartered Professional Accountant.

Ben Guenther is a mining engineer with a wide range of management, executive, board, and consulting experience and over 40 years in the mining industry. Mr. Guenther held Senior Management Positions with AngloGold Ashanti in his past career, including a long association with mining in Brazil. Mr. Guenther graduated from the Colorado School of Mines.

Thomas Weng has more than 25 years of experience in the financial services sector with a focus on mining, metals, industrials, and consumer products. Mr. Weng is a Cofounding Partner with Alta Capital Partners, a financial advisory provider. Previously, Mr. Weng was Managing Director at Deutsche Bank and Head of Equity Capital Markets for Metals and Mining throughout the Americas and Latin America, across all industry segments. Prior to 2007, Mr. Weng held various senior positions at Pacific Partners, an alternative investment firm, and Morgan Stanley and Bear Stearns. Mr. Weng graduated from Boston University with a Bachelor of Arts in Economics.

The Audit and Risk Committee, which satisfies the composition requirements for audit committees set out in subsection 3.1(1) of NI 52-110, is actively engaged in the oversight of the management of the Issuer and its wholly-owned direct subsidiary, MSOL, which is incorporated under the laws of the Federal Republic of Brazil.

All of the internal financial reports prepared by the Company's foreign entities are in English and each member of the Audit and Risk Committee is able to read and understand the breadth and complexity of these financial statements.

Audit Fees

During the fiscal years ended December 31, 2023, and 2022, KPMG LLP, Chartered Professional Accountants ("KPMG"), charged Jaguar a total of C\$ 781,247 and C\$461,000, respectively, for audit services.

Audit-Related Fees

During the fiscal years ended December 31, 2023, and 2022, KPMG charged C\$nil and C\$nil respectively for assurance and related services that are reasonably related to the performance of audit-related services but are not reported above in "Audit Fees".

Tax Fees

During the fiscal years ended December 31, 2023, and 2022, KPMG billed C\$ nil and C\$ nil, respectively, for tax compliance, tax advice and tax planning services.

All Other Fees

In each of the fiscal years ended December 31, 2023 and 2022, KPMG billed C\$nil and C\$nil, respectively, for services other than those reported under "Audit Fees," "Audit-Related Fees," and "Tax Fees."

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the knowledge of the management of Jaguar, none of the directors, executive officers or principal shareholders of Jaguar and no associate or affiliate of the foregoing persons has or has had any material interest, direct or indirect, in any transaction within the past three years or in any proposed transaction that has materially affected or will materially affect Jaguar or any of its subsidiaries, except for:

The Company incurred legal fees from Azevedo Sette Advogados ("ASA"), a law firm where Luis Miraglia, a director of Jaguar is a partner. Fees paid to ASA are recorded at the exchange amount, representing the amount agreed to by the parties and included in general and administrative expenses in the consolidated statements of operations and comprehensive income. Legal fees paid to ASA were \$57,000 for the year ended December 31, 2023 (\$18,000 for the year ended December 31, 2022).

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

There are no pending or to Jaguar's knowledge, contemplated, legal proceedings (that individually amount to more than 10 percent of the Company's current assets) that the Company is or was a party to, or that any of its property is or was the subject of, during the financial year ended December 31, 2023.

There have been no penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority, nor any other penalties or sanctions imposed by a court or regulatory body against the Company during the financial year ended December 31, 2023. The Company has not entered into any settlement agreement before a court relating to securities legislation or with a securities regulatory authority during the year ended December 31, 2023.

INTERESTS OF EXPERTS

External Auditors

KPMG LLP, Chartered Professional Accountants are Jaguar's auditors and have advised the Company that they are independent of the Company within the meaning of the relevant rules and related interpretations prescribed by the professional bodies in Canada and any applicable legislation or regulations.

Qualified Persons

Turmalina – The updated Mineral Reserves and Mineral Resources (Non-Material) disclosed in this AIF were reviewed and approved (i) in respect of the estimated in-situ Mineral Reserves by Jeff Sepp, P.Eng., and (ii) in respect of the estimated Mineral Resources by Pierre Landry, P. Geo, and Reno Pressacco, P. Geo, of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7. SLR is an independent mining consultancy and Mr. Sepp, Mr. Landry, Ms. El-Rassi, Mr. Lopes and Mr. Pressacco are each Qualified Persons within the definition of NI 43-101.

Caeté - The updated Mineral Reserves and Mineral Resources (Non-Material) disclosed in this AIF were reviewed and approved (i) in respect of the estimated in-situ Mineral Reserves by Jeff Sepp, P.Eng., and (ii) in respect of the estimated Mineral Resources by Pierre Landry and Reno Pressacco, P. Geo, of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7 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.

Paciência - The updated Mineral Resources disclosed in this AIF were reviewed and approved (i) in respect of the estimated Mineral Resources by Reno Pressacco, P. Geo, of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7. SLR is an independent mining consultancy and Mr. Pressacco is a Qualified Person within the definition of NI 43-101.

Jeff Sepp, P. Eng, Pierre Landy, P. Geo and Reno Pressacco, P. Geo, from SLR Consulting, each of whom is an independent "qualified person" as that term is defined in NI 43-101 have verified the data.

Jeff Sepp, P. Eng, Pierre Landy, P. Geo, and Reno Pressacco do not own, directly or indirectly, any securities of Jaguar or have any direct or indirect interest in any property of Jaguar or of any associate or affiliate of Jaguar.

TRANSFER AGENT AND REGISTRAR

TSX Trust Company, at its principal office in Toronto, Ontario, is the transfer agent and registrar for the common shares of Jaguar.

ADDITIONAL INFORMATION

Additional information relating to Jaguar may be found on SEDAR+ at www.sedarplus.ca.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of Jaguar's securities, and securities authorized for issuance under equity compensation plans, is contained in Jaguar's information circular for its most recent annual meeting of shareholders. Additional financial information is provided in Jaguar's audited consolidated financial statements and management's discussion and analysis for its financial year ended December 31, 2023.

APPENDICES

APPENDIX 1 – General Technical Information

The estimated Mineral Reserves and Mineral Resources for Jaguar's mines and mineral projects set forth in this AIF have been classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Council definition standards adopted by the CIM Council on May 10, 2014 (the “CIM Standards”). The following definitions are reproduced from the CIM Standards:

The term “*Mineral Resource*” means a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

The term “*Inferred Mineral Resource*” is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The term “*Indicated Mineral Resources*” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from the adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource (as defined below) and may only be converted to a Probable Mineral Reserve (as defined below).

The term “*Measured Mineral Resource*” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from the detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve (as defined below) or to a Probable Mineral Reserve.

The term “*Mineral Reserve*” means the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

The term “*Probable Mineral Reserve*” means the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

The term “*Proven Mineral Reserve*” means the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Mining Concessions and Environmental Licences

All of Jaguar's mineral rights and mining concessions in connection with its operations in the state of Minas Gerais are in good standing. Through its wholly owned subsidiaries, Jaguar has all the necessary environmental licences that are material to the operation of its mines and processing plants in Minas Gerais.

Material Mineral Properties

Turmalina, Caeté and Paciência are material properties of Jaguar.

APPENDIX 2 – Turmalina Mining Complex Background

Mineral Reserve and Mineral Resource figures (as at December 31st 2023) were 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. of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7. SLR is an independent mining consultancy and Mr. Sepp, Mr. Landry are each Qualified Persons within the definition of NI 43-101.

Property Description and Location

The Turmalina Mining Complex is located in the Conceição do Pará municipality in the state of Minas Gerais, approximately 130 km northwest of Belo Horizonte and 6 km south of Pitangui, the nearest important town.

The property currently comprises five contiguous mining permits and eleven additional exploration authorizations/concessions granted by the Agência Nacional de Mineração (ANM/DNPM) that, altogether, cover an area of 14,128 ha. The mine is centred at approximately 19°44'36" south latitude and 44°52'36" west longitude.

The Turmalina Mining Complex consists of an underground mine and a CIL processing plant (the "Turmalina Plant"). The Turmalina Plant was commissioned in November 2006, and commercial production was declared in August 2007. The Turmalina process facility has a 3,000 tpd grinding capacity with three grinding mills. The advancement of the Faina Project is an opportunity to utilize the unused capacity of the plant with initiating in 2024 and beyond.

Jaguar has 100% ownership subject to a 5% net revenue interest up to \$10 million and 3% thereafter, to an unrelated third party. In addition, there is a 0.5% net revenue interest payable to the surface landowner.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Turmalina Mining Complex is accessed from Belo Horizonte by 120 km of paved highways (BR-262 and MG-423). The Turmalina deposits are 6 km south of Pitangui and less than 1 km from highway MG-423.

Belo Horizonte is the commercial centre for Brazil's mining industries and has an excellent infrastructure to support world-class mining operations. This mining region has historically produced significant quantities of gold and iron from open pit and large-scale underground mining operations operated by AngloGold, Vale, CSN, and Eldorado. The city is a well-developed urban metropolis of almost four million residents and has substantial infrastructure, including two airports, an extensive network of paved highways, a fully developed and reliable power grid and ready access to processed and potable water.

Pitangui is a town of approximately 28,000 people. The local economy is based on agriculture, cattle breeding and a small pig iron plant. Manpower, energy and water are readily available.

The Turmalina mining complex lies approximately 700 m above sea level ("MASL"). The Pitangui area terrain is rugged in places, with numerous rolling hills incised by deep gullies along drainage channels. Farming and ranching activities are carried out in approximately 50% of the region.

The area experiences six months of warm, dry weather (April to November), with the mean temperature slightly above 20° C, followed by six months of tropical rainfall. Annual precipitation ranges from 1,300 to 2,500 mm and is most intense in December and January. The climate is suitable for year-round operations.

Belo Horizonte is one of the world's mining capitals with a regional population in the range of six million people. Automobile manufacturing and mining services dominate the economy. Mining activities in Belo Horizonte and the surrounding area have been carried out in a relatively consistent manner for over 300 years. The Turmalina Mine site is within commuting distance of Belo Horizonte.

The Turmalina Mining Complex includes an underground mine, a processing plant and a tailings disposal area. Electrical power is obtained from the national grid.

All ancillary buildings are located near the mine entrance: gate house including a reception area and waiting room, administration building, maintenance shops, cafeteria, warehouse, change room, first aid and compressor room. The explosives warehouse is located 1.2 km away from the mine area, in compliance with the regulations set forth by the Brazilian Army.

Other ancillary buildings are located near the processing plant and include an office building, a laboratory, warehousing and a small maintenance shop.

There is currently no infrastructure related to the Faina and Pontal historic open pit operations.

Geological Setting

The Turmalina deposits are located in the northwestern part of the Iron Quadrangle, which has been the largest and most important mineral province in Brazil for centuries until the early 1980s, when the Carajás mineral province, in the state of Pará, attained equal status. Many commodities are mined in the Iron Quadrangle, the most important being gold, iron, manganese, bauxite, imperial topaz, and limestone. The Iron Quadrangle was the principal region for the Brazilian hard rock gold mining until 1983 and accounted for about 40% of Brazil's total gold production. Gold was produced from numerous deposits, primarily in the northern and southeastern parts of the Iron Quadrangle, most hosted by Archean banded iron formations (BIF) contained within greenstone belt supracrustal sequences (the Rio das Velhas Supergroup).

The Pitangui area, where the Turmalina deposit is located, is underlain by rocks of Archean and Proterozoic age. Archean units include a granitic basement, which is overlain by the Pitangui Group, a metamorphosed sequence of ultramafic to intermediate volcanic flows and pyroclastics and associated sediments. The Turmalina deposit is mainly hosted by chlorite-amphibole schists and silicified biotite schists packages within the Pitangui Group. A sequence of sheared, banded, sulphidized Algoma-type iron formations and cherts lies within the stratigraphic sequence. The stratigraphy locally strikes towards the Northwest-Southeast direction.

Proterozoic units include the Minas Supergroup and the Bambui Group. The former includes basal quartzites and conglomerates, as well as phyllites. Some phyllites, stratigraphically higher in the sequence, are hematitic in nature. The Bambui Group is essentially composed of calcareous sediments and slates.

The local geology in the Pitangui-Turmalina region and adjacent exploration areas was defined by geologists from Unigeo Geologia e Mineração, a former subsidiary of Mineração Morro Velho and AngloGold Ashanti, during the initial exploration field work phases (1980's). At that time, the mapped lithologies and stratigraphy were defined and classified as a greenstone belt sequence, within a possible northwestern extension of the Archean portions of the Iron Quadrangle terrain.

The geology of the Pitangui Greenstone Belt is divided into the lower, middle, and upper units. The lower and middle units can be broadly correlated with the Nova Lima Group.

The lower unit comprises ultramafic and mafic volcanic rocks that are intercalated with Algoma-type banded iron formation, clastic metasediments, and chemical metasedimentary rocks. Schists of chlorite, talc, sericite, and biotite are common within this unit. Clastic and chemical metasedimentary rocks include pelites, sandstones, banded iron formations, and cherts. The stratigraphy of the lower unit can be divided into five main intervals:

1. Interval I comprises a succession of interbedded metasediments, banded iron formations, and contain minor metapelites.
2. Interval II represents an approximately 100 m thick package of interbedded turbiditic metasediments. The banded iron formation layers of this interval are collectively referred to as the Pimentão BIF.
3. Interval III consists of ultramafic metavolcanic and carbon-rich metapelitic rocks containing thin metachert lenses.
4. Interval IV comprises metasedimentary rocks containing lenses of carbon-rich metapelite at the base. This interval is overlain by a two metre to 30 m thick layer of laterally extensive banded iron formation termed the Biquinho BIF.
5. Interval V is composed of a roughly five metre thick mafic metavolcanic unit interstratified with a three metre to five meter unit of thinly layered banded iron formations termed the Tomate zone. This interval contains thick packages of metasediments interbedded with mafic metavolcanic rocks.”

