

# JAGUAR



MINING INC.

**ANNUAL INFORMATION FORM**

**FOR THE YEAR ENDED DECEMBER 31, 2021**

**March 31, 2022**

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## 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 regulatory and governmental approvals for its development projects and other operations on a timely basis; that Jaguar is able to obtain 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; 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: 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; actions taken against the Company by governmental agencies and securities and other regulators; potential direct or indirect operational impacts resulting from infectious diseases or pandemics, such as the coronavirus (SARS-CoV-2) (“COVID-19”) pandemic, climate change effects, and other factors not currently viewed as material that could cause actual results to differ materially from those described in the forward-looking statements. Important factors that could cause actual results to differ materially from these expectations are discussed in greater detail under the heading “*Risk Factors*” in this AIF. When relying on forward-looking statements to make decisions with respect to Jaguar, carefully consider these risk factors and other uncertainties and potential events. Jaguar undertakes no obligation to update or revise any forward-looking statement, except as required by law.

## REPORTING CURRENCY

In this AIF, dollar amounts are reported in United States (“US”) dollars unless otherwise stated.

## CORPORATE STRUCTURE

### 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 Mineração Serras do Oeste Ltda. (“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 National Department of Mineral Production (“DNPM”) Mineral Exploration Request no. 831.264/87 and DNPM Mineral Exploration Request nos. 830.590/83 and 830.592/83 (the “Rio de Peixe Property”). Jaguar was moved into Ontario in October 2003 pursuant to the Business Corporations Act (Ontario) and is a corporation existing under the laws of Ontario.

On October 9, 2003, pursuant to an amalgamation agreement dated July 16, 2003, Jaguar amalgamated with Rainbow Gold Ltd. (“Rainbow”), a New Brunswick corporation and a then inactive reporting issuer listed on the TSX Venture Exchange (the “TSX-V”), through a reverse take-over. The amalgamated entity adopted the name “Jaguar Mining Inc.” Jaguar was approved for listing on the TSX-V on October 14, 2003, and began trading on October 16, 2003. Jaguar subsequently graduated from the TSX-V to the Toronto Stock Exchange (the “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.” The common shares of the Company were delisted from the NYSE on June 7, 2013, and from the TSX on April 30, 2014, when the Company announced that the TSX-V had accepted its listing application. 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 commenced trading on the TSX on August 3, 2016, and the common shares of Jaguar were simultaneously delisted from the TSX-V.

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 significant reduction of operating costs. The registered and head office of MSOL is located at Rua Andaluzita, 131, 7º Andar, Carmo, Belo Horizonte, Minas Gerais, CEP 30310-030, Brazil. Jaguar’s head and registered office is located at 100 King Street West, 56th Floor, Toronto, Ontario, Canada, M5X 1C9. 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 72,460,203 common shares outstanding on a non-diluted basis.

MSOL and Jaguar's Assets and Operations in Brazil

MSOL does not have a board of directors but rather, it has two administrators who are also executive officers of Jaguar that report directly to the Chief Executive Officer 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 Administration 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 regards to MSOL 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 (Hashim Ahmed), 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. Ahmed), all members of Jaguar's management team are residents of Brazil. Prior to the imposition of travel restrictions relating to COVID-19, Mr. Ahmed travelled to Brazil to meet with local management and visit the Company's material projects approximately ten times a year.

Jaguar's finance team reviews the management accounts of MSOL at the end of each quarter.

MSOL is entirely funded by Jaguar as all proceeds from the sale of gold in Brazil are directly transferred by the purchasers to Jaguar, rather than MSOL. Management of Jaguar then transfers funds to MSOL on an as-needed basis, following thoughtful deliberations with the Board in regards 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 Resource 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 it is not a requirement under Brazilian law. Jaguar's books and records are located at the head office of Jaguar in Toronto, Ontario.

Jaguar Mining Inc. – Corporate Structure Chart (as at March 2022)



## GENERAL DEVELOPMENT OF THE BUSINESS

### Overview of Business

Jaguar Mining Inc. is a Canadian-listed junior gold mining, development, and exploration company operating in Brazil with three gold mining complexes and a large land package with significant upside exploration potential from mineral claims covering an area of approximately 60,000 hectares (Ha) (Jaguar Mining 33,000 Ha, Iamgold JV 27,000 Ha). The Company's principal operating assets are located in the Iron Quadrangle, a prolific greenstone belt in the state of Minas Gerais; and include the Turmalina Gold Mine Complex and Caeté Gold Mine Complex. The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012.

Potential for a significant increase in gold production exists through further exploration and development of the Company's existing brownfield land package around its existing mines.

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

### Recent History

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

#### **Turmalina Mining Complex – Operational Review, Exploration and Mineral Reserves and Mineral Resources**

Gold production at Turmalina was 37,505 oz. in 2021, 40,068 oz. in 2020, and 33,400 oz. in 2019.

Underground development at Turmalina totalled 5.6 km in 2021, 5.7 km in 2020, and 4.8 km in 2019. During 2021, a total of 46.7 km of underground delineation drilling, infill drilling and exploratory drilling was completed at the mine.

The mining method utilized at the Turmalina underground mine is sublevel open stoping with backfill. Jaguar's priority is to stabilize production at +40 koz/yr while reducing unit costs with good mining practices. The longer-term aim is to increase the production capability of Turmalina with exploration success.

### 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).*

#### **Orebody "A", "B" and "C"**

At Turmalina, infill and growth exploration diamond drilling targeting both Mineral Resource to Mineral Reserve conversion and the generation of new Inferred Mineral Resources (as defined below) continued during 2021. The Company aims to replace mined depletion through infill and growth-focused diamond drilling and regular sampling of mining development. Consolidated Mineral Resource and Mineral Reserves inventories presented in this AIF will also be reported in a National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101") Technical Report uploaded to SEDAR on April 6<sup>th</sup>, 2022.

Growth exploration has and will continue to target shallow extensions to mineralization along the Orebody C Trend, as well as potential downdip / plunge extensions to mineralization associated within the Orebody A, B and C structures at depth.

Further step out drilling along strike is planned to investigate the potential of mineralized structures extending

northwest between Orebody C-NW and the Faina mineralization some 1,000m further along strike.