Mineralization

The mineralization at the Turmalina deposit consists of a number of stratabound, tabular bodies that are spatially related to either a BIF/iron formation package or to a package of slightly silicified quartz-muscovite-biotite schists. These bodies are grouped together, according to the host stratigraphy, to the spatial configuration and to the gold content, into Orebodies “A”, “B”, and “C”. Gold mineralization can occur within the BIF package but can equally occur in the other host lithologies.

The down-plunge continuity of mineralization within the Orebodies follows the intersection between bedding planes/S₀ and the main penetrative tectonic cleavage/S_n, and the attitude of this intersection lineation has been identified and statistically measured underground.

The main past production of the mine has been from Orebody A, which is mostly comprised of slightly silicified and “veined” quartz-muscovite-biotite schist host rocks (swarms of small, prevalent, quartz veinlets that are centimetres in width). The economic mineralization in this zone has been outlined along a strike length of approximately 350 m to 400 m (with an average thickness of 6 m) and to depths of approximately 1,150 m to 1,200 m below surface. The southeastern portion of Orebody A is composed of two parallel narrow veins. The northwestern portion of Orebody A is much the same as the southeastern, however, the two parallel zones nearly or completely merge and therefore the economic zone is much wider overall to the northwest direction (locally up to 10 m to 15 m in thickness).

Orebody B is located in the hanging wall of the Orebody A, and is geologically somewhat similar to Orebody A, both in terms of the type of the host package and of the visual style of the gold mineralization. The Orebody B corresponds to two or three lower grade, tabular-shaped lenses that are generally parallel to Orebody A. These lenses are located approximately 50 m to 75 m in the structural hanging wall and are accessed by a series of crosscuts that are driven from Orebody A in the upper levels of the mine. The mineralization in this zone has been outlined along a strike length of approximately 350 m to 400 m and to depths of 950 m to 1,000 m below surface.

Orebody C is a mineralized structure located to the southwest, in the structural footwall of Orebody A. At least three individual economic zones (orebodies “C SE”, “C Central”, and “C NW”) have been delineated in this zone along a strike length of a bit more than one kilometre, and to depths of 850 m to 900 m below the surface. The three individual stratabound economic orebodies are generally represented by 2 m to 10 m thick, pervasively altered/silicified/replaced lenses hosted by the unique Orebody C Iron Formation horizon. Its auriferous silicification is quite distinctive, being dark gray in colour and sulphide bearing (pyrite, pyrrhotite, and arsenopyrite constituting up to 5% to 12% in volume of the host rocks), and characteristically causes a marked obliteration of the original bedding lamination of the iron formations. The silicification zones are stratabound in relation to the host iron-formation layer. It is observed that the high-grade economic zones are generally confined to the silicification zones.

The quality of the average gold grades of the mineralized zones of orebodies C, A and B, is a direct function of the relative amount of arsenopyrite that is present in the total modal concentration of disseminated sulphides present in altered/silicified rock specimens.

Two recently discovered mineralized lenses are located between the Orebody A and the previously known lenses comprising Orebody

C. These new lenses were discovered as a result of recent exploration drilling that was carried out from the underground drill bays to define and evaluate the lower portions of the Orebody C SE mineralized lenses. As these are newly discovered mineralized lenses, their full limits and economic potential are not fully understood at the moment. The presence of potentially economic mineralization therefore is, very likely, not restricted to only the previously defined mineralized horizons and orezones. The possibility of additional mineralized zones being located elsewhere in the mine stratigraphy must be considered and evaluated as exploration targets.

The auriferous gold mineralization at the Faina deposit corresponds mainly to swarms of sulphide bearing quartz veinlets (individual veinlets with millimetric-to-centimetric widths) which are hosted by amphibolitic packages of the Mafic Volcanic Unit. The mineralized swarms of quartz veinlets appear to occur within conformable horizons to the mine stratigraphic package, in at least several distinct “stratigraphic layers” of the Mafic Volcanic Unit. Moreover, the mineralized quartz veinlets have locally been mesoscopically folded, in the same manner as the bedding/SO surfaces and the Sn cleavage planes locally were folded. The mineralized quartz veinlets and the pervasive silicification hosted by amphibolitic packages at Faina are accompanied by disseminated sulphides (pyrite, arsenopyrite, pyrrhotite, and berthierite (FeSb₂S₄)), however, these accessory mineral phases rarely exceed 5% of the mineralized/economic rock volume.

The past open pit operation indicated that the individual folded economic zones and lenses of the Faina deposit have dimensions of 20 m to 140 m along the SO//Sn strike, 1 m to 15 m in thickness, and very reliable continuities down-plunge, noting the maximum attitude of -50° towards an azimuth of 73° for the intersection lineations inside the Faina open pit.

The economic mineralization at the Faina deposit is continuous down-plunge from surface for at least 850 m in length, as verified by the results of the deepest available drill hole, FUH-220, that intercepted the economic mineralized zone between 550 m and 650 m below the surface presents examples of the distinct visual styles of/for the gold mineralization that can be recognized in a single diamond drill hole targeting the Faina mine package (e.g., hole FUH-168A). “HDM” has been, since 2020, the field lithologic name for the high-grade Faina mineralization/veining/alteration that is hosted by hydrothermally altered intervals. At the same time, “AXS” has been the field name for a weaker, non-economic manifestation of the Faina mineralization/alteration environment overprinting the amphibolites and amphibole schists of the Mafic Volcanic Unit.

Gold mineralization at the São Sebastião deposit is contained within deposits hosted in three main strata-confined sulfidations zones within several stacked banded iron formation layers in the lower unit of the Pitangui greenstone belt. The mineralized zones are locally named Tomate, Biquinho, and Pimentão from top to bottom. The main mineralized zone is Biquinho. One of the smaller zoned, Pimentão, is located within a thrust-fold with the fold axis gently plunging to the north and gold mineralization concentrated in one of its limbs.

The main mineralized zones in the São Sebastião gold deposit are hosted in the two most continuous banded iron formation packages (Biquinho and Pimentão) of the lower unit, corresponding to intervals II and IV as shown in Figure 7-25. The sulphide mineralization in these zones most commonly occurs as disseminations replacing magnetite, however occasional massive sulphide mineralization in quartz-carbonate veins and breccias can occur. Pyrrhotite is the dominant sulphide, followed by arsenopyrite, pyrite, and chalcopyrite, which appear in smaller concentrations.

History

Gold was first discovered in the area in the 17th century, and through the following two centuries, intermittent small-scale production took place from alluvial terraces and outcropping quartz veins. Gold production exploited alluvium or weathered material, including saprolite and saprolite-hosted quartz veins. Records from this historical period are few and incomplete.

AngloGold Ashanti controlled the mineral rights from 1978 to 2004 through a number of Brazilian subsidiaries. AngloGold explored the project area extensively between 1979 and 1988 using geochemistry, ground geophysics, and trenching, which led to the discovery of the Turmalina, Satinoco (now referred as Orebodies C), Faina, Pontal and other mineralized zones. Exploration work at these mineralized bodies initially included only 22 diamond drill holes totalling 5,439 m drilled from the surface to test the downward extensions.

In 1992 and 1993, AngloGold Ashanti mined 373 kt of oxide ore from open pits at the Turmalina, Satinoco (Orebodies C), Pontal, and Faina zones. It recovered 35.5 koz of gold using heap leach technology. Subsequently, AngloGold Ashanti drove a ramp beneath the

Turmalina pit and carried out drifting on two levels in the mineralized zone at approximately 50 m and 75 m below the pit floor to explore the downward extension of the sulphide mineralized body.

Jaguar acquired the AngloGold Ashanti Turmalina properties in 2004 and continued operation of the Turmalina underground mine. The mine is accessed from a 5 m x 5 m primary decline located in the footwall of the main deposit.

An important additional exploration program was carried out at the Satinoco Trend (Orebody C), targeted by Jaguar from March 2006 to April 2008, in order to collect sufficient information to prepare an estimate of the Mineral Resources in accordance with the regulation NI 43-101. This Satinoco program included the opening of about 700 m of trenches and a complementary diamond drilling program. At the end of that exploration program, the Orebody C were added to the Turmalina underground operation inventory.

In 2018, Jaguar carried out an initial program of soil sampling, chip sampling, trenching, and geological mapping on the Zona Basal target, located approximately four kilometres to the west of the Orebody A and C of the Turmalina underground operation. A total of 14 trenches were initially excavated at the Zona Basal in 2019, totalling 1,434 m in length. Subsequent exploration developments for the Zona Basal between 2020 and 2022 are described in more detail in a specific section below.

In 2023, electrical properties (resistivity and chargeability) of 462 drill core samples from Faina were measured via Sample Core Induced Polarization (SCIP) GDD tester. The SCIP is a portable, battery-operated instrument for evaluating the resistive properties and IP response (apparent resistivity and time domain induced polarization) of the samples. With this type of survey, one can easily and cost-efficiently assemble the data required in order to design an appropriate and more elaborated geophysical survey, like an IP survey if appropriate. The SCIP also assists in a better definition of IP inversions. The chosen methodology applied in Faina consisted in selecting pairs of DDHs for each of the six cross-sections (100-150m spaced approx.) that traversed both the stratigraphy and the mineralization envelope of Faina. For each DDH, one SCIP sample was selected every 9 meters and/or at every lithological unit for all the geological contacts throughout the DDH. Each sample was submerged in natural Stillwater for 48h consistently and then the electrical properties readings were conducted onto, with a total of 3 readings per sample. The objective was to establish whether the resistivity and/or induced polarisation geophysical methods could be used at Faina to search for additional gold mineralization.

In the second semester of 2022, a new workflow based on machine learning and cloud computing was elaborated and implemented in order to identify geochemical anomalies and their anisotropies within Faina. This workflow is mainly based on both the Principal Component Analysis (PCA) of geochemistry variables (multi-elements assay data and their corresponding centered log ratio - CLR) and the DRIVER cloud-based machine learning software (recently acquired by Seequent). DRIVER provides good anisotropy analysis, which indicates plunge and/or strike trends for the variables based on assay data. The Faina database used consisted in approx. 9600 DDH samples with 49 elements assay results, generating oriented anisotropy tensors (represented in stereonet) and 3D models that indicate the anomalous concentration zones for each variable (multi-elements). The Au model generated by DRIVER fits very well, and therefore, was validated by the previous Jaguar Au mineralization model. It also highlighted the anomalous Sb concentration associated with higher Au grades at the hinge zone of the major NE plunging fold at Faina. This supports the hypothesis of later (possibly Paleoproterozoic) gold remobilization by low melting point chalcophile elements, such as Sb, increasing gold grade and its fineness.

In the second half of 2023, as the development of underground galleries and ore drives progresses from Turmalina mine towards Faina deposit, the detailed (1:500) geological mapping begun, as a product from the combined collaboration of the Mine Geology and the Exploration Geology Jaguar Mining teams. So far, three approximately parallel drives were developed (namely PNWRP2, PNWRP1, and FN435NW from SW to NE) in the so-called NW Project (PNW) or Faina Project. The PNW starts at circa 250m (horizontal distance) to the NW of the CNW orebody and is currently ~1100 metres long in strike and adds up to 3230m of interconnecting development so far. The whole area to be mapped is ~0.5 Km² in total, the gold mineralization is hosted in both chemical metasediments (banded iron formations and metacherts) in the footwall and in metabasalts in the hanging wall. The host rocks are folded (NE plunging) and faulted (E-W striking, semi-vertical), and there are two main foliation planes (S_n is NE dipping and S_{n+1} is steeply dipping to N or S). There is also an important metallogenic relationship between the NE plunging direction of the main fold in Faina, whose deformation event was responsible for the later gold remobilization by low melting point chalcophile elements, mainly Sb, increasing the gold grade and its fineness in this aforementioned hinge zone.

Pontal Target

The Pontal target collectively refers to the “Pontal North”, “Pontal” (historical Mineral Resource) and “Pontal South” targets located approximately 1 kilometre northwest of the Faina deposit and some 4 kilometres northwest of the Turmalina mine.

The “Pontal” deposit has a Measured and Indicated Mineral Resource of 29 koz of gold (266 kt @ 3.44 g/t Au) and an Inferred Mineral Resource of 24 koz of gold (159 kt @ 4.72 g/t Au).

In late 2021, 6 initial diamond drill holes (1,466 m) were drilled in the “gap” between Pontal and Faina. These diamond drill holes targeted southern extensions of the historically known Pontal deposit (above) and associated mineralized trend, which was highlighted as magnetically anomalous by the drone-based magnetic aerial survey completed for Jaguar (2020-2021) over selected portions of its Turmalina tenement portfolio.

Initial results from this 2021 drilling have been encouraging, with several drill holes intersecting wide zones of sulphide mineralization associated with a 30-metre-thick stratigraphic horizon over a currently defined strike length of 350 metres. The mineralized zone was first intercepted by hole PTL094, which reported an intersection of 28.8 m @ 2.67 g/t Au, including 21.95 m @ 3.29 g/t Au.

In 2022, Jaguar continued the exploration works in the recently discovered Pontal South, with an additional 8 diamond drill holes (1,980.90 m drilled in total). With this 2022 drilling campaign, 3D models (geology/stratigraphy and mineralization envelope), as well as the initially interpreted geological map, were updated. The 2022 Pontal South drilling campaign returned encouraging intercepts, such as 7.25 m @ 3.49 g/t Au for hole PTL098; 4 m @ 3.58 g/t Au for hole PTL099; 3.65 m @ 7.41 g/t Au for hole PTL102; and an impressive 10.05 m @ 4.69 g/t Au, including 5.15 m @ 7.98 g/t Au, for hole PTL105.

The combined 2021 and 2022 drilling campaigns at the Pontal South target have initially delineated inferred resources of 81 koz of gold (669 kt @ 3.76 g/t Au). The entire Pontal trend (Pontal South, Pontal, and Pontal North altogether) has a great exploration potential, as its footprint is 1,500 m in strike length and remains open at depth.

Zona Basal Target

The Zona Basal target area is located approximately 3.0-3.5 km west of the Turmalina mining and processing facilities. In late 2020 and early 2021, a total of 26 exploratory/reconnaissance diamond drill holes (3,830.8 m of drilling) were completed over this target. This drilling initially focused on a program of widely spaced drill holes following-up and targeting near surface oxide and potentially deeper, structurally controlled sulphide extensions to the greenstone bedrock gold intersections seen in surface trenching (both within the footprint and along the margins of an extensive 100 ppb Au soil anomaly). All exploratory diamond drill-core samples from the Zona Basal target were analyzed at the external ALS laboratory in Belo Horizonte (fire assay analytical method for gold - 50 g).

The Zona Basal hypogenic economic mineralization corresponds to fine-grained disseminations of sulphides (arsenopyrite + pyrite + pyrrhotite) hosted by favourably replaced volcano-chemical stratigraphic horizons. Gold particles occur both as inclusion in arsenopyrite crystals and in association with the matrix of silicate minerals from the arsenopyrite-rich samples examined. The Zona Basal “supergene” (or surficial) mineralization exhibits enriched gold grades with lesser silver grades and anomalous concentrations of other base metals. This mineralization occurs within the near surface oxide-saprolite zone of the weathering profile.

Results reported from the 2020-2021 diamond drilling campaign include both encouraging oxide and sulphide intercepts of 2.39 g/t Au over a drilled width of 20.45 m from surface in hole FZB014; of 2.00 g/t Au over a drilled with 15.40 m in hole FZB013; and of 1.30 g/t Au over a drilled width of 11.60 m (including 1.78 g/t Au over 8.2 m) in hole FZB026. Of further interest was the oxide intersection in hole FZB014, which falls within a wider intersection interval that contains anomalous silver grading 7.81 g/t Ag over a drilled width of 27.5 m. The presence of anomalous silver values associated with high gold values in the oxide-saprolite zone appears to indicate the potential for an extensive supergene deposit within the footprint of the Au soil anomaly.

Preliminary leach test work completed on samples from two positive intersections reported above (holes FZB014 and FZB026) demonstrated that the Zona Basal material is free milling/non-refractory, with recoveries of the order of 90% after direct cyanidation, further justifying follow-up drilling programs aimed at evaluating the potential to define open pit mineable Mineral Resources from this source.

In late 2021, an initial reverse-circulation (RC) drilling campaign was completed at the Zona Basal target. The RC drilling campaign targeted shallow oxide material within the surface exposure and shallow supergene (oxide-saprolite) regolith profile within a central area which extends some 1,000 m along strike by 200 m width (across strike) and to a depth of 30 m to 50 m. A total of 119 reverse-circulation drill holes (6,751 m completed) to an average depth of 50 m were completed (November 2021) at a 50 m x 50 m grid pattern.

In December 2021, an infill RC drilling campaign (at a 25 m x 25 m grid spacing) was completed over two of the more promising individual areas (43 drill holes and a total of 2,120 m completed). Results from this RC drilling were fully reported in February 2022.

During 2022, all of the drill holes completed at the Zona Basal surficial deposit were used to update the 3D models, and the inferred surface geological maps. For geostatistical evaluation purposes, careful in situ density estimates were also carried out for Zona Basal.

The 2021 drilling campaigns at the Zona Basal surficial deposit have initially delineated inferred resources of 32 koz of gold (781 kt @ 1.28 g/t Au)."

Underground and Surface/Exploration Diamond Drilling Activities Completed in 2023

The drilling programs in 2023 mainly targeted the down-plunge areas of the orebodies B and C. The drill holes were designed to intersect the projected plunges and dips of the mineralized zones as close to perpendicular as possible.

In 2023, a combined total of 23 km of underground delineation, infill and exploratory drilling was completed at Turmalina.

Growth Exploration Mine is targeting extensions for mineralization along Orebody's Trend C, primarily further NW, as well as parallel lenses with high potential in the remaining portions of Ore body C. Drilling from the Growth Exploration Mine has also been investigating the potential down-dip/plunge extensions for mineralization associated with Ore body B and high potentials for the Faina Ore body. This last mineral deposit is investigated through shorter drillings and at deeper levels for better detailing of its bodies and structures.

At Turmalina, Growth exploration Corporate drilling results in 2022/2023 returned interceptions that demonstrated high potential down-plunge that encouraged new mine developments in CNW portion in 2023. Underground Infill diamond drilling of the Orebodies C Structure intersected a series of new higher grade "lenses" near current underground development and approximately 300 m below surface. Geological and structural logging of drill core along with mapping of nearby underground development defined two higher-grade, structurally controlled mineralized zones. First of all the mine has development into this higher-grade area to better understand the structural controls. Step out drilling testing the projected plunge continuity is successfully expanding the higher-grade footprints of the Orebodies C Structure in a series of structurally controlled prospective zones.

Structure in a series of structurally controlled prospective zones.

Similarly, exploratory work aimed at refining the geological-structural controls on higher grade mineralization zones within the Orebody B Structure recommenced in 2022, also at shallow levels close to existing underground mine development access.

Results from the 2023 drilling campaigns at Turmalina have been particularly encouraging, with a number of exceptional relatively shallow intersections reporting grade x thickness (GT) intervals greater than 40 gram meters on the Orebodies C and Orebody B structures. These intercepts again demonstrate potential down and up plunge extensions within these structures.

A summary of the more significant intersections of the infill and exploration drilling campaigns completed underground at Turmalina in 2023 has been gathered in this AIF, as at December 31, 2023 and is provided in Table 17 below. A summary of the more significant diamond drilling interceptions pertaining to Faina project and Onças do Pitangui project (São Sebastião) are provided in Table 18 and Table 19 below, respectively:

Table 17: Summary of More Significant Drilling Intersections, 2023 - Turmalina Mine Operation

Summary of Significant Drilling Intersections – Turmalina Mine Underground GTs (average grade x thickness) greater than 25 in 20223							
Hole ID	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT (ETW)	Orebody
FTS2291	140.21	143.93	3.72	2.97	7.26	34.78	CNW-Rock 21
GR250LM12	135.31	139.53	4.22	2.46	16.78	41.28	B Orebody
	144.58	150.88	6.30	3.20	25.75	82.40	B Orebody
FTS2262B	105.97	109.40	3.43	2.77	11.80	32.69	CNW-Rock 32
FTS2300	74.75	78.58	3.83	3.32	8.32	27.62	CNW-Rock 21
CC312LM01	31.19	43.16	11.97	6.02	11.17	67.24	CNW-Rock 32
B480ACLM03	92.36	100.22	7.86	6.26	7.47	46.76	01-ANW
FTS2343	16.07	20.57	4.5	3.93	11.01	43.27	01-ANW
FTS2348	22.59	30.35	7.76	5.67	8.87	50.29	01-ANW
CC342LM03	12.5	14.26	1.76	1.73	17.38	30.07	CC-Rock 34
FTS2355	64.65	72.9	8.25	4.87	13.07	63.65	B Orebody
FTS2356	67.05	77.07	10.02	6.39	8.46	54.06	B Orebody
CNW463LM04	60.35	65.97	5.62	4.69	8.36	39.21	CNW-Rock 21
CNW333LM02	81.62	90.45	8.83	2.86	14.65	41.90	CNW-Rock 21
	95.82	114.7	18.88	4.84	5.94	28.75	CNW-Rock 33
B260LM01	15.89	20.64	4.75	4.26	8.39	35.74	B Orebody
	23.07	24.83	1.76	1.61	17.68	28.46	15-B Orebody
B260LM06	13.54	19.81	6.27	5.39	12.22	65.87	B Orebody-17
	19.81	25.72	5.91	4.1	10.1	41.41	
B260LM07	14.53	22.1	7.57	6.01	14.25	85.64	B Orebody-17
B260LM11	18.08	26.25	8.17	5.72	14.34	82.02	B Orebody
	28.23	33.21	4.98	3.4	15.89	54.03	B Orebody
B260LM14	33.97	37.25	3.28	3.15	9.83	30.96	B Orebody
	38.32	44.8	6.48	2.9	26.74	77.55	B Orebody

Table 18: Summary of Most Significant Drilling Intersections of the “Faina Resource Conversion Infill Drilling”

Summary of Significant Drilling Intersections - Faina Resource Conversion Infill Drilling GTs (average grade x thickness) greater than 25					
Hole ID	From (m)	To (m)	Downhole Interval (m)	Gold Grade (g/t Au)	GT
FUH209	321.1	327.0	5.9	5.5	32
Including	322.0	323.0	1.0	27.2	27
FUH210	290.0	302.3	12.3	3.9	47
Including	294.0	302.3	8.3	5.5	45
FUH212	342.5	355.0	12.6	2.6	32
FUH213	328.0	355.5	27.6	1.4	39
FUH214	358.5	368.0	9.6	2.7	26
FUH215	247.1	257.6	10.5	2.5	26
FUH216	262.0	285.3	23.3	4.4	103
Including	275.5	285.3	9.8	9.5	93
FUH217	303.7	321.0	17.3	3.0	52
Including	321.8	316.1	3.3	11.9	39

Table 19: Summary of Most Significant Drilling Intersections of the “Onças do Pitangui (São Sebastião)”

Summary of Significant Drilling Intersections with GTs (average grade x thickness) greater than 25 - Exploratory Drilling São Sebastião Deposit						
Hole ID	From (m)	To (m)	Down Hole Interval (m)	Gold Grade (g/t Au)	GT	Potential Orebody Zone
FJG07	162.02	169.24	7.22	4.25	31	Biquinho
FJG07	259.02	272.87	13.85	1.94	27	Pimentão
FJG12	146.98	150.68	3.7	9.09	34	Biquinho
FJG40	129.92	142.4	12.48	3.82	48	Biquinho
FJG40	146.71	160.14	13.43	4.23	57	Biquinho
FJG40	223.69	236.41	12.72	2	25	Pimentão
FJG43	172.64	176.09	3.45	8.15	28	Biquinho
FJG44	201.36	209.27	7.91	4.19	33	Biquinho
FJG47	104.96	118.38	13.42	4.81	65	Biquinho
FJG47	216.17	233.82	17.65	3.06	54	Pimentão
FJG48	166.88	173.07	6.19	5.45	34	Biquinho
FJG49	131.45	138.4	6.95	18.69	130	Biquinho
FJG53	145.14	160.42	15.28	3.66	56	Biquinho
FJG57	203.12	223.38	20.26	1.81	37	Biquinho
FJG71	135.9	146.47	10.57	3.45	36	Biquinho
FJG73	135.65	143.23	7.58	6.73	51	Biquinho
FJG75	136.46	140.82	4.36	6.93	30	Biquinho
FJG76	89.12	95.38	6.26	7.12	45	Biquinho
FJG76	230.09	239.55	9.46	6.13	58	Pimentão

FJG78	83.59	90.69	7.1	9.82	70	Biquinho
FJG78	219.86	225.56	5.7	7.59	43	Pimentão
FJG81	75.81	82.41	6.6	6.14	41	Biquinho
FJG81	196.96	207.43	10.47	2.59	27	Pimentão
FJG82	64.36	72.9	8.54	4.82	41	Biquinho
FJG84	146.86	163.16	16.3	2.35	38	Biquinho
FJG84	241.12	246.63	5.51	4.77	26	Pimentão
FJG84	315.86	327.25	11.39	5.78	66	Pimentão
FJG86	119.9	127.55	7.65	5.25	40	Biquinho
FJG86	224.94	236.92	11.98	6.84	82	Pimentão
FJG88	102.67	118.52	15.85	4.03	64	Biquinho
FJG92	118.89	129.56	10.67	3.17	34	Biquinho
FJG102	211.21	216.18	4.97	5.41	27	Biquinho
FJG105	175.04	182.65	7.61	9.78	74	Biquinho
FJG109	152.75	161.8	9.05	5.41	49	Biquinho
FJG109	240.31	253.53	13.22	2.15	28	Pimentão
FJG111	197.32	210.03	12.71	4.23	54	Biquinho
FJG112	246.4	261.43	15.03	3.57	54	Pimentão
FJG114	185.87	194.83	8.96	4.73	42	Biquinho
FJG115	138.74	152.83	14.09	4.91	69	Biquinho
FJG115	239.79	251.49	11.7	2.26	26	Pimentão
FJG116	204.73	213.43	8.7	7.37	64	Biquinho
FJG118	181.45	197.91	16.46	2.77	46	Biquinho
FJG119	124.53	132.73	8.2	3.75	31	Biquinho
FJG121	150.36	178.76	28.4	1.02	29	Biquinho
FJG122	217.13	226.82	9.69	4.51	44	Biquinho
FJG125	124.8	129.2	4.4	6.06	27	Biquinho
FJG141	466.8	473.68	6.88	3.94	27	Biquinho
FJG149	196.49	207.17	10.68	3.12	33	Pimentão
FJG149	222.55	231.17	8.62	4.49	39	Pimentão
FJG150	88.25	94.6	6.35	6.08	39	Biquinho
FJG150	98	106.19	8.19	6.66	55	Biquinho
FJG151	71.34	83	11.66	10.85	127	Biquinho
FJG155	276.75	281.29	4.54	8.95	41	Pimentão
FJG156	64.41	72.89	8.48	4.04	34	Biquinho
FJG161	59.2	64.43	5.23	5.2	27	Biquinho
FJG164	176.66	196.61	19.95	1.77	35	Pimentão
FJG170	140.31	143.17	2.86	9.21	26	Pimentão
FJG183	117.56	120.68	3.12	13.01	41	Pimentão
FJG198	277.67	286.78	9.11	4.45	41	Biquinho
FJG209	116	121.9	5.9	4.67	28	Pimentão

Sample Preparation, Analyses, Quality Assurance/Quality Control and Security

The sampling and sample preparation procedures used by Jaguar are as follows:

Surface/Exploration Channel Sampling

- Channel samples are regularly collected from outcrops and trenches.
- The sites to be sampled are cleaned with a hoe, exposing the material by scraping it.
- Structures are mapped and the lithologic contacts defined, and samples marked so that no sample has more than one lithology.
- Samples have a maximum length of one metre and are from one kilogram to two kilograms in weight.
- Each sample is collected manually in channels with average widths between five centimetres and ten centimetres, and about three centimetres deep, using a hammer and a chisel.
- Either an aluminum tray or a thick plastic canvas drops sheet is used to collect the material.
- The samples are then stored in a thick plastic bag and identified by a numbered label, which is protected by a thin plastic cover and placed with the sample.
- At the sampling site, samples are identified by small aluminum plates, labels, or small wooden poles.
- Sketches are drawn with lithological and structural information. The sample locations are then surveyed and are entered into the master database.