### ***Faina Deposit***

The Faina Deposit has a mineral resource of 1.8 Mt at 7.21 g/t containing 418 koz of mainly Inferred Mineral Resource. The Mineral Resource is accessible from Turmalina's current underground workings.

The shallow oxide portions of the Faina deposit were previously mined via an open pit, but due to the refractory nature of 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 and very encouraging average gold grades (> 5gt Au over widths greater than 4m), along strike and extending to depth. Results from a June 2021 preliminary metallurgical test work study on Faina sulphide samples selected from several large-diameter (PQ) diamond drill holes demonstrated that metallurgical recoveries > 85% are reported from a combination of gravity concentration followed by flotation of gravity tails. The above results and ongoing studies will inform conceptual mine studies and plans supported by modern advances in metallurgical processes for the extraction of gold from refractory ores.

In late 2021, Jaguar reported plans for a campaign of infill diamond drilling comprising 15,000m of diamond drilling commencing in Q1-2022 aimed at the conversion of the inferred mineral resource inventory at Faina to the indicated mineral resource. This drilling will provide representative samples for comprehensive metallurgical test work that will inform prefeasibility studies. Importantly, these 2022 studies will evaluate the viability of adding to the production profile and life of the nearby Turmalina Mine, by accessing the Faina deposit northwest from currently active underground mining areas, and the utilization of available excess crushing and milling capacity.

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 completed along the down-plunge and strike continuity of the currently defined portions of the Faina deposit.

### ***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 itself has a Measured and Indicated Mineral Resource of 62koz at a grade of 4.72 g/t Au and an Inferred Mineral Resource of 21koz at a grade of 5.03 g/t Au.

In late 2021, 6 diamond drill holes (1,466m) were drilled in the "gap" between Pontal and Faina.

These diamond holes targeted southern extensions of the historically known Pontal deposit (above) and associated mineralized trend, which was highlighted as magnetically anomalous by a drone-based magnetic aerial survey completed for Jaguar (2020-2021) over selected portions of its Turmalina tenement portfolio. The new airborne magnetic datasets were acquired using a drone (hexacopter) with GEM magnetometer as part of an Avant Geofisica's DRONEmagTMs system survey. The consulting company Southern Geoscience Consultants (SGC-Australia) has produced an integrated interpretation of the magnetic data for Jaguar and proposed targets for follow-up drill-testing.

Initial results from this drilling have been encouraging, with several 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 28.8m @ 2.67 g/t Au, including 21.95m @ 3.29 g/t Au.

### **Zona Basal Target**

The Zona Basal target area is located approximately 3.0-3.5 km west of the Turmalina mining 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 wide-spaced holes following-up and targeting near surface oxide and potentially deeper, structurally controlled sulphide extensions to the bedrock gold intersections seen in surface trenching (both within the footprint and along the margins of an extensive 100 ppb Au soil anomaly). 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 width of 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 respectively. 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 H2/2021, 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 constrained by a central area which extends some 1,000 m along strike by 200 m width (across strike) and to a depth of 30-50 m. A total of 119 reverse-circulation holes (6,751 m) were completed to an average depth of 50 m (October - 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, 2,120 m). Results from this RC drilling were fully reported in February 2022 and are currently being modelled and evaluated.

### **Processing**

Ore produced at Turmalina is transported to the adjacent Carbon-In-Leach ("CIL") processing plant. During Q4 2021, the plant processed 101,000 tonnes (t) at an average grade of 3.55 g/t; as compared to Q4 2020, the plant processed 111,000 tonnes at an average grade of 3.27 g/t and 99,000 tonnes at 3.44 g/t in Q4 2019.

Overall, the processing plant maintained a recovery rate of 88% during Q4 2021, 87% during Q4 2020, and 89% during Q4 2019. The Company successfully recommissioned Mill #3 in 2017, with an estimated installed capacity of 1,600 tpd. Using only Mill #3, Turmalina is able to process the entire current and planned mine production with a lower operating cost. Through electricity consumption savings, Mills #1 and #2 are being kept on standby mode. 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.

### **Mineral Reserves and Mineral Resources Update**

For the purposes of this AIF, Mineral Reserves and Mineral Resources for Turmalina as at December 31<sup>st</sup>, 2021, are reported based on an updated resource model and mine plan informed by diamond drilling, development sampling and geological mapping completed during 2020 and 2021.

Turmalina Mine 2P Mineral Reserves are reported as 256,000 oz of gold (2,177,000 t grading 3.66 g/t). Proven Reserves total 126,000 oz (1,012,000 t grading 3.88 g/t), while Probable Reserves total 130,000 oz (1,165,000 t grading 3.47 g/t).



Measured and Indicated Mineral Resources (as defined below) (as at December 31<sup>st</sup>, 2021) at Turmalina total 525,000 oz. of gold (3,982,000 t grading 4.10 g/t Au). Inferred Resources as at December 31<sup>st</sup>, 2021 at Turmalina total 221,000 oz. of gold (2,176,000 t grading 3.15 g/t Au).

### **Caeté Mining Complex – Operational Review, Exploration, Mineral Reserves and Mineral Resources**

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 2,200 tpd gravity, flotation and CIP treatment of flotation concentrate Caeté processing plant adjacent to RG, a total distance of approximately 40 km by road. During Q4 2021, the Caeté plant achieved a gold recovery of 87.5%. 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.

#### ***Mining - Pilar***

Pilar continued to focus on improvements in adherence to the mine plan and ore quality improvements focusing on initiatives to reduce dilution from overbreak, which impacts the mined grade and reduces profitability. The Pilar’s geological team has focused on detailed geological and structural mapping of the complex geometries associated with mineralization to support interpretation of infill and exploration drilling completed since 2019. A new wireframe model was developed and used in 2020-2021, to better reflect the geology and lithology controls at Pilar, which has improved the estimation, planning and stope design process. More improvements related to data treatment, estimation methods and criteria, and resource classification will be implemented during 2022.

#### ***Exploration Highlights***

At Pilar, infill and growth exploration diamond drilling targeted at both Mineral Resource to Mineral Reserve conversion and the generation of new Inferred Mineral Resources continued during 2021. The Company aims to replace mined depletion through infill and growth-focused diamond drilling and regular sampling of mining development. Consolidated Mineral Resource and Mineral Reserves inventories presented in this AIF will also be reported as part of a NI 43-101 Technical Report uploaded to SEDAR on March 31<sup>st</sup>, 2022.

Growth exploration has and will continue to target shallow extensions to mineralization associated with the SW, Torre, BA and Sao Jorge Structures, including the main BIF hosted mineralization. Higher grade mineralization extensions projected down plunge are being specifically targeted at depth associated with the BF ore assembly (BF, BF2 and LPA zones).

#### ***Córrego Brandão Target***

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 (during 2021) has tested a relatively restricted portion of the semi-regional-scale fold structure mapped and targeted by Jaguar since 2020.

This first full drilling year (2021) at the target saw forty-four (44) diamond drill holes completed, totalling 5,670.40 m. This drilling campaign has 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 the order of 20-40 m. Moreover, the initially intercepted mineralized zones remain open both laterally and down-plunge.

Based on drilling completed by the end of 2021 at Córrego Brandão, a maiden Inferred Mineral Resource for the Córrego Brandão target is reported as 1,072,000 tonnes @ 1.48 g/t Au (51,000 Oz Au).

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.

### ***Ore Transport – Pilar***

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 46,373 oz. in 2021, 51,050 oz. in 2020, and 40,682 oz. in 2019. Underground development at Pilar totalled 4.3 km in 2021, 4.1 km in 2020, and 3.8 km in 2019. During 2021, a total of 33.3 km of underground delineation drilling, infill drilling and exploratory drilling was conducted across the complex.

During 2021, the Caeté plant achieved gold recovery of 87.5% 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.

### ***Mineral Reserves and Resources Update - Pilar***

Growth exploration diamond drilling programmes continued in 2021 at Pilar. The results from these programmes were combined with infill drilling and development sampling activities undertaken from 2020 and 2021 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 December 31<sup>st</sup>, 2021. Figures reported are based

on the most recent resource model after mined depletion during 2021.

As at December 31<sup>st</sup>, 2021, 2P Mineral Reserves for Pilar (Proven & Probable) are 251,000 oz. of gold (2,110,000 t grading 3.71 g/t Au), after mined depletion from the 2021 annual period. Proven Reserves total 149,000 oz (1,222,000 t grading 3.80 g/t), while Probable Reserves total 102,000 oz (888,000 t grading 3.59 g/t).

As at December 31<sup>st</sup>, 2021, Measured and Indicated Mineral Resources for Pilar total 467,000 oz. of gold (3,837,000 t grading 3.79 g/t Au). Inferred Resources for Pilar at the same date are 288,000 oz. (2,125,000 t grading 4.21 g/t Au).

#### **Mineral Reserves and 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.

The current measured and indicated Mineral Resources of RG total 121,000 oz. (962,000 t at an average grade of 3.90 g/t Au) and inferred Mineral Resources total 889,000 t at an average grade of 4.08 g/t Au (total of 117,000 oz. of gold).

#### **Mineral Resources Update – Córrego Brandão**

As at December 31<sup>st</sup> 2021, a maiden inferred mineral resource for the Córrego Brandão target is reported as 1,072,000 tonnes @ 1.48 g/t Au (51,000 Oz Au).

#### **Other 2021 and 2022 Updates**

On March 15, 2021, Jaguar executed a Definitive Agreement with Metalla (as defined below) for the sale of the Company's NSR from gold production at the CentroGold Project (also referred to as the Gurupi Project) located in Maranhão State, Brazil and 100% owned by Oz Minerals Ltd. The NSR is comprised of a 1% net smelter return on the first 500,000 ounces of gold sold, a 2% net smelter return from 500,001 to 1,500,000 ounces of gold, and a 1% net smelter return on gold sales exceeding 1,500,000 ounces of gold.

On June 28, 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:

Jaguar has paid C\$13.9 million in dividends, at C\$0.19 per common share, for the year ended December 31, 2021. The Company has also announced that its Board of Directors has declared a cash dividend of C\$0.04 per common share of the Company, to be paid on March 31, 2022, to shareholders of record as of the close of business on March 25, 2022. This is the same amount as was paid in the recent previous quarters. The dividend qualifies as an eligible dividend for Canadian income tax purposes.

## **DESCRIPTION OF THE BUSINESS**

### **General**

Jaguar is a gold mining company engaged in gold production and in the acquisition, exploration, development and operation of gold mineral properties in Brazil.

Jaguar's three operating mining complexes, Turmalina, Caeté, and the Paciência (currently on care and maintenance) are located in or adjacent to the Iron Quadrangle region of Brazil, a greenstone belt located east of the city of Belo Horizonte in the state of Minas Gerais.

Through its wholly owned subsidiary, MSOL, Jaguar has interests in, and controls, the mineral rights, concessions and licences to the Mineral Resources and Mineral Reserves presented under the section entitled "*Mineral Resources and Mineral Reserves.*"

All of Jaguar's production facilities are, or will be, near Jaguar's mineral concessions and are accessible via existing roads. Jaguar believes it has an advantage over other gold mine operators due to the clustered nature of its mineral resource concessions and the proximity of its concessions to its processing facilities and existing infrastructure.

### **Gold Production and Sales**

Gold production in 2021 totalled 83,878 oz. at cash operating cost of \$831 per ounce sold, in 2020 totalled 91,118 oz. at cash operating cost of \$647 per ounce sold, and in 2019 totalled 74,082 oz. at cash operating cost of \$800 per ounce sold.

Gold sales reported in 2021 totalled 84,638 oz., in 2020 totalled 91,853 oz., and in 2019 totalled 73,897.

### **Specialized Skill and Knowledge**

Numerous types of specialized skills, knowledge and experience are required of employees in the mining industry. Such skills and knowledge include permitting, geology, drilling, metallurgy, logistical planning, engineering and implementation of exploration programs, as well as legal compliance, finance and accounting. Jaguar has the necessary skilled employees and consultants to carry on its business as conducted and believes it will continue to be able to retain such employees and consultants.

### **Competitive Conditions**

The gold exploration and mining business is an intensely competitive business. Jaguar competes with numerous companies and individuals in the search for, and the acquisition of, mineral licences, permits and other mineral interests, as well as for the acquisition of equipment and the recruitment and retention of qualified personnel. There is also significant competition for the limited number of gold property acquisition opportunities. Jaguar's ability to acquire gold mineral properties in the future will depend not only on its ability to develop its present properties, but also on its ability to select and acquire suitable producing properties or prospects for gold development or mineral exploration.