Diamond Drilling Core Sampling

- Surface drilling is performed by contractors with holes in HQ or NQ diameters.
- Underground drilling was performed either by Jaguar or contractors with NQ, BQ, or LTK core diameters.
- Drill holes are accepted only if core recovery from the mineralized zone exceeds 85%.
- All the drill holes have their deviations measured by a Reflex Gyro TM or an equivalent surveying tool.
- The cores are stored in wooden or plastic boxes of one metre length, and with three metres of core per box (HQ and NQ diameter) or with four metres of core per box (BQ or LTK diameters).
- The code number, length, and location of each hole are identified in the boxes by an aluminum plate or by a water-resistant ink mark in front of the box.
- The progress intervals and core recoveries are identified inside the boxes using aluminum plates that show the data, attached to small wooden blocks.
- During logging, all geological information and the recovery measurements are verified and the significant intervals for sampling are defined.
- Individual samples are identified in the boxes by highlighting/labeling their numbers at the edges of the wood boxes.
- Core samples are cut lengthwise into approximately equal halves, with the use of a diamond saw.
- The half core sample for analysis is placed in a highly resistant plastic bag, identified by a label, and the other half is kept in the box at an offsite secure location close to the mine.
- For the shorter-length, bazooka-type drill holes completed from underground set-ups (the LM series drill holes), the whole core is sampled as the core diameter does not permit splitting into halves.

Underground Production Channel Sampling

- The sector of wall to be sampled is cleaned with pressurized water. Structures are mapped and lithologic contacts defined, and samples marked with boundaries at lithology contacts. Samples have a maximum length of one metre and are from two to three kilograms in weight.
- Channel samples were collected by manually opening the channels, using a hammer and a little steel pointer crowned by carbide or a small jackhammer.
- The channel samples have lengths ranging from 50 cm to one metre, average widths between five centimetres and ten centimetres, and about three centimetres deep.
- Two sets of channel samples on the face are regularly collected. One set of channel samples are collected from the top of the muck pile once the work area has been secured. The second set of channel samples are collected at waist height once the heading has been mucked clean and secured.
- At approximately five metre intervals, the walls and back are sampled by channel sampling. The channel samples are collected starting at the floor level on one side and continue over the drift back to the floor on the opposite side.
- Either an aluminum tray or a thick plastic canvas is used to collect the sample material. The samples are then stored in a thick plastic bag and identified by a numbered label, which is protected by a thin plastic cover and placed with the sample.
- At the sampling site, samples are identified by small aluminum plates, labels, or small wooden poles.
- Sketches are drawn with lithological and structural information. The sample locations are then surveyed and are entered into the master database.

Sample Preparation and Analysis

For exploration drill holes prior to 2016, samples were prepared and analyzed at the SGS Geosol Laboratory in Belo Horizonte. From 2016, exploration samples from auger, drill holes, chip, and RC drilling were analyzed at Jaguar's onsite Caeté laboratory to quickly determine grades, and by the ALS laboratory, located in Belo Horizonte, for the official grades and assay certificates. These duplicate assays allowed for quality control checks of the onsite laboratory. The ALS and SGS Geosol laboratories are independent of Jaguar and meet international analytical standards and ISO 17025 compliance protocols.

For in-fill drill holes and channels collected prior to 2015, samples were prepared at Jaguar's Caeté laboratory by drying, crushing to 90% minus 2 mm, quartering with a Jones splitter to produce a 250 g sample, and pulverizing to 95% minus 150 mesh. Analysis for gold was by standard fire assay procedures, using a 50 g or 30 g sample with an atomic absorption (AA) finish.

All samples from 2015 to 2022 sent to and analyzed at Jaguar's Caeté laboratory were analyzed according to the following workflow: A one-kilogram sub-sample of the crushed material is selected for pulverization to approximately 70% minus 200 mesh. The ring-and-puck pulverisers are cleaned after each sample using compressed air and a polyester bristle brush. The analytical protocol for all samples employs a standard fire assay fusion using a standard 30 g aliquot, with the final gold content being determined by means of AA. The detection limit for fire assay analyses is 0.05 g/t Au. A second cut from the pulps is collected and re-assayed for those drill core samples where the grade is found to be greater than 30 g/t Au. If the two assays are in good agreement, only the first assay is reported. The AA unit is calibrated to directly read gold grades up to 3.3 g/t Au; samples with grades greater than this are re-assayed by diluting the solute until it falls within the direct-read range.

The Turmalina Mine has a process control laboratory that analyzes the underground shifts and plant samples.

Quality Assurance and Quality Control (QA/QC)

The geology team at the Turmalina Complex has carried out a Quality Assurance and Quality Control (QA/QC) program over the past years that has monitored the analytical results of samples from all the diamond drilling programs. Approximately 5% of pulps from drilling programs has been sent to an external laboratory for duplicate analysis. Commercially sourced Certified Reference Materials

(CRMs) obtained from the Rocklabs company are inserted into the sample stream at a frequency of one every 45 to 50 samples. Blank samples are inserted at a rate of one in every 20 samples, representing an insertion frequency of 5%. Blank samples are composed of crushed, barren quartzite or gneiss and are used to check for contamination and carry-over during the crushing and pulverization stages.

The results of the blanks, duplicates, and standards are forwarded to Jaguar's head office monthly for insertion into Jaguar's internal database. The results from the standards samples are scanned visually for out-of-range values on a regular basis. When failures are detected, a request for re-analysis is sent to the laboratory. Only those assays that have passed the validation tests are accepted into the main database. The Caeté laboratory carries out an internal, separate, and distinct program of QA/QC for all drill core samples and channel samples as well.

APPENDIX 3 – Caeté Complex Background

Mineral Reserve and Mineral Resource figures (as at December 31st 2023) were 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 Reno Pressacco, P. Geo., of SLR Consulting (Canada) Ltd 55 University Avenue, Suite 501, Toronto, Ontario M5J2H7. SLR is an independent mining consultancy and Mr. Sepp and Mr. Pressacco are each Qualified Persons within the definition of NI 43-101.

The Drilling, Mineral Resource Estimates and Mineral Reserve Estimates sections of this AIF have been updated by Jaguar to reflect updated activities carried out in 2023.

Property Description and Location

The Caeté Mining Complex, includes the Pilar and Roça Grande Mines and the Caeté Plant, as well as the advanced exploration projects Catita and Córrego Brandão, is located in the state of Minas Gerais, Brazil, 50 to 100 km east of the city of Belo Horizonte. The property is currently constituted of 12,124 ha of mining and exploration concessions. The properties are owned through Jaguar's wholly owned subsidiary, MSOL.

In December 2003, Jaguar acquired the Santa Bárbara property, including the Pilar mineral concessions, from Vale. In November 2005, Jaguar entered into a mutual exploration and option agreement with Vale with respect to six concessions, known as the Roça Grande concessions, located on 2,090 ha of highly prospective gold properties along 25 km of a key geological trend in the Iron Quadrangle. The contract between Jaguar and Vale provided Jaguar with the exclusive right over a 28-month period beginning November 28, 2005, to explore and conduct feasibility studies and to acquire gold mining rights in the Vale properties if the studies supported economical mining operations. The contract granted corresponding rights for Vale to explore the Jaguar property for iron and acquire mineral rights in the property during a three-year period. In November 2007, Jaguar notified Vale of its intent to exercise the option to acquire all seven Roça Grande concessions. The final transfers of the Roça Grande concessions to Jaguar were concluded in December 2010 and August 2011. In November 2014, four of the six Roça Grande concessions acquired from Vale were returned to Vale by amending the original contract.

The mining and exploration concessions related to Caeté's Pilar and Roça Grande Mines and related exploration projects are in good standing. Jaguar has all the necessary environmental and operating licences that are required for the operation of the mining complex.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Roça Grande and Pilar mines are located in the municipalities of Caeté and Santa Bárbara, respectively, in the state of Minas Gerais, Brazil. Caeté (45,000 inhabitants) and Santa Bárbara (31,000 inhabitants) are comparable towns, located 55 km and 100 km, respectively, from Belo Horizonte. The towns have good urban infrastructure, including banks, hospitals, schools and general commerce. As a result, skilled labour is readily available.

The properties can be accessed via a federal highway and state paved roads. A partially paved 27 km secondary road is used to transport Pilar run-of-mine (ROM) ore to the Caeté Plant.

Annual rainfall in the area averages between 1,300 and 2,300 mm, 84% of which falls during the rainy season, between October and March. December and January present the most intense precipitation. Winds, predominantly from the south and southeast, have a low average speed (<1 m/s). The annual average temperature is slightly above 20°C. Air humidity ranges up to 90% even in the summer months. Annual average evaporation is approximately 934 mm.

CEMIG (Companhia Energética de Minas Gerais) currently supplies power to the project site. Diesel back-up generators provide emergency power.

Geological Setting

During the 17th and 18th centuries, the era commonly referred to as the initial Brazilian Gold Cycle, mining in the Caeté and Santa Bárbara regions included numerous moderate sized mines, such as Gongo Soco, Cuiabá, Taquaril, São Bento, Santa Quitéria, Pary, Luis Soares, Juca Vieira and Brumal.

The orebodies of the Caeté Mining Complex are emplaced in Archean age meta-volcanic and meta-sedimentary rock packages of the Nova Lima Group, Rio das Velhas Supergroup.

- *Pilar*

The Pilar deposit is hosted by the basal units of the Nova Lima Group, and by sequences of the Quebra-Ossos Group of the Rio das Velhas Supergroup. The rock packages in the immediate Pilar mine area are comprised of tholeiitic meta-basalts, mica-quartz schists, chlorite-quartz schists, quartz-chlorite-sericite schists, and volcano-chemical and clastic meta-sedimentary rocks of the Santa Quitéria Unit (Nova Lima Group), and further to the east, of meta-komatiite flows (along with their intrusive equivalents) of the Quebra-Ossos Group. The volcano-chemical meta-sedimentary rock packages include cherts, BIFs, and carbonaceous phyllites. Along the eastern edge of the Pilar property, the supracrustal units of the Rio das Velhas Supergroup are in fault contact with migmatites and granitic gneisses of the Santa Bárbara Complex, the unit that locally represents the basement sequence.

The Pilar deposit occurs at the northernmost end of the northeasterly oriented Brumal-Pilar BIF trend, which extends for many kilometres to the southwest from the Pilar deposit. In regional terms, the Brumal-Pilar BIF linear trend corresponds to a package of “Algoma type” BIFs (oxide-facies, silicate-facies, and carbonate-facies lithotypes) that have represented the main economic target as hosts of the Pilar deposit. Past regional mapping demonstrated that the Brumal BIF trend within the Pilar site is folded into a considerably tight, overturned synform-antiform fold of approximately one kilometre in amplitude, with axes statistically plunging steeply to the southeast and with an axial-planar tectonic cleavage dipping steeply in the east-southeast direction.

While the Algoma type BIFs typically range between five metres and 15 m to 20 m in thickness, at Pilar, they have been severely and tightly folded and thickened as a result of a west-verging compressional regional deformation event that affected the entire eastern border of the Rio da Velhas Supergroup exposures in the Iron Quadrangle Terrain. Structural geometries recorded at Pilar indicate that the mine stratigraphic package may have been folded and refolded during this event. Moreover, some major reverse faults and/or accommodation faults (such as faulted synform closures) formed during this regional compressional event locally exhibit evidence of the presence of later superimposed events (mainly tilting and/or rotation of the previously faulted blocks).

The resulting folded geometry of the Pilar deposit stratigraphic package is described as a series of overturned synform-antiform folds (a synclinorium) primarily outlined by the Pilar BIF Unit, and which locally may exhibit some degree of stratigraphic transposition and/or stratigraphic thickening at their hinge zones. The axes generally plunge to the southeast. The axial-planar tectonic cleavage of the overturned synform-antiform folds dips steeply to the east-southeast. The average inclination (plunge) of the ore shoots varies from 15° to 60°, towards the 130-180 azimuth range orientation (trend). The regional foliation (S_2) is very well preserved in all foliated rock units, showing a regular planar attitude of N30°-50° E / 40°-65°.

Stratigraphically, the economic Pilar BIF Unit is overlain by a two to five metre thick layer of carbonaceous phyllites, which in turn is overlain by a thick package of greenschists (meta-basic volcanic rocks - “Upper Basic Volcanic Unit”). The Pilar BIF Unit is underlain by a thick package of greenschists (“Lower Basic Volcanic Unit”). The Lower and Upper basic volcanic units are very similar in nature, if not identical, considering their lithologies, lithostratigraphic record, and penetrative structural petrofabrics mapped.

- *Roça Grande*

The Roça Grande mine is located in the upper unit of the Nova Lima Group. The dominant rock types observed at Roça Grande are a mixed assemblage of meta-volcanoclastics and meta-tuffs. These are represented by quartz sericite and chlorite schists with variable amounts of carbonate facies BIF, oxide-facies BIF, metacherts, and graphitic schists. The iron formations, chert units, and graphitic schist units are intimately inter-bedded with each other, such that they form an assemblage of chemical and clastic sedimentary units.