### **Employees**

As at December 31, 2021, Jaguar had 1,224 employees compared to 1,160 employees in 2020 and 1,141 employees in 2019. 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 that is currently in place and set to expire on May 31, 2022. Jaguar anticipates that discussions regarding the new union agreement will commence in April 2022.

### **Foreign Operations**

All of Jaguar's mineral projects are owned and operated through MSOL. Jaguar's wholly owned 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 production of gold. Certain of the Company's assets are domiciled in Brazil-based solely on their geographic location.

Unlike MSOL, Jaguar is not domiciled in Brazil. Given the foregoing, as well as the fact that the Brazilian Civil Code grants all management powers of MSOL to its sole shareholder (Jaguar), 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 does not have any fixed customers 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. All the Company's suppliers have signed contracts with Jaguar. 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**

People are the most valuable asset of the Company. Jaguar sets the life and welfare of its employees, their families and communities as a first priority. Jaguar's safety and healthcare procedures are focused on promoting health and quality of life in the work environment. Jaguar has an integrated management system in place that promotes open communication at all levels.

Over the past few years, the health and safety team has expanded in order to meet compliance and regulatory requirements, and also to improve the Company's operating standards. Jaguar's training program for new employees is extensive and includes the participation of experienced professionals who act as mentors, providing hands-on guidance and conducting periodical reviews.

Jaguar applies an extended maternity leave period in order to promote health for newborns and also offers social work assistance in order to support the Company's employees and their families in challenging circumstances.

For every reported incident, Management identifies the likely causes and develops remediation plans to prevent future recurrences. The overall Lost Time Injury ("LTI") frequency rate is calculated as the number of lost-time injuries per million hours worked, including third-party contractors. All accidents are analyzed, and the underlying causes are identified to implement corrective actions.

### **ESG**

Interest in environmental, social and governance ("ESG") aspects of the Company's business has grown exponentially over the past few years, primarily from the financial and investment communities. This interest is long overdue in the Company's view: the recognition that, in the mining sector in particular, ESG performance and excellence go a long way to predict the financial performance and growth trajectory of a company like Jaguar. Identifying and managing these issues is not new for Jaguar. ESG topics span all departments in the Company: those related to

health, safety, environment and community (“HSEC”) aspects of the business are managed by the Company, and the remaining social and governance topics are the shared responsibility of other departments.

Jaguar's long-term goals highlight its commitment to being an efficient and sustainable gold mining company, aligning sustainability pillars with its respective goals. These goals are periodically reviewed and changed. Below are the Company's ESG goals to the end of 2023:

- increase in square footage of protected areas;
- water management protection for safe water cycle;
- tailing and dam safety management checks;
- environmental education amongst employees and communities;
- reduction in atmospheric emissions;
- reduction in total accidents;
- increase the prosperity of employees while decreasing poverty amongst communities;
- increase in community-led initiatives;
- implementation of increased hygiene protocols;
- increase employee development programs and assistance programs;
- diversity increased in executive and managerial positions;
- comprehensive programs to decrease risks related to corruption;
- increase in stakeholder engagement relating to ESG topics;
- increase in indirect jobs as a result of governance policies; and
- progress in implementing further ESG-Standard Gold Mining Practices.

The involvement of all Jaguar's stakeholders is essential to ensure that operations generate profit for shareholders and create a sustainable environment for operations and add value to all relationships. Engagement methods are tailored for each group.

The three principal pillars for Jaguar's ESG approach are as follows:

#### 1. *Environment*

Jaguar is committed to understanding, managing and working to reduce environmental impacts. Through engagement with local communities, governments and industry standards for environmental protection, we are demonstrating our commitment to environmental stewardship. Environmental criteria consider how a company performs in environmental sustainability and resource efficiency.

- Climate change
- Resource depletion
- Environmental protection
- Waste and pollution
- Production consumption
- Responsible sourcing

#### 2. *Social and Economic Development*

Working with the communities in which we operate and facilitating programs that promote economic and social development is a fundamental pillar at Jaguar. Our ability to create jobs and thriving economies fundamentally benefit those communities in which we operate. Social criteria examine how a company contributes to an equitable society in its relationships with employees, contractors, stakeholders and the communities where it operates.

- Working conditions
- Industry innovation
- Community relations
- Health and safety
- Diversity
- Employee relations

### 3. Governance

Among Jaguar’s most important assets are its employees and their well-being. Jaguar develops programs and policies that seek to promote a safe and efficient work environment as its success depends on a strong culture that protects people and nature. In addition, establishing guidelines, processes and good practices that precede decision-making leads to changes in the culture necessary for the Company. Governance criteria focus on accountability and transparency.

- Executive committee
- Code of conduct and ethics
- Anti-corruption
- Approval Matrix
- Corporate Risk management
- Stakeholder relations
- Board and management diversity
- Privacy and data

Jaguar’s strategies, policies and approach to ESG are described in further detail in the *Jaguar Mining Sustainability Framework*, which is available on the Company’s website at [www.jaguarmining.com](http://www.jaguarmining.com).

### Technical Information

The estimated Mineral Reserves and Mineral Resources for Jaguar's mines and mineral projects set forth in this AIF have been estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Council definitions 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.

### **Mineral Reserve and Mineral Resources**

The Resources and Reserves depletions and additions during the year 2021 were prepared by the Company’s technical services team, under the supervision of Jonathan Victor Hill, BSc (Hons) (Economic Geology - UCT) FAUSIMM. Jonathan Victor Hill is a Qualified Person in accordance with NI 43-101.

As of December 31<sup>st</sup>, 2021, Jaguar’s Mineral Reserves and Mineral Resources are:

1. Jaguar’s Proven and Probable Mineral Reserves, which are included in the Measured and Indicated Mineral Resource figures, are 4,287,000 t with an average grade of 3.69 g/t Au - containing 507,000 oz. of gold.
2. Measured and Indicated Mineral Resources of 9,452,000 t with an average grade of 4.06 g/t Au - containing 1,233,000 oz. of gold.
3. Inferred Mineral Resources of 7,934,000 t with an average grade of 4.14 g/t Au - containing 1,058,000 oz. of gold.



The tables below set out the Mineral Reserve and Mineral Resource estimates for the Turmalina and Caeté Complex's as per the Notes below.

**Table 1: Summary of Mineral Reserves as of December 31<sup>st</sup>, 2021**

As of December 31st, 2021	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)
<b>Turmalina Gold Complex</b>									
Ore Body A	448	4.81	69	155	3.25	16	603	4.41	85
Ore Body B	183	2.88	17	138	3.83	17	321	3.29	34
Ore Body C	381	3.27	40	872	3.45	97	1253	3.40	137
<b>Total - Turmalina</b>	<b>1012</b>	<b>3.88</b>	<b>126</b>	<b>1165</b>	<b>3.47</b>	<b>130</b>	<b>2177</b>	<b>3.66</b>	<b>256</b>
<b>Caeté Gold Complex</b>									
Pilar									
Ore Body BA	119	3.64	14	118	3.41	13	237	3.52	27
Ore Body BF	365	4.20	49	133	4.05	17	498	4.16	67
Ore Body BFII	298	4.07	39	55	3.77	7	353	4.03	46
Ore Body BFIII	14	4.66	2	21	4.21	3	35	4.39	5
Ore Body Torre	30	3.00	3	138	3.25	14	167	3.20	17
Ore Body SW	178	3.44	20	338	3.60	39	516	3.55	59
Others	218	3.19	22	85	3.39	9	303	3.24	32
<b>Total - Pilar</b>	<b>1221</b>	<b>3.80</b>	<b>149</b>	<b>887</b>	<b>3.60</b>	<b>102</b>	<b>2108</b>	<b>3.71</b>	<b>251</b>
<b>Total - Mineral Reserves</b>	<b>2233</b>	<b>3.84</b>	<b>275</b>	<b>2052</b>	<b>3.53</b>	<b>232</b>	<b>4285</b>	<b>3.68</b>	<b>507</b>

**Notes:**

1. CIM (2014) definitions are followed for Mineral Reserves.
2. Mineral Reserves at Turmalina were estimated at a break-even cut-off grade of 2.13 g/t Au. Mineral Reserves at Pilar were estimated at a cut-off grade of 2.11 g/t Au.
3. Mineral Reserves are estimated using an average long-term gold price of \$1,650 per ounce and a US\$/BRL\$ exchange rate of 5.50 at both mines.
4. A minimum mining width of 3.50 m was used at Turmalina and 2.00 m at Pilar.
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 of December 31<sup>st</sup>, 2021**

As of December 31st 2021	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)
<b>Underground Turmalina Gold Complex</b>												
Ore Body A	989	5,85	186	263	3,49	30	1251	5,36	216	211	3,73	25
Ore Body B	264	3,19	27	337	4,11	44	601	3,70	72	267	4,10	35
Ore Body C	530	3,41	58	1600	3,49	180	2130	3,47	238	1697	2,93	160
Sub-Total Turmalina	1783	4,73	271	2199	3,59	254	3982	4,10	525	2176	3,15	221
Faina	72	7,39	17	189	6,66	42	261	6,87	58	1542	7,26	360
Pontal	251	5,00	40	159	4,28	22	410	4,72	62	130	5,03	21
<b>Total - Turmalina UG</b>	<b>2106</b>	<b>4,85</b>	<b>328</b>	<b>2547</b>	<b>3,86</b>	<b>318</b>	<b>4653</b>	<b>4,31</b>	<b>645</b>	<b>3848</b>	<b>4,86</b>	<b>602</b>
Turmalina Waste/Void Tonnes Total	1079											
<b>Underground Caeté Gold Complex</b>												
<b>Pilar</b>												
Ore Body BA	396	4,30	55	176	3,80	22	573	4,15	76	31	3,70	4
Ore Body BF	734	4,22	99	198	4,19	27	931	4,21	126	293	4,33	41
Ore Body BFII	428	4,07	56	61	4,09	8	489	4,07	64	29	3,16	3
Ore Body BFIII	28	4,29	4	33	4,34	5	61	4,32	8	79	3,63	9
Ore Body Torre	75	2,99	7	286	3,28	30	361	3,22	37	288	3,74	35
Ore Body SW	224	3,44	25	637	3,45	71	861	3,45	95	1330	4,37	187
Others	454	3,29	48	108	3,36	12	562	3,30	60	75	4,04	10
<b>Total - Pilar</b>	<b>2338</b>	<b>3,91</b>	<b>294</b>	<b>1499</b>	<b>3,60</b>	<b>173</b>	<b>3837</b>	<b>3,79</b>	<b>467</b>	<b>2125</b>	<b>4,21</b>	<b>288</b>
Roça Grande	197	3,42	22	765	4,02	99	962	3,90	121	889	4,08	117
<b>Total - Caeté UG</b>	<b>2535</b>	<b>3,87</b>	<b>316</b>	<b>2264</b>	<b>3,74</b>	<b>272</b>	<b>4799</b>	<b>3,81</b>	<b>588</b>	<b>3014</b>	<b>4,17</b>	<b>405</b>
Pilar Waste/Void Tonnes Total	815											
<b>Open Pit - Caeté Gold Complex</b>												
Córrego Brandão	0	0,00	0	0	0,00	0	0	0,00	0	1072	1,48	51
Córrego Brandão Waste	8508											
JAGUAR UG Total - Mineral Resources	4642	4,32	644	4811	3,80	590	9452	4,06	1233	6862	4,56	1007
JAGUAR OP Total - Mineral Resources	0	0	0	0	0	0	0	0	0	1072	1,48	51
<b>JAGUAR TOTAL - Mineral Resources</b>	<b>4642</b>	<b>4,32</b>	<b>644</b>	<b>4811</b>	<b>3,80</b>	<b>590</b>	<b>9452</b>	<b>4,06</b>	<b>1233</b>	<b>7934</b>	<b>4,14</b>	<b>1058</b>