Two important BIF horizons are present at Roça Grande, and they are separated by a central unit of sericitic phyllites and schists. The two BIF horizons are approximately parallel and referred to as Structures 1 and 2. In general, the southern BIF unit (Structure 2) is thicker than the northern BIF unit (Structure 1). The North Structure (Structure 1) hosts the RG01 mineralized zone and the South Structure (Structure 2) hosts the RG02, RG03, and RG06 mineralized zones. The RG07 mineralized zone is located immediately in the hanging wall of Structure 1 and is predominately hosted by a quartz vein. The bedding is well defined by the carbonate-facies iron formation and chert observed in the BIF horizons, with an overall azimuth strike of 70° to 80° and dipping approximately 30° to 35° south. At the mine scale, folding of the iron formation stratigraphy is generally absent. Local folding and faulting in Structure 2 has been observed in the RG06 mineralized zone where a 200 m to 300 m strike length of the stratigraphy has been folded.

Mineralization

- *Pilar*

Geological mapping and underground observations indicate that mineralized zones of the Pilar BIF Unit represent generally stratabound lenses of “sulphide-facies” BIF ranging from 15-20 m to 100-200 m in strike length and two metres to 15 m in thickness. In the Pilar deposit, the best grade BIF hosted mineralized zones are typically located along the contact between the Pilar BIF Unit and the layer of carbonaceous phyllites that occurs immediately adjacent to the greenschists of the Upper Basic Volcanic Unit. Moreover, at the Pilar deposit, increased average gold grades and higher sulphide/arsenopyrite concentrations (within the economic mineralized zones and orebodies) are almost everywhere mapped in association with the deposit scale, larger, higher-amplitude fold hinge geometries. The BIF hosted mineralized zones are conformably folded together with the whole Pilar BIF Unit at the deposit scale “synclinorium” of the Pilar deposit.

The main zones of mineralization occur as scattered, stratabound lenses (or “pods”) of sulphide-facies BIFs within the “carbonatic-oxide-facies” deposit scale Pilar BIF Unit. Economic mineralized bodies consist of stratabound, but not stratiform, concentrations of gold bearing sulphides that occur in grains, seams, and irregular shaped granular aggregates located along and replacing iron carbonates-rich bands of the BIFs. Arsenopyrite and pyrrhotite are the most important sulphide minerals in mineralized bodies, with pyrite, chalcopyrite, galena, and sphalerite commonly present as accessory minerals. A direct relationship can generally be established between the amounts of arsenopyrite (percentage per volume) and the gold concentrations in mineralized BIF samples of the Pilar deposit.

There is a clear temporal-spatial-genetic relationship between the epigenetic replacement/sulphidation of the host BIFs and the onset of a structurally controlled, district scale silicification event. Carbonate-rich bands of mineralized BIFs commonly exhibit sulphide enriched alteration/replacement halos that are symmetrically distributed around swarms of quartz veins and veinlets.

- *Roça Grande*

At Roça Grande, gold mineralization is commonly associated with BIF horizons. In the RG01, RG02, RG03, and RG06 mineralized zones, gold mineralization is developed approximately parallel to the primary bedding and is related to centimetre scale bands of massive to disseminated pyrrhotite and arsenopyrite. In many instances, higher gold values are located along the hanging wall contact of the iron formation sequence and are hosted by carbonate-facies iron formation. Grades generally decrease towards the footwall where the iron formation becomes more silica-rich. The thicknesses of the iron formations are observed to be affected by broad scale boudinaged structures. Higher gold grades are observed in the thicker portions while the narrower portions of the boudinaged structures have lower grades.

In the RG07 mineralized body, gold is hosted in quartz veins that are contained within a sericite (chlorite) schist associated with an east-west oriented shear zone.

Gold Deposit Types - Pilar and Roça Grande Mines

Pilar and Roça Grande are local examples of Algoma BIF hosted type gold deposits. The main geological characteristics of this group of deposits in the Iron Quadrangle province are summarized as follows:

- Main host/fertile “Algoma type” BIF packages:

These packages host the mineralization and are stratigraphically located at the waning stages of major volcanic cycles of the Rio da Velhas greenstone belt.

- Mineralization style:

The mineralization consists of predominately “lateral” replacements/sulphidations of the iron carbonate-rich bands of the host Algoma type BIF units. The BIF hosted gold mineralization at Pilar, however, is not syngenetic in nature (in relation to the deposition of the host rock packages), rather it is clearly an epigenetic event that has occurred after the formation of the host rock units. Other than the mineralization contained within the RG07 deposit, the gold mineralization at Roça Grande is more stratiform in nature.

- Dimensions of the economic orebodies:

Economic strike lengths of 50 m to 350 m for individual mined zones. The average thicknesses of the BIF hosted orebodies may range from two metres to 20 m.

- Structural-geometric controls and down-plunge continuities of the mineralized zones:

Mineralized zones plunge with the orientation of an intersection lineation (between bedding planes and a tectonic cleavage) that mimics the orientation of axes of major, deposit scale reclined folds. At Pilar, increased gold grades and higher sulphide concentrations are typically mapped in association with the fold hinge zones of the deposit scale reclined folds.

- Mineralized zones with incredible down-plunge persistence towards great depths:

Major BIF hosted orebodies and underground operations in the belt exhibit consistent continuities for several kilometres down-plunge despite the relatively small lateral dimensions (along the strike of the host units). They can be longer than five kilometres along the plunge, similar to the main zones of the AngloGold Ashanti Morro Velho and Cuiabá Mines in the province. Therefore, major BIF hosted mineralized zones are commonly open at depth and warrant additional deep drilling to expand resources.

- BIF hosted gold deposits amenable to both bulk mining and more selective high grade underground operations:

The Roça Grande and Pilar mine packages demonstrate good average gold grades and attractive thicknesses and may be amenable to both bulk and selective mining.

History

Jaguar initiated exploration activities at Pilar in 2006 and initially contemplated building a sulphide plant on site, but the acquisition of the RG mineral concessions created an opportunity to develop an expanded project with greater plant capacity to receive ore from several mineral properties.

During 2007, Jaguar completed a scoping study, received the Implementation Licence for the Project, secured the power contract for the start-up and commissioned TechnoMine to prepare a NI 43-101 technical report on the Caeté Project Mineral Resources, which was completed during the year. By the end of the third quarter in 2008, all necessary permits and licences for the construction and commissioning phase of the Caeté Project had been received, and Jaguar initiated civil works for the milling and treatment circuits.

In November 2008, due to the decline in gold prices, the financial markets and worldwide equity values, including the gold sector, Jaguar temporarily suspended the development of the Caeté Project pending an assessment of market conditions and the availability

of capital to move the project forward. Consistent with the decision to suspend the development of the Caeté Project, underground work at RG was temporarily suspended; however, development at Pilar continued. In December 2008, Jaguar began transporting ore by truck from Pilar to the Paciência Plant to supplement the ore being supplied from Paciência's Santa Izabel Mine.

In March 2009, Jaguar completed an \$86.3 million equity offering, the proceeds of which were primarily used to restart development and construction at Caeté. During 2009 and part of 2010, Jaguar focused on the implementation and construction of the Caeté Project. The Caeté Plant was commissioned in June 2010. The first gold pour was conducted in August 2010, and commercial production was declared in October 2010.

In October 2010, TechnoMine completed an amendment to the 2008 feasibility study, which consisted of an enhancement of the process route and updated Mineral Resource and Mineral Reserve estimates afforded by an increase of the gold price over the LOM.

On March 22, 2018, The RG underground mine was placed on care and maintenance. However, the RG plant continued to process the ores from the Pilar underground mine operation.

The more recent, 2020-2021-2022, exploration developments at/for the Córrego Brandão deposit/discovery are described in detail in a specific section below.

Gold production at the Caeté plant was 37,585 oz of gold in 2023, 44,802 oz of gold in 2022, 46,373 oz. in 2021, and 51,050 oz. in 2020 (ores coming from the Pilar underground operation).

Surface Exploration Program Carried Out in 2020-2021 and 2022 (Córrego Brandão Target)

Drilling History Figures at the Pilar Operation

A summary of the drilled figures after the successive drilling campaigns completed at the Pilar mine is provided in Table 29 (from 2004 to 2023), and a summary of the more significant intersections obtained at the Pilar Mine and at the Catita exploration area in 2023 are provided in Table 30 and Table 31 below, respectively. In 2023, 22 km of drilling were completed at the Pilar underground operation. It is important to note that the reported intersections underground do not necessarily represent true thicknesses, as they have been drilled from underground-based platforms and consequently have intersected the mineralized zones and bodies at varying relative angles. However, estimated true widths/thicknesses have also been included in Table 30.

Table 20: Summary of Drilling Campaign - Pilar

Period	Target	Diamond Drilling		Roto-Percussive Drilling	
		Number Holes	Total Length (m)	Number Holes	Total Length (m)
Vale					
1989-1994		65	11,812	60	2,960
2002-2003		10	3,069	-	-
Subtotal Vale		75	14,881	60	2,960
Jaguar					
2004-2010	Phase 1	36	6,489	-	-
	Phase 2	41	12,926	-	-
	Phase 3 – UG	180	11,200	-	-
	Phase 3 – Surface	19	10,186	-	-
Q4 2010-2011		44	12,574	-	-
2012	U G-Exploration	31	4,005	-	-

	U G-Definition	121	9,705	-	-
2013	U G- Exploration	40	5,978	-	-
	U G-Definition	51	3,557	-	-
	U G- Exploration	60	8,398	-	-
2014	U G- Definition	125	10,818	-	-
	Surface	9	910	-	-
	Exploration	-		-	-
2015	U G- Exploration	30	6,477	-	-
	U G-Definition	12	879	-	-
2016	U G- Exploration	19	2,994	-	-
	U G-Definition	89	8,143	-	-
2017	U G- Exploration	23	7,081	-	-
	U G-Definition	150	9,534	-	-
2018	U G - Exploration	3	328	-	-
	U G-Definition	172	12,172	-	-
	U G-Definition	83	6,206	-	-
2019	U G- In-Fill	20	3,293	-	-
	U G-Exploration	22	4,822	-	-
	U G-Definition	108	4,942	-	-
2020	UG- In-Fill	30	4,262	-	-
	U G-Exploration	145	18,362	-	-
	U G-Definition	33	1,960	-	-
2021	UG- In-Fill	34	6,042	-	-
	UG-Exploration	144	24,619	-	-
	U G-Definition	82	5,143	-	-
2022	UG- In-Fill	52	7,789	-	-
	U G-Exploration	90	21,720	-	-
2023	UG-In-Fill	48	11,654	-	-
	U G-Definition	71	5,830	-	-
	UG-Exploration	10	4,546	-	-
Subtotal Jaguar		2,227	275,544	-	-
Total		2,302	290,426	60	2,960

Table 21: Significant Drilling Intersection at the Pilar Mine in 2023 - Jaguar Mining Inc. - Caeté Operations

Summary of Significant Intersections, Drilling Program Jaguar Mining Inc. – Pilar Mine							
Hole ID	From(m)	To(m)	Down Hole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT(ETW)	Orebody
PPL985	140.35	146.55	6.20	5.50	6.15	33.83	BFII
PPL988	184.50	187.50	3.00	1.50	17.17	25.76	BFIII
PPL929	80.10	90.90	10.80	10.00	3.79	37.90	SW
PPL929	119.05	130.00	10.95	9.00	9.34	84.06	SW
PPL852	178.05	187.20	9.15	6.10	7.12	43.43	BA
PPL852	214.25	229.85	15.60	9.50	4.62	43.89	TORRE
PPL978	98.75	114.00	15.25	10.00	3.37	33.70	SW
FSB1050	55.70	71.45	15.75	8.00	13.35	106.80	BF
FSB1050	61.95	70.05	8.10	3.50	24.10	84.35	BF
FSB1016	15.10	21.04	5.94	4.80	12.91	61.97	BF
FSB1022	23.70	28.30	4.60	4.00	10.91	43.64	BF
FSB877	88.85	95.20	6.35	3.00	15.21	45.63	BF
FSB1100A	75.95	88.45	12.50	4.40	7.22	31.77	BFII
PPL645	193.05	196.45	3.40	3.00	10.58	31.74	LPA
PPL645	203.30	209.25	5.95	3.50	14.00	49.00	LPA
PPL645	209.25	222.65	13.40	8.00	3.26	26.08	LFW
PPL713	61.10	63.55	2.45	1.80	22.79	41.02	SW
FSB1052	17.50	28.35	10.85	7.90	7.57	59.80	BF
FSB1052	29.70	33.70	4.00	3.80	7.11	27.02	BF
FSB1078	23.50	37.75	14.25	11.20	7.82	87.58	BF
FSB1076	35.35	40.70	5.35	5.40	6.48	34.99	BF
FSB1058A	41.90	44.10	2.20	1.00	30.50	30.50	BFIII
FSB1082	45.15	52.75	7.60	5.80	5.23	30.33	BF
PPL681	37.25	43.20	5.95	5.50	4.86	26.73	BFII?
PPL681	60.55	73.30	12.75	12.00	4.61	55.32	BFII
PPL681	82.25	101.90	19.65	12.00	6.66	79.92	BF
PPL681	133.45	147.90	14.45	11.00	6.52	71.72	BF
FSB1075	46.65	58.10	11.45	9.00	4.22	37.98	BF
PPL657	74.90	78.75	3.85	3.50	16.98	59.43	LPA
FSB1077A	32.45	51.30	18.85	17.00	9.01	153.17	BF
PPL688	42.95	54.60	11.65	11.50	8.85	101.78	BFII?
PPL688	71.00	81.00	10.00	8.50	5.09	43.27	BF?
PPL682	54.40	58.15	3.75	3.50	14.41	50.44	BFII?
PPL692	61.30	71.35	10.05	8.40	4.49	37.72	BFII
PPL692	113.05	117.30	4.25	2.30	21.38	49.17	BF
FSB1020	54.75	60.50	5.75	4.50	10.06	45.27	BFIII