**Notes:**

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Turmalina Gold Complex include the Turmalina Mine, the Faina deposit and the Pontal deposit.
3. Mineral Resources at the Caete Gold Complex include the Pilar and Roça Grande underground mines and the Córrego Brandão open pit deposit
4. Mineral Resources at Turmalina Complex are estimated at a cut-off grade of 1.49 g/t Au at Turmalina, 3.80 g/t Au at Faina and 2.90 g/t Au at Pontal. Mineral Resources at Caete Complex are estimated at a cut-off grade of 1.66 g/t Au for Pilar and 1.80 g/t for Roça Grande. For Córrego Brandão the resources are defined by pit optimization using Lerchs-Grossmann algorithm.
5. Mineral Resources at the Faina and Pontal deposits remain unchanged from those stated as at December 31, 2015.
6. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounces at Turmalina, Pilar, Roça Grande, Faina, Pontal and Córrego Brandão.
7. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.50 Brazilian Reals: 1 US Dollar for Turmalina, Pilar, Roça Grande, Faina and Pontal.
8. A minimum mining width of 3.50 m was used at Turmalina and 2.00 m at Pilar. For Córrego Brandão are used pit optimization using Lerchs-Grossmann algorithm.
9. Mineral Resources are inclusive of Mineral Reserves at Turmalina and Pilar mines. No Mineral Reserves are currently present at Faina, Pontal, Roça Grande and Córrego Brandão.
10. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
11. 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.”

### ***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 and Caeté are material properties of Jaguar.

#### **1. Turmalina Mining Complex**

The scientific and technical information contained in this AIF relating to the Company’s Turmalina Mining Complex from December 31, 2017 to December 31, 2021 updated as disclosed by an updated version of the Turmalina Technical Report being uploaded on SEDAR on April 6<sup>th</sup>, 2022, was 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, Dorota E-Rassi, P. Eng., Renan Lopes, CP (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.

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 2021.

#### ***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 ten additional exploration authorizations/concessions granted by the Agência Nacional de Mineração (“ANM”) that, altogether, cover an area of 8,671 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. Studies are underway to find opportunities to fill the unused capacity via the advancement of the Faina growth project towards PFS in 2022, brownfield exploration and remnant mining.

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. General Electric has a major locomotive plant that produces engines for all of South America and Africa. 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.

#### *History*

Gold was first discovered in the area in the 16<sup>th</sup> century, and through the 19<sup>th</sup> century, 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 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 (Orebody C), Faina, Pontal and other mineralized zones. Exploration work at these mineralized bodies included 22 diamond drill holes totalling 5,439 m drilled from the surface to test the downward extension of the sulphide mineralized body. At the Satinoco target (Orebody C), a total of 1,523 m was completed in nine holes.

In 1992 and 1993, AngloGold mined 373,000 t of oxide ore from open pits at the Turmalina, Satinoco (now referred to as Orebody C), Pontal, and Faina zones. It recovered 35,500 oz. of gold using heap leach technology. Subsequently, AngloGold 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 Turmalina properties in 2004 and continued operation of the underground mine. The mine is accessed from a 5 m x 5 m primary decline located in the footwall of the main deposit.

### *Geological Setting*

The Turmalina deposits are located in the western 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 (Rio das Velhas Supergroup).

In the Brumal-Santa Bárbara region, where the Pilar deposit is located, outcrops belonging to the granitic-gneissic basement and to the Nova Lima and Quebra-Ossos groups of the Rio das Velhas Supergroup occur. The granitic-gneissic basement consists of leucocratic and homogeneous gneisses and migmatites, making up a complex of an initial tonalitic composition intruded by Archean rocks of granitic composition. The upper contact of the sequence is discordant and tectonically induced by reverse faulting. The Rio das Velhas Supergroup is regionally represented by meta-mafic, meta-volcaniclastic and meta-epiclastic schists of the Nova Lima Group and by meta-ultramafic and meta-mafic rocks of the Quebra-Ossos Group, including serpentinites, talc schists, and metabasalts.

“Algoma-type” iron formations occur as the more prominent volcanogenic-sedimentary rocks in the Nova Lima Group, as layers with thicknesses of up to 10 m. The Nova Lima Group can be sub-divided into three units: a) A basal unit composed of mafic (basic) to intermediate meta-volcanic rocks interlayered with meta-pelites, Algoma-type banded iron-formations, and rare acidic meta-volcaniclastic rocks; b) An intermediate unit represented by mafic to felsic volcanic rocks and volcaniclastic rocks interlayered with graphitic phyllite and horizons of Algoma-type banded iron-formation; and c) An upper unit composed of meta-pelites interlayered with felsic meta-volcanic rocks and meta-volcaniclastic rocks, quartzites, and meta-conglomerates.

The Pitangui area, where the Turmalina deposit is located, is underlain by rocks of Archaean and Proterozoic age. Archaean units include a granitic basement, which is overlain by the Pitangui Group, a sequence of ultramafic to intermediate volcanic flows and pyroclastics and associated sediments. The Turmalina deposit is hosted by chlorite-amphibole schists and silicified biotite schists units 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 azimuth direction 135°.

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 composed of calcareous sediments and slates.

The local geology in the Turmalina deposit area and in the adjacent exploration areas was defined by AngloGold, more specifically by UNIGEO geologists, during the initial exploration field work phase. At that time, the mapped lithologies and the stratigraphic package were defined and classified as a greenstone-belt sequence, within a possible terrain that represented a western extension of the Iron Quadrangle district.

The stratigraphic column defined by UNIGEO in the Pitangui region, from bottom to the top was:

#### 1. Basement

The basement is composed of foliated, leucocratic granite and gneisses. Locally, it has been defined by its migmatitic portions, with porphyry crystals of quartz and K- feldspars. Granitic intrusions with fine-to-medium grain-sizes and textures, and diabase dikes, are also common.

#### 2. Pitangui Group

The Pitangui Group is defined as a greenstone belt sequence of Archean age. It commonly shows the following stratigraphic sequence (from the base to the top):

- i. Meta-Ultramafic and Meta-Mafic Volcanic Unit (Basal Unit): constituted by interlayered igneous ultramafic and mafic flows represented by serpentinites, chlorite-actinolite schists and amphibolites, with layers of talc schists, oxide-facies BIFs and carbonaceous phyllites;
- ii. Meta-Mafic and Meta-Sedimentary Unit (Middle Unit): constituted by interlayered meta-mafic (chlorite-actinolite schists with dacitic intrusions at the top);
- iii. Meta-Sedimentary: cummingtonite BIFs and metachert-rich horizons interlayered with carbonaceous and chlorite schists, locally, layers of meta-arkoses can be observed;
- iv. Meta-Mafic: alternation of layers of amphibolites and chlorite-actinolite schists;
- v. Pyroclastic and Meta-Pelites: volcanic meta-conglomerates at the base, transitioning to, or alternating with, foliated meta-lapilli tuffs and metatuffs at the top of the sequence, where the meta-tuffs become predominant;
- vi. Meta-Sedimentary (Upper Unit): narrow and numerous interlayered layers of quartz-sericite schists, quartz-chlorite schists, quartz-sericite-chlorite schists, and carbonate-rich schists.

The general stratigraphic sequence of the Pitangui Group strikes towards the orientation 135°/285° azimuth and dips moderately to steeply to the northeast. All its stratigraphic sub-units have been metamorphosed to the amphibolite grade.

#### 3. Minas Supergroup

The Minas Supergroup is defined as clastic and chemical sedimentary rocks in a Proterozoic sequence that has thin-to-coarse-grained quartzites and layers of conglomerates at its stratigraphic base.

#### 4. Intrusive Rocks

The intrusive rocks are defined as granitic and mafic to ultramafic bodies and rock assemblages.

## *Brief Exploration History*

### Geochemistry

AngloGold/Unigeo performed a regional geochemistry survey covering an area of 430 km<sup>2</sup> in the Turmalina region. A total of 875 stream sediments samples and 446 pan concentrate samples were collected. Stream sediments samples were assayed for Au, Cu, Zn, Pb, Cr, Sb, and As. Pan concentrate samples were assayed for Au only.

Soil geochemistry sampling was also executed by AngloGold/Unigeo in both the Faina and Pontal areas, with grids varying from 100 m x 20 m to 10 m x 10 m. At Faina, 1,272 soil samples were collected, and 16,900 m of exploratory traverse lines were opened. At Pontal, 1,698 soil samples were collected, and 28,000 m of traverse lines were opened.

Several/many soil samples returned gold grades superior to 300 parts per billion (ppb). A significant portion of the soil samples collected from these targets were also assayed for As and Sb. There is a strong, positive correlation between gold and As/Sb, since gold is associated directly with arsenopyrite-bearing and/or berthierite-bearing quartz veins swarms in the region.

Initial exploration efforts by Jaguar in 2004 focused on the re-interpretation of the AngloGold's exploration datasets (trenches, soil geochemistry, and drilling), aimed at better understanding the local geology. These efforts were concentrated on the targets previously identified by AngloGold: "Main", "NE" and "Satinoco Trend".

An 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 (Orebody C) program included the opening of about 700 m of trenches and the collection of 146 channel samples transecting the mineralized zone, and a complementary diamond drilling program.

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 Orebodies A and C. The soil sampling program involved the collection of 670 soil samples from the B-horizon, which were analyzed for gold and 48 other elements by the ALS Chemex laboratory located in the town of Vespasiano, Minas Gerais state. This soil sampling program was carried out along a series of 12 sampling lines that were spaced approximately 50 m apart. The soil sampling program detected the presence of two gold anomalies oriented in a northwest-southeast direction, roughly parallel to the regional stratigraphic trends. The soil gold anomalies contain elevated concentrations of arsenic and antimony. Detailed mapping in the area of the soil anomalies found several small gossanic outcrops where grab rock samples collected yielded grades between 1.38 g/t Au and 26.5 g/t Au.

A total of 14 trenches were excavated at the Zona Basal in 2019, totalling 1,434 m in length. These trenches were geologically mapped, and samples were taken of any material that was believed to contain gold mineralization. A total of 1,055 channel samples were taken.

Geological mapping was carried out by Jaguar's exploration team over an area of approximately 78 hectares at a scale of 1:2,500. This mapping program discovered numerous occurrences of rock outcrops, mostly located along the various drainage features in the area. It was clear in 2019 that the exploration program carried out over the Zona Basal target had encountered gold mineralization over an area measuring approximately 1,000 m to 1,250 m along strike and approximately 200 m across strike in an area that was not previously considered as having potential for hosting potentially economic mineralization. The results obtained from the Zona Basal target area merited further examination by means of subsequent diamond drilling program.

## Geophysical Surveys

In the 1980s, AngloGold contracted the Instituto de Pesquisas Tecnológicas (IPT) to execute a ground geophysics survey at the Faina and Pontal areas. At Faina, a 50 m x 100 m grid was made composed of 11 lines covering about 31.5 ha. At Pontal, the grid was 40 m x 100 m, with 24 lines covering about 130 ha. Part of this area (approximately 56 ha) was surveyed by ground magnetics in a 5 m x 25 m grid.

Several geophysical anomalies were defined, and most of them showed a strong correlation with the geochemical anomalies. This combined information was used for the planning of the trench locations.

In 2004, the Minas Gerais Government Mining Agency (COMIG) completed a supplementary airborne geophysical survey, covering all the Iron Quadrangle and the adjacent areas, totalling approximately 36,400 km<sup>2</sup>. This survey was performed by the contractor LASA SA on a 250 m grid using magnetic and gamma-ray methods. All Jaguar targets, including the Turmalina Mine, were covered with these geophysical surveys.

More recently, a drone-based magnetic aerial survey was completed for Jaguar (2020-2021) in selected portions of its Turmalina tenement portfolio. The new airborne magnetic datasets were acquired using a drone (hexacopter) with GEM magnetometer as part of an Avant Geofísica's DRONEmagTMS system surveys. The consulting company Southern Geoscience Consultants (SGC) has produced an integrated interpretation of the magnetic data for Jaguar and proposed targets for follow-up testing, either by surface geological mapping activities or by diamond drilling (e.g., Zona Basal Target, Pontal South Target and potential extensions of the Faina Deposit Area).

### *Exploratory Drilling*

Following the trenching and the channel sampling programs completed between March 2006 and April 2008, Jaguar completed a three-phase drilling campaign in the Turmalina deposit area:

Phase 1: 5,501 m drilled in 35 holes. This program tested the continuity of the mineralized bodies between the weathered zone and up to 200 m below the surface.

Phase 2: 3,338 m drilled in 24 complementary in-fill holes, aimed at creating a 25 m x 60 m grid between the surface and 100 m below and at testing the lateral continuity of the mineralized bodies.