FSB1020	189.50	198.05	8.55	8.00	3.82	30.56	SW
PPL711	70.50	72.80	2.30	2.00	14.16	28.32	BFII
PPL660	126.65	141.75	15.10	6.00	4.49	26.94	LFW
PPL1001	58.90	65.35	6.45	6.10	5.79	35.32	SW
FSB1088	15.80	25.05	9.25	8.30	6.13	50.88	BFII
FSB1043	36.55	40.80	4.25	3.60	9.38	33.77	BF
FSB1089	40.30	52.95	12.65	9.80	4.64	45.47	BF
FSB1089A	39.30	53.50	14.20	11.10	7.24	80.36	BF
FSB1089A	50.20	53.50	3.30	2.50	18.97	47.43	BF
FSB1094	46.90	54.15	7.25	5.90	5.45	32.16	BF
PPL671	155.05	189.70	34.65	25.00	6.69	167.25	TORRE
PPL671	176.85	180.70	3.85	2.80	19.40	54.32	TORRE
FSB1048	8.00	13.40	5.40	2.30	24.67	56.74	LPA
FSB1098	58.50	64.85	6.35	5.70	9.61	54.78	BF
FSB1081	0.00	8.35	8.35	5.60	4.73	26.49	LPA
PPL674	83.25	92.10	8.85	5.90	7.02	41.42	BF
PPL675A	67.00	81.55	14.55	7.70	3.82	29.41	BF
FSB1105	110.80	112.90	2.10	2.00	17.43	34.86	BF
FSB1107	0.00	11.55	11.55	6.00	6.80	40.80	BF
FSB1111	84.35	94.85	10.50	4.80	6.27	30.10	BF?
FSB1108	0.00	9.75	9.75	7.50	5.92	44.40	BF
FSB1109	0.00	14.60	14.60	6.00	5.32	31.92	BF
FSB1114	5.45	15.55	10.10	7.10	4.18	29.68	BFII
PPL1007	233.70	236.75	3.05	2.00	20.41	40.82	BF?
FSB1115	42.50	49.30	6.80	6.80	5.46	37.13	BF
FSB1117	0.00	10.15	10.15	6.00	6.53	39.18	BF
PPL1018	43.45	55.30	11.85	6.00	5.91	35.46	LPA
PPL1017	39.95	57.60	17.65	8.00	8.02	64.16	LPA
PPL678B	262.55	266.55	4.00	2.10	29.73	62.43	BF?
FSB1116	0.00	17.15	17.15	8.00	3.38	27.04	BF
FSB1116	31.75	43.05	11.30	10.20	3.71	37.84	BF
PPL1019	130.05	149.45	19.40	11.50	7.38	84.87	LPA
FSB1119	44.25	56.80	12.55	9.00	5.05	45.45	BF
FSB1118	48.35	58.00	9.65	8.00	3.81	30.48	BF
PPL1023	243.05	246.60	3.55	1.50	16.60	24.90	LPA?
PPL1031	196.50	203.50	7.00	5.90	7.43	43.84	BF
FSB1124	13.50	23.95	10.45	9.50	4.14	39.33	BF
PPL1040	55.20	60.00	4.80	2.80	37.54	105.11	LPA
PPL1035	207.80	210.85	3.05	2.20	11.61	25.54	BF
PPL1042	79.10	82.80	3.70	2.00	21.18	42.36	BA?
PPL1038	114.20	120.90	6.70	4.60	5.60	25.76	BFIII
FSB1072	0.00	7.30	6.30	5.50	6.47	35.59	BFII?
FSB1074	4.40	17.55	13.15	10.75	10.10	108.58	BFII

PPL1033	86.60	94.15	7.55	5.00	10.26	51.30	BFI
FSB1090	13.35	24.40	11.05	7.50	4.81	36.08	BF
PPL1044	141.00	148.95	7.95	6.50	7.46	48.49	BA
PPL1044	175.40	192.00	16.60	11.50	7.17	82.46	BA
FSB1131	27.15	32.85	5.70	3.00	10.11	30.33	BFI

Table 22: Significant Drilling Intersection at the Catita Area in 2023 - Jaguar Mining Inc. - Caeté Operations

Summary of Significant Drilling Intersections GTs (average grade x thickness) greater than 25 (in 2023) Exploratory Drilling Carrancas and Catita Deposit						
Hole ID	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)	GT	Potential Orebody Zone
FCAR001	49.15	53.95	4.8	16.7	80.10	Carrancas
Including	49.15	51.75	2.6	23.2	60.43	Carrancas
FCAT050	26.82	28.12	1.3	22.3	28.99	Catita
FCAT050	36.12	37.16	1.04	4.9	5.14	Catita
FCAT054	52.27	60.73	8.46	8.7	73.53	Catita
Including	53.08	58.15	5.07	13.7	69.55	Catita
FCAT055	7.80	13.55	5.75	1.7	9.56	Catita
Including	12.55	13.55	1.0	8.5	8.53	Catita

- *Drilling History Figures at the Roça Grande Operation*

Jaguar has carried out a number of surface-based and underground-based drilling programs at RG since entering into a mutual exploration and option agreement with Vale in 2005. These infill and exploration drilling programs were focused primarily on the RG01/07, RG02, RG03 and RG06 deposits/mineralized zones.

Jaguar started diamond drilling at RG in August 2006. Following the completion of the first exploratory holes drilled at the RG01/07, RG02, RG03, and RG06 mineralized zones, Jaguar carried out an infill drilling program to delineate these zones.

The drill hole lengths ranged from 40 m to 559 m. Holes were targeted to investigate the continuity of the mineralized zones laterally and at depth.

A summary of the past drilling campaigns completed at RG (drilled figures) is provided in Table 32.

Table 23: Summary of Drilling Campaigns, Roça Grande

Period	Target	Diamond Drilling		Roto-Percussive Drilling			
		No. Holes	Total Length (m)	No. Holes	Total Length (m)		
Vale							
1973-1993	Roça Grande	116	18,288	313	17,270		
1994-1995	Roça Grande						
1996-1999	RG01	8	550				
	RG02	9	910				
	RG05	18	1,530				
	RG03,04 and 06	10	625				
	2000	RG02	4			410	
		RG03	8			571	
RG05		1	63				
	RG06	3	379				
Sub-Total Vale		177	23,325	313	17,270		
Jaguar							
2004-2010	RG01/07	111	10,625				
	RG02	59	16,580				
	RG03	56	9,407				
	RG06	55	7,954				
2011	RG01/07	71	9,983				
2012	RG01/07		19,922				
2013	RG01/07		10,142				
2014	RG03/RG06	14	794				
Sub-Total Jaguar			79,407				

Sample Preparation, Analyses, Quality Assurance/Quality Control and Security

The sampling and sample preparation procedures used by Jaguar on Caete complex are as follows:

Surface/Exploration Channel Sampling

- Channel samples are collected from outcrops and trenches as needed.
- The sites to be sampled are cleaned with a hoe, exposing the material by scraping it.
- Structures are mapped and the lithologic contacts defined, and samples marked so that no sample has more than one lithology.
- Samples have a maximum length of one metre and are from one kilogram to two kilograms in weight.
- Each sample is collected manually in channels with average widths between five and ten centimetres, and approximately three centimetres deep, using a hammer and chisel.
- Either an aluminum tray or a thick plastic canvas drops sheet is used to collect the material.
- Samples are stored in a thick plastic bag and identified by a numbered label, which is protected by a thin plastic cover and placed with the sample.
- At the sampling site, samples are identified by small aluminum plates, labels, or small wooden poles.
- Sketches are prepared with lithological and structural information, and sample locations are surveyed

Diamond Drilling Core Sampling

- Surface drilling is performed by contractors using either HQ or NQ equipment.
- Underground drilling is performed either by Jaguar or contractors using BQ, NQ, or LTK equipment.
- Drill holes are accepted only if they have greater than 85% core recovery from the mineralized zone.
- All the drill holes have their deviations measured by Maxibor, Reflex™, or equivalent survey tools.
- The cores are stored in wooden or plastic boxes of one metre length with three metres of core per box (NQ and HQ diameters) or four metres of core per box (BQ or LTK diameters).
- The number, depth, and location of each hole are identified in the boxes by an aluminum plate or by a water-resistant ink mark on the front of the box.
- The progress interval and core recovery are identified inside the boxes by small wooden plates.
- During logging, all of the geological information, progress, and recovery measures are verified and the significant intervals are defined for sampling.
- Samples are identified in the boxes by highlighting their side or by labels.
- Samples are cut lengthwise with a diamond saw and hammer into approximately equal halves. One half of the sample is placed in a highly resistant plastic bag, identified by a label, and the other half is kept in the box at a warehouse.
- The remaining drill core from the surface-based drill holes is stored at a dedicated core storage facility that is located at Roça Grande.
- For many of the underground-based drill holes, samples are cut lengthwise with a diamond saw and hammer into approximately equal halves.
- For the shorter length, bazooka type drill holes completed from underground set-ups, the whole core is sampled as the core diameter does not permit splitting into halves.

Underground Production Channel Sampling

- The sector of the wall to be sampled is cleaned with pressurized water. Structures are mapped and lithologic contacts defined, and samples marked so that no sample has more than one lithology. Samples have a maximum length of one metre and are from two to three kilograms in weight.
- Channel samples are collected by manually opening the channels, using a hammer and small steel pointer crowned by carbide or small jackhammer.
- The channel samples have lengths ranging from 50 cm to 1.5 m, average widths between five and ten centimetres, and are approximately three centimetres deep.
- Two sets of channel samples are regularly collected on the face. One set of channel samples is collected approximately along the back once the work area has been secured. The second set of channel samples is collected at the grade height once the heading has been mucked and secured.
- Channel samples from the walls and back are collected at approximately five metre intervals. When the mineralization has very flat dips, the channel samples are collected starting at the floor level on one side and continuing over the drift back to the floor on the opposite side. In case of a steep dip, the channel samples are collected only at the roof.
- Either an aluminum tray or a thick plastic canvas placed on the floor of the drift is used to collect the material. Samples are then stored in a thick plastic bag and identified by a numbered label, which is protected by a thin plastic cover and placed with the sample.
- At the sampling site, samples are identified with paint.
- Sketches are prepared with lithological and structural information, and sample locations are surveyed.

Sample Preparation and Analysis

For surface-based exploration drill holes completed prior to 2015, samples were prepared at the independent SGS laboratories in Belo Horizonte. For other drill holes and channels collected prior to 2015, samples were prepared at Jaguar's onsite laboratories by drying, crushing to 90% -2 mm, quartering with a Jones splitter to produce a 250 g sample, and pulverizing to 95% -150 mesh. Analysis for gold is by standard fire assay procedures, using a 50 g or 30 g sample and an AAS finish. The SGS laboratory based in Belo Horizonte meets international analytical standards and ISO 17025 compliance protocols. SGS is independent of Jaguar. Analytical results from the SGS laboratory were forwarded to Jaguar's Exploration or Mine Departments by e-mail, followed by a hard copy.

All samples from the 2015 to 2022 drilling programs executed at Pilar and Roça Grande were analyzed for gold either at Jaguar's onsite laboratory, or by the ALS laboratory located in Belo Horizonte. Samples from the Córrego Brandão deposit were analyzed exclusively by ALS. The ALS laboratory based in Belo Horizonte meets international analytical standards and ISO 17025 compliance protocols. ALS is independent of Jaguar.

At Jaguar's onsite laboratory, samples from Pilar are dried and then crushed. A one-kilogram sub-sample of the crushed material is selected for pulverization to approximately 70% - 200 mesh. The ring and puck pulverisers are cleaned after each sample using compressed air and a polyester bristle brush. The analytical protocol for all samples employs a standard fire assay fusion using a standard 30 g aliquot, with the final gold content being determined by means of AAS. The detection limit for fire assay analyses is 0.05 g/t Au. A second cut from the pulps is taken and re-assayed for those drill core samples where the grade is determined to be greater than 30 g/t Au. If the two assays are in agreement, only the first assay is reported. The AAS unit is calibrated to directly read gold grades up to 3.3 g/t Au, samples with grades greater than this are re-assayed by diluting the solute until it falls within the direct-read range.

Quality Assurance and Quality Control (QA/QC)

In adherence to stringent quality assurance and quality control (QA/QC) protocols, a duplicate analysis is systematically conducted after every 20 samples, signifying an insertion frequency of 5%. Utilizing commercially sourced standard reference materials procured from Rocklabs, these standards are introduced into the sample stream at the same frequency, ensuring a comprehensive evaluation process. Additionally, blank samples, consisting of crushed, barren quartzite, or gneiss, are systematically incorporated at a rate of one in every 20 samples, serving to meticulously assess and mitigate the risk of contamination and carry-over during the crushing and pulverization stages.

Pertaining to the channel sampling programs, a selection of pulp samples has been dispatched to the ALS laboratory in Vespasiano, Minas Gerais, for third-party check analyses. The obtained analytical results have demonstrated a commendable level of comparability with the analyses conducted by Jaguar.

Subsequently, the outcomes derived from the blanks, duplicates, and standards are routinely transmitted to Jaguar's head office on a monthly basis, facilitating their integration into the internal database. Within this database, results from the standard samples undergo regular visual scrutiny for out-of-range values. Should any anomalies be identified, a formal request for reanalysis is promptly dispatched to the laboratory. Only those assays that successfully pass the validation tests find inclusion in the main database.

Moreover, an internal QA/QC program is independently administered by the Caeté laboratory, encompassing rigorous assessments for all drill core samples and channel samples. This internal program operates distinctly, ensuring a comprehensive and multifaceted approach to quality control within the organization.

APPENDIX 4 – Paciência Mining Complex Background

Property Description and Location

The Paciência Gold Mining Complex (“CPA”) is located in the Acurui district, which is a part of the municipality of Itabirito in the central area of the Iron Quadrangle. The distance from the project site to the main neighboring cities are: 23 km to Itabirito, 53 km to the historic city of Ouro Preto, and 81 km to Belo Horizonte.

The Paciência Gold Mining Complex comprises a number of contiguous mineral rights holdings granted by the Agência Nacional de Mineração (ANM/DNPM) that cover an area of 9,005.35 ha of permits (“mining concessions” and “exploration authorizations” altogether) in the region. The Paciência Mining Complex includes a nominal 1,750 tpd processing plant and tailings disposal area. From 2008 to 2012, the Paciência Mining Complex has processed ore material from various local deposits, including the Santa Izabel, Marzagão and Córrego Grande underground mines, which are hosted by the Paciência lineament/trend, and from other more distant deposits in the immediate region (e.g: Ouro Fino, Rio de Peixe, Palmital, and Pilar).

The historical production coming from the deposits Santa Izabel/Córrego Grande and Marzagão, and processed at the Paciência/CPA plant, corresponds to a total of 1,755 kt at a mill head grade of 3.06 g/t Au (153,725 oz of gold were produced). The average mill recovery from 2008 to 2012 was 92.4 %. Electricity was/is provided to the Paciência mine site from the Brazilian national grid by CEMIG, the state-owned utility company in Minas Gerais.

Royalties on the Past Revenues of the Paciência Mining Complex: In 2003, Jaguar Mining (the local entity MSOL) executed a sale-purchase agreement with AngloGold Ashanti Ltda. covering the three main individual tenements related to what is now termed the CPA Mine Complex (ANM/DNPM Processes 830.373/1979 – Bahú deposit, 830.374/1979 – Marzagão deposit, 830.375/1979 – Santa Izabel deposit). The agreement includes fixed payment and related commitments over a 10-year period (now expired) and a sliding scale Royalty (NSR), as tabulated below (Table 33). Jaguar and AngloGold Ashanti have ongoing discussions regarding restructuring the above-mentioned NSR Royalty Agreement which, in its original form, does not reflect current or projected market conditions.

The Paciência Plant was commissioned in April 2008 and commercial production was declared in December 2008 and has been placed on care and maintenance since 2012.

Table 24: Past NSR Royalty Agreement with AngloGold Ashanti for the Paciência Mining Complex which, in its original form, does not reflect current or projected market conditions

Gold Price (US\$/oz Au)		NSR Royalty Amount (%)
From	To	
0	290.00	1.5
290.01	320.00	2.0
320.01	350.00	2.5
350.01	390.00	2.7
390.01	430.00	3.0
430.01	470.00	3.5
470.01	510.00	4.0
Above 510.00		4.5

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Paciência Gold Mining Complex lies approximately 1,077 m above sea level and is centered on the original Santa Isabel underground mine. The portal of the Santa Isabel mine (the primary past mining operation of the Paciência Gold Mining Complex) has

the coordinates of 20°12'27.84" S latitude and 43°41' 9.51" W longitude.

The Paciência area terrain is rugged, with numerous rolling hills. The area experiences six months of warm dry weather (April to November) with the mean temperature slightly above 20°C, followed by six months of tropical rainfall. Annual precipitation ranges from 1,300 mm to 2,500 mm and is most intense in December and January.

The Itabirito town, located close to the project site, has good urban infrastructure, including banks, a hospital, schools, and commercial businesses. Access to the project site is provided by a 16 km public road that joins BR-356, the main road that goes to Ouro Preto.

To accommodate all support activities in the near past, the complex's ancillary buildings are concentrated near the processing plant. There are specific buildings including: a maintenance shop, cafeteria, warehouse, change room for the plant crew, and buildings for administration, first aid, materials warehousing and water treatment. The explosives and blasting accessories warehouses are located 1.5 km away from the mine area, in compliance with the regulations set forth by the Brazilian Army. The facilities that relate solely to the underground operations are located near the mine portal. These include a small office, compressors, and a mobile equipment maintenance shop.

Geological Setting

The Paciência Mining Complex is located in the central portion of the Iron Quadrangle province. The Paciência area, where the Complex is located, is underlain by rocks of Archaean and Proterozoic ages. Archaean units at the vicinities of the Complex site include a granitic basement and granitic stocks, which are overlain by the Nova Lima Group, a sequence of mafic to intermediate volcanic flows and pyroclastics and associated sediments. Proterozoic units are represented by sedimentary packages of the Minas Supergroup, which includes basal quartzites and Witwatersrand-type conglomerates, and the well-known Lake Superior-type BIF packages of the Itabira Group.

The Nova Lima Group, the host stratigraphic package of the Mining Complex main deposits, can be sub-divided in the Paciência region into three units:

- A basal unit composed of mafic (basic) to intermediate meta-volcanic rocks interlayered with meta-pelites, Algoma type BIFs, and rare acidic meta-volcaniclastic rocks.
- An intermediate unit represented by meta-mafic to meta-felsic volcanic rocks and meta-volcaniclastic rocks interlayered with graphitic phyllites and horizons of Algoma type BIFs.
- An upper unit composed of meta-pelites interlayered with felsic meta-volcanic rocks and meta-volcaniclastic rocks, quartzites, and meta-conglomerates.

As part of the complex and polyphasic tectonic-structural history of the Iron Quadrangle, extensive crustal sutures producing regional structural lineaments are the apparent hosts of a significant number of gold occurrences and deposits emplaced on the upper stratigraphic portion of the Nova Lima Group metasedimentary package. In special, this is the local geological setting where the Paciência Mining Complex is located.

The Paciência Mining Complex is situated along the São Vicente/Paciência Lineament (Paciência Trend), the most prominent structure in the area. It is a northwest-trending, northeast dipping, transpressive, sinistral shear zone that extends for more than 60 km across the Iron Quadrangle, from the Ouro Preto city in the south to the Nova Lima town in the north. The Paciência region shows a significant number of surficial orogenic lode gold diggings, prospects and deposits that were intensively explored during the 17th and 18th centuries. Large surface excavations and old abandoned mines/diggings are distributed for many kilometers in a continuous straight line along the Paciência Trend.

Meta-pelitic and meta-volcanoclastic rock packages are the most common stratigraphic context in the Paciência Mining Complex area. Subordinate basic dikes and schists rich in quartz and carbonaceous material are present locally. Along the Paciência Trend shear zone, the meta-pelite and meta-volcanoclastic rock packages were subjected to marked processes of structural deformation and

hydrothermal alteration that resulted in the development of carbonate halos, chlorite and sericite-rich zones, and quartz veins swarms and silicification zones. Disseminated sulphides (pyrite, arsenopyrite, stibnite, sphalerite, chalcopyrite, and galena) in close association with the mineralized quartz veins swarms are common, but they do not commonly exceed 3% of the rock volumes.

Mineralization

Mineralized shoots are composed of concentrations of quartz veins and veinlets swarms and silicification fronts which are hosted by (hydrothermally altered) sericite-chlorite-quartz schists host packages. The length of the individual economic shoots varies between 10 m and 200 m along the strike of the host packages, and shoots can possess vertical extents much greater than several/many hundred meters following the down plunge direction of continuity.

The gold mineralization and the mineralized bodies pertaining to the deactivated Santa Izabel and Marzagão underground mines, and to the Bahú deposit as well, are genetically related to the Paciência lineament/trend structure.

The ore shoots are lenticular and stratabound (however not stratiform), but somewhat discontinuous laterally. The protolith host packages of the mineralized bodies seem to be a bit variable along the strike-length of the host shear zone structure and include metapelitic-to-metapsammitic turbiditic and metavolcanoclastics sequences of the Nova Lima Group.

The hydrothermal alteration fronts, currently represented by carbonatization, sericitization, silicification, and sulfidation zones/domains that obliterated protolithic lithologies, also generated concentrations of quartz veins/veinlets swarms within the foliation planes. Alteration and quartz veining also being probably coeval with elongated boudins and “filled” fold axes that trend mainly to the 115-120 azimuth direction and plunge downwards approximately 15 to 25 degrees. The lenticular quartz swarms are microcrystalline, white-grayish in color, and host some little pyrite, pyrrhotite, arsenopyrite, and stibnite disseminations, mainly concentrated at the borders of the quartz veins with the host hydrothermally altered schists.

The gold grades of the mineralization are variable, and individual samples with grades between 100 g/t and 500 g/t are not uncommon, due to the existence of coarse-grained gold. The gold particles occur in free native form or included in sulphides and/or along their grain boundaries.

The economic mineralized bodies of the Santa Izabel and Marzagão mines are “structurally controlled”, as their down-plunge continuities mimic (in attitude) the linear structural fabrics that are measured underground (intersection lineations, stretching lineations and mesoscopic fold axes).

Underground and Surface/Exploration Diamond Drilling Activities Completed in 2022

Between September and November 2022, Jaguar drilled 09 drillholes, totalizing 1,999 meters, as an effort to better known, access and double-check the mineral resources-base and the down-plunge continuity of the Bahú deposit only.

Gold mineralization at the Bahú deposit is hosted by quartz veining and alteration of the host rocks and is modelled as shallow dipping tabular sheets that sub-parallel the regional foliation. The mineralization is considered to be amenable to extraction using open pit mining methods for the shallow portions of the deposit. Underground cut-and-fill mining method is envisioned to be utilized to extract the mineralization from the deeper portions of the deposit. Mineralization is envisioned to be processed at the Paciência plant. The Mineral Resource estimates, with an effective date of March 31, 2023

Sample Preparation, Analyses, Quality Assurance/Quality Control and Security

QA/QC programs at the Paciência site consisted of:

- Submission of the blanks, certified reference material (CRM), and duplicate samples to the laboratories.
- Re-submission of selected rejects and pulps to the laboratories for re-assays.
- Checking the original results at an outside accredited assay laboratory.

The following procedure was used for each sample lot assayed:

- Blanks: One was inserted at the beginning and another at the end of the lot, and one in every 20 samples.
- Standards: RockLabs certified standards were included at a rate of one in every 20 samples.
- Duplicates: One in every 20 samples.
- Interlab Check Control: pulps and crushed samples assayed at the primary laboratory were re-assayed at a second laboratory.
- Control Blanks: Control blanks were employed to check for contamination, drift, or tampering.

Blanks were composed of crushed, barren quartzite, or gneiss. They were used to check for contamination. The detection limit for fire assay gold analyses was < 0.02 g/t Au (SGS and LKG) and < 0.05 g/t Au (Jaguar internal labs).

APPENDIX 5 – Permits, Licences and Other Regulatory Approvals

The following permits, licenses and other regulatory approvals are required for the operation of Jaguar’s mining activities:

1. Under current regulations, all exploration activities that the Company undertakes through its subsidiaries (being MSOL) must be carried out on valid exploration licenses or prospecting permits issued by the ANM. The ANM is responsible for the administration of all mining and exploration licenses and prospecting permits. According to local regulations, the Company must submit a final exploration report before the expiry date of any license or permit, which is usually three years from the date of grant. Mining operations currently pay a 1% royalty fee to the Financial Compensation for Mineral Exploitation (Compensação Financeira pela Exploração de Recursos Minerais) (the “CFEM”), on the value of the ore produced and 1,5% on the value of the gold produced. However, the Brazilian government is currently considering the adoption of new mining legislation that would include increases in the CFEM royalties. All local agencies have the right to monitor and evaluate compliance with environmental permits, even though such monitoring tends to be minimal in scope and nature. Any changes to the exploration activities that result in a greater environmental impact require approval.

In order to build, develop and operate projects in Brazil, companies are required to obtain three types of permits, as required by Brazilian environmental authorities. The Licença Prévia (the “LP”), which is often referred to as the Preliminary License, is the first of these three permits and focuses on the initial phase of business planning. The LP is valid for up to five years and is granted by the Environmental Agency of the State where a project is located. The LP approves the location and concept of a project, confirms the environmental viability and feasibility of a project, and establishes the basic requirements and conditions for the next phase of the permitting process.

The Licença de Instalação (the “LI”), which is often referred to as the Installation License, authorizes the infrastructure of a project in Brazil and the commencement of construction. This phase includes fulfilling the LP conditions, approval of the mine development plan and approval of the basic environmental plan. The LI is valid for up to six years and is granted by the Environmental Agency of the State where a project is located. The LI authorizes the installation of a project and establishes conditions for the execution of programs and projects for prevention, mitigation, recovery and compensation of environmental impacts.

The third permit is the Licença de Operação (the “LO”), which is often referred to as the Operating License and is requested before the project is initiated and authorizes the day-to-day operations of a project in Brazil. The LO is valid for four to ten years and may be renewed by the Environmental Agency of the State where a project is located. Each of Jaguar’s material projects, the Turmalina Mine Complex and the Caeté Mine Complex, are in full production and the LO was obtained for each mine.

2. The following authorizations granted by the ANM are also required for the operation of Jaguar’s mining activities: (i) an Exploration Consent, whereby the interested party is authorized to carry out mineral research, which is the execution of works aimed at defining deposits, its evaluation and the definition of the feasibility of its economic use; and (ii) an Exploitation Permit, whereby the ANM grants to the interested party the right to mineral exploitation of a certain area.
3. Permits issued by the municipality where projects are located.

4. Army authorization for managing and handling explosives.
5. Authorization from the applicable fire brigade.

Jaguar is regularly inspected by applicable government agencies in Brazil to ensure that Jaguar's business activities are duly authorized. Environmental inspections are supervised by the State Environment Agency. Inspections relating to mining rights are supervised by the ANM. Inspections relating to workers are supervised by the Ministry of Labor. Further, Jaguar's operations are subject to regular external and internal audits, including the external audits completed by Jaguar's auditors, KPMG LLP.

The governmental agencies that issue operating licenses in Brazil have the power to impose conditions for the operation of a company's business. Such conditions are established in accordance with applicable legislation. If these conditions are not fulfilled, the applicable agency has the power to suspend the license until the conditions are regularized, in which case the company can always discuss the matter in court if it does not agree with the agency's decision. Since commencing operations in Brazil, Jaguar has complied with all such conditions imposed on the operation of its business by applicable governmental agencies in Brazil.

APPENDIX 6 – Charter of the Audit and Risk Committee



CHARTER OF THE AUDIT AND RISK COMMITTEE

History of the Charter

Adopted by the Board: May 12, 2005

Amended by the Board: March 20, 2017

Purpose of the Committee

The Audit and Risk Committee (the "Committee") is appointed by the Board of Directors (the "Board") of Jaguar Mining Inc. (the "Company") to assist the Board in fulfilling its oversight responsibilities relating to financial accounting and reporting process and internal controls for the Company, including the preparation of any report required by The Ontario Securities Commission or other similar bodies in Canada or other countries.

The primary purpose of the Committee with respect to its audit mandate is to assist Board oversight of: (i) the integrity of the Company's financial statements, (ii) the qualifications and independence of the Company's external auditor (the "Independent Auditor") and the Internal Auditor (iii) the performance of both the Company's internal audit function and the Independent Auditor.

The primary purpose of the Committee with respect to its risk mandate is to assist the Board in fulfilling its oversight responsibilities related to the risks to which the Company is exposed and its enterprise risk management approach to managing and insuring against those risks.

The Committee is also the primary working committee of the Board with respect to overseeing matters related to compliance with ethical and anti-corruption legislation.

A. Duties

The Committee's primary duties and responsibilities are to serve as an independent and objective committee of the Company's

Board, with responsibility for the completion of the general tasks set out in this section and the specific tasks set out in Section F. In addition, the Committee shall report to the Board with such recommendations and other matters as the Committee deems appropriate so that the Board is informed of the Committee's activities.

1. Conduct such reviews and discussions with management and the independent auditors relating to the audit and financial reporting as are deemed appropriate by the Committee;
2. Assess the integrity of internal controls and financial reporting procedures of the Company and ensure implementation of such controls and procedures;
3. Review the quarterly and annual financial statements, management's discussion and analysis of the Company's financial position and operating results, and all press releases and website postings pertaining to financial matters prior to their being filed with the appropriate regulatory authorities or posted on the Company's website and report thereon to the Board;
4. Recommend the selection of the Company's external auditors and monitor the independence and performance of the Company's external auditors (the "Independent Auditors") and internal auditors, including attending private meetings with both and reviewing and approving prior to recommendation to the Board all renewals or dismissals and the remuneration of both;
5. Set clear policies regarding the hiring of employees or former employees (including partners) of the present and former Independent Auditors by the Company;
6. Monitor the quality and integrity of the Company's financial statements and other financial information;
7. Provide oversight to related party transactions entered into by the Company;
8. Oversee the operation of the Company's whistleblower program to ensure timely and effective compliance with legal requirements and high ethical standards;
9. Oversee the Company's compliance with the Foreign Corrupt Practices Act and similar legislation in all countries relevant to the Company;
10. Oversee the Company's information technology programs to ensure data integrity, sound financial control processes and security measures to protect the Company's data and information; and
11. Oversee the Company's enterprise risk management and insurance programs.

B. General Authority

1. The Committee shall have the resources and authority it deems necessary and appropriate to discharge its responsibilities at the Company's expense, including authority to select and retain legal or other consultants or experts, to approve the fees and other retention terms related to the appointment of such consultants or experts, and to terminate the services of any such consultants or experts with respect to any matters including compensation.
2. The Committee shall have the power to call upon assistance from officers and employees of the Company and outside counsel and other advisers, including the Independent and Internal Auditors.
3. The Committee, and each member of the Committee in his or her capacity as such, shall be entitled to rely, in good faith, on information, opinions, reports or statements, or other information prepared or presented to them by officers and employees of the Company, whom such member believes to be reliable and competent in the matters presented and on counsel or other persons as to matters which the member believes to be within the professional competence of such person.
4. Except as limited by law, or applicable securities rules and regulations, the Committee may form and delegate authority to such individuals or subcommittees as it deems appropriate.

5. The Committee has the authority to conduct any investigation appropriate to its responsibilities.
6. The Committee shall be given unrestricted access to the books and records of the Company.
7. The Committee may fulfill additional duties and adopt additional policies and procedures as may be appropriate in light of changing business, legislative, regulatory or other conditions. The Committee shall keep the Board apprised of any additional duties it intends to fulfill.
8. The Committee shall have the power to adopt its own operating rules and procedures, without the consent of management.
9. The Committee shall perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.

C. Composition and Meetings

I. Composition of Committee

1. The Committee shall be composed of three or more directors of the Company as shall be designated by the Board from time to time. The Board shall appoint a member who shall serve as Chair of the Committee.
2. Each member of the Committee shall be “independent” and “financially literate” (as such terms are defined in Multilateral Instrument 52-110 of the CSA) and meet any eligibility criteria mandated by applicable corporate or securities law, or the rules of any applicable stock exchange.
3. Members of the Committee and the Chair shall receive such remuneration for their service on the Committee as the Board may determine from time to time (which remuneration may include cash and/or shares or options or other in-kind consideration ordinarily available to directors).

II. Committee Meetings

1. The Committee shall meet at least once each quarter, at the discretion of the Chair or a majority of its members, as circumstances dictate or as may be required by applicable legal or listing requirements.
2. A minimum of two and at least 50% of the members of the Committee present either in person or by telephone shall constitute a quorum.
3. If and whenever a vacancy shall exist that is not filled by an appointment by the Board, the remaining members of the Committee may exercise all of its powers and responsibilities so long as a quorum remains in office.
4. The time and place of the Committee meetings shall be determined from time to time by the Committee. A meeting of the Committee may be called by letter, telephone, facsimile, email or other communication equipment by giving at least 48 hours notice, provided that no notice of a meeting shall be necessary if all of the members are present either in person or by means of teleconference or if those absent have waived notice or otherwise signified their consent to the holding of such meeting. The independent auditor will be provided notice of all meetings of the Committee and will generally attend unless the subject matter is such that attendance is not required or desirable.
5. The Chair will chair all meetings of the committee and set the agendas for committee meetings.
6. The Committee shall keep minutes of its meetings, which shall be submitted, to the Board. The Committee may, from time to time, appoint any person who need not be a member to act as a secretary at any meeting.
7. The Committee may invite such officers, directors and employees of the Company and its subsidiaries or any other person as it may see fit to attend at meetings of the Committee.

8. Any matters to be determined by the Committee shall be decided by a majority of votes cast at a meeting of the Committee called for such purpose. Actions of the Committee may be taken by an instrument or instruments in writing signed by all of the members of the Committee, and such actions shall be effective as though they had been decided by a majority of votes cast at a meeting of the Committee called for such purpose. All decisions or recommendations of the Audit Committee shall require the approval of the Board prior to implementation by the Company, except for any recommendation or approval that is specifically delegated by the Board.

9. The Committee will prepare an annual work plan to guide its activities and shall review the work plan with the Board.

D. Responsibilities

I. Financial Accounting and Reporting and Internal Controls

1. The Committee shall review the Company's annual audited financial statements to satisfy itself that they are presented in accordance with applicable accounting principles and report thereon to the Board and recommend to the Board whether or not same should be approved prior to their being filed with the appropriate regulatory authorities. The Committee shall also review and approve the Company's quarterly financial statements and management discussion and analysis prior to their being filed with the appropriate regulatory authorities and report thereon to the Board. With respect to financial statements and related materials, the Committee shall discuss significant issues regarding accounting principles, practices, and judgments of management with management and the Independent Auditors as and when the Committee deems it appropriate to do so.

2. The Committee shall review all press releases pertaining to financial matters to ensure conformity with the Company's financial statements and timely disclosure obligations.

The Committee shall satisfy itself that the information contained in the annual audited and quarterly financial statements is not erroneous or misleading in a material manner and that the audit and/or review function has been effectively carried out.

3. The Committee shall review annual and quarterly management's discussion and analysis and annual and quarterly financial statements, and any other public disclosure documents that are required to be reviewed by the Committee under any applicable laws prior to their public disclosure or being filed with the appropriate regulatory authorities including, without limitation, any press releases announcing annual or quarterly earnings.

4. The Committee shall review management's internal control reports and the evaluation of such reports by the Independent Auditors, together with management's responses.

5. The Committee shall meet no less frequently than annually with the Independent Auditors and the Chief Financial Officer to review accounting practices, internal controls and such other matters as the Committee deems appropriate.

6. The Committee shall inquire of management and the Independent Auditors about significant risks or exposures, both internal and external, to which the Company may be subject, and assess the steps management has taken to minimize such risks.

7. The Committee shall review, during an in-camera meeting, the post-audit or management letter containing the recommendations of the Independent Auditors and management's response and subsequent follow-up to any identified weaknesses.

8. The Committee shall provide oversight to related party transactions entered into by the Company.

9. The Committee shall satisfy itself that adequate procedures are in place for the review of the Company's public disclosure of financial information derived or extracted from the Company's financial statements and periodically assess the adequacy of those procedures.

10. The Committee shall provide oversight of the Company's programs for hedging gold prices and currencies.

II. Independent Auditors

1. The Committee shall be responsible for recommending to the Board the selection, appointment, renewal, dismissal, compensation and oversight of the Independent Auditors, and the Independent Auditors shall report directly to the Committee.
2. The Committee shall directly monitor and assess the relationship between management and the Independent Auditors and monitor, confirm, support and ensure the independence and objectivity of the Independent Auditors. The Committee shall be responsible for resolving disagreements between management and the Independent Auditors. The Committee shall establish procedures to receive and respond to complaints with respect to accounting, internal accounting controls and auditing matters.
3. The Committee shall pre-approve all audit and non-audit services not prohibited by law to be provided by the Independent Auditors to the Company or its subsidiaries. This can be completed by the Chairman of the Committee, provided the Committee receives a report at the next meeting. The Committee shall not allow fees for non-audit services provided by the Independent Auditors to exceed \$25,000 for a specific project or \$50,000 in aggregate during a given year without the express approval of the Board.
4. The Committee shall review the Independent Auditor's audit plan, including scope, procedures and timing of the audit.
5. The Committee shall review, during an in-camera meeting, the results of the annual audit with the Independent Auditors, including matters related to the conduct of the audit.
6. The Committee shall obtain timely reports from the Independent Auditors describing critical accounting policies and practices, alternative treatments of information within applicable accounting standards that were discussed with management, their ramifications, and the Independent Auditors' preferred treatment and material written communications between the Company and the Independent Auditors.
7. The Committee shall review fees paid by the Company to the Independent Auditors and other professionals in respect of audit and non-audit services on an annual basis.

III. Internal Auditors

1. The Committee shall be directly responsible for the selection, appointment, renewal, dismissal, compensation and oversight of the Company's Internal Auditor(s), and the Internal Auditor will report directly to the Committee (through the Chairman) on all functional matters. The Internal Auditor shall report to the CEO with respect to operational matters and the Chairman of the Committee and the CEO will work together to ensure an appropriate balance between the independence of the Internal Auditor and conformity with the Company's overall procedures and processes.
2. The Committee will review annually the Internal Audit Charter and recommend any proposed changes to Management.
3. The Committee shall review and approve the annual internal audit plan prepared by the Company's internal audit group, including scope, procedures and timing of activities.
4. The Committee shall at each Audit and Risk Committee Meeting receive a report from the Company's internal auditors based on the results of their internal audit activities.
5. The Committee shall at each Audit and Risk Committee Meeting discuss during an in camera meeting the results of the internal audit activities with the Company's internal auditors, including matters related to the undertaking of the internal audits. In addition, the Committee will periodically review with the internal auditors any significant difficulties, disagreements with management, or scope restrictions encountered in the course of their work.

IV. Whistleblower Policy

1. The Committee shall oversee the procedures for the receipt, retention and treatment of complaints, including confidential or anonymous employee complaints with respect to accounting, internal accounting controls and auditing matters.

2. The Company will promptly forward to the Chairman of the Committee any complaints that it has received regarding financial statement disclosures, accounting, internal accounting controls or auditing matters. The Chairman shall keep the members of the Committee apprised of the progress of each investigation on a regular basis.

3. Any employee of the Company or any of its subsidiaries may submit, on a confidential and anonymous basis if the employee so desires, any concerns regarding financial statement disclosures, accounting, internal accounting controls or auditing matters. All such concerns will be set forth in writing and forwarded in a sealed envelope addressed to the attention of the chairman of the Audit Committee, c/o the Company's Toronto address set forth at the Company's website, in an envelope labeled with a legend such as: "To be opened by the Audit Committee only. Submitted pursuant to the Jaguar Mining Inc. Whistleblower Policy." If an employee would like to discuss any matter with the Committee, the employee should indicate this in the submission and include a telephone number at which he or she can be reached, should the Committee deem such communication is appropriate. Alternatively, concerns can be communicated by phone to Ethics Point, an independent service partner.

1-888-279-5268 for US and Canada, 0-800-891-1667 for Brazil or

<https://jaguarmining.com/en/compliance-program/whistleblower-hotline/>

4. Following the receipt of any complaints submitted, the Chairman shall initiate an investigation. Following the investigation, the Company shall take such corrective and disciplinary actions as it considers appropriate, and such action shall be discussed with the Chairman of the Committee. The Chairman shall report to the full Committee on a regular basis regarding investigation results and corrective action.

5. The Committee may enlist employees of the Company and/or outside legal, accounting or other advisor to conduct any investigation of complaints regarding financial statement disclosures, accounting, accounting controls or auditing matters. In conducting any investigation, the Committee shall use reasonable efforts to protect the confidentiality and anonymity of the complainant.

6. It is the policy of the Company that employees will not be discharged, demoted, suspended, threatened, harassed or in any other manner discriminated against as a result of any complaint made hereunder in good faith.

7. The Company shall make this policy available to all employees.

8. The Committee will retain as a part of its records any such complaints or concerns for a period of at least seven (7) years.

G. Review of Charter and Self-Assessment

1. The Committee should review and reassess the adequacy of this Charter no less than every two years.

2. The Committee shall review annually the Committee's own performance.

3. The Committee should review no less than every two years the Whistleblower Policy.

H. Other Responsibilities

The Committee shall perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.

The Board may at any time amend or rescind any of the provisions hereof, or cancel them entirely, with or without substitution.