Phase 3: An additional drilling campaign was carried out in 2007, which consisted of 12,763 m drilled in 48 holes. Results from holes FSN 10 to FSN 68 from this campaign were included in the mineral resource estimate contained in the original TechnoMine technical report, dated October 22, 2007. Results from the remaining drill holes FSN 69 to FSN 113 were included in the second TechnoMine technical report, dated February 5, 2008.

During the three Satinoco Trend/Orebody C drilling phases described above, 2,338 core samples from holes FSN 10 to FSN 113 were collected. These drilling programs were carried out by the contractor Mata Nativa Comércio e Serviços Ltda. (Mata Nativa), a local drilling company, using Longyear drill rigs.

Drill hole lengths ranged from 32 m to 453 m. Core diameters were consistently HQ from the surface through the weathered rock to bedrock. At approximately 3 m into the fresh bedrock, the holes were reduced to NQ diameter to the final depth.

Collar locations for the holes were established by theodolite surveys. All holes were drilled within 3 m of the planned location. Azimuths and inclinations for plunging drill holes were set by Brunton compass, deemed accurate to within 2° azimuth and <1° inclination.

Following the completion of the holes, the collars were resurveyed with theodolite and cement markers were emplaced. Downhole surveys were completed in all holes with lengths greater than 100 m, with the use of Sperry-



Sun or the Maxibore equipment. The average drill core recovery was greater than 90%. Core samples were collected during these phases and sent to laboratories for gold assays (discussed in the next section).

Jaguar has continued to carry out drilling and channel sampling programs on the orebodies. The drilling has been carried out from surface locations that provide general information as to the location of the mineralized zones. Further detailed drill hole information is gathered for the three orebodies from underground locations. Final detailed information of the location and distribution of the gold mineralization is collected by means of channel sampling underground.

Surface diamond drilling was carried out by the drilling contractor Mata Nativa using HQ and NQ tools. HQ-sized equipment was used for the portion of the hole that traverses the saprolite horizon, and the hole diameter was then reduced to NQ when the fresh rock was reached. The diamond drill core procedures adopted by Jaguar are described below:

- Only drill holes with more than 90% core recovery from the mineralized zone were accepted.
- Drill hole deviations (surveys) were measured by Sperry-Sun or DDI/Maxibore equipment.
- The cores were stored in wooden boxes of 1 m length with 3 m of core per box (HQ diameter) or 4 m of core per box (NQ diameter). The hole's number, depth, and location were identified in the boxes by an aluminum plate on the front of the box and by a water-resistant ink mark on its side. The progress interval and core recovery are identified inside the boxes by small wooden or aluminum plates.

#### *Surface Exploration Programs Carried Out in 2021*

##### 1) Faina Deposit Area

The Faina Deposit has a mineral resource of 1.8 Mt at 7.21 g/t containing 418 koz of primarily inferred mineral resource. The mineral resource is accessible from Turmalina's current underground workings.

The shallow oxide portions of the Faina deposit were previously mined via an open pit, but due to the refractory nature of the sulphide mineralization beneath the oxide zone, the fresh (non-weathered) deeper portion of the deposit remains to be exploited. The Faina Mineral Resources-base remains open, with exploration potential and very encouraging average gold grades (> 5gt Au over widths greater than 4m), along strike and extending to depth. Results from a June 2021 preliminary metallurgical test work on Faina sulphide samples selected from several large-diameter (PQ) diamond drill holes completed in late 2020 demonstrated that metallurgical recoveries > 85% are reported from a combination of gravity concentration followed by flotation of gravity tails. The above results will inform conceptual mine studies and plans supported by modern advances in metallurgical processes for the extraction of gold from refractory ores.

In late 2021, Jaguar reported plans for a phase of infill diamond drilling comprising 15,000m of diamond drilling commencing in Q1-2022 aimed at the conversion of the inferred mineral resource inventory at Faina to indicated mineral resource. This drilling will provide representative samples for comprehensive metallurgical test work that will inform prefeasibility studies. Importantly, these 2022 studies will evaluate the viability of adding to the production profile and life of the nearby Turmalina Mine, by accessing the Faina deposit north-west from currently active underground mining areas, and the utilization of available additional crushing and milling capacity.

The Faina Project will have 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 deeper investigations will also be completed along the down-plunge continuity of the currently defined portion of the Faina deposit.

##### 2) Pontal Target

The Pontal target collectively refers to the "Pontal North", "Pontal" (historical mineral resource) and "Pontal South"

targets. The Pontal South target is 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 62koz at a grade of 4.72 g/t Au and an inferred mineral resource of 21koz at a grade of 5.03 g/t Au.

In late 2021, 6 diamond drill holes (1,466m) were drilled in the “Gap” between Pontal and Faina.

These diamond holes targeted southern extensions of the historically known Pontal deposit (above) mineralized trend, which were highlighted as magnetically anomalous by the drone-based magnetic aerial survey completed for Jaguar (2020-2021) in selected portions of its Turmalina tenement portfolio.

Initial results from this drilling have been encouraging, with several 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 28.8m @ 2.67 g/t Au, including 21.95m @ 3.29 g/t Au).

Three slightly different “styles” of gold mineralization have been recorded in the Pontal South target. All three styles gold-arsenic-antimony are rich. The main style corresponds to fine-grained disseminations of sulphides (arsenopyrite + pyrite + pyrrhotite) hosted by the Pontal trend pyroclastic rocks. The second style corresponds to massive concentrations of sulphides (mainly arsenopyrite and antimony sulphides) located around quartz veins and within highly silicified domains of the same pyroclastic host rocks. The last style is associated with the presence of multiple sulphidized lithoclasts and coarse fragments, either primarily mineralized and redeposited or perhaps replaced by the same ore fluids that “sulphidized” the matrix of the pyroclastic host rocks.

### 3) Zona Basal Target Area

The Zona Basal target area is located approximately 3.0-3.5 km west of the Turmalina mining 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 wide-spaced 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 apparently concentrates economic gold grades and some silver and other base-metals anomalous concentrations in the weathering halo.

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 width of 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 respectively. 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 H2/2021, an initial reverse-circulation (RC) drilling campaign was completed at the Zona Basal target. The RC drilling campaign targeted a 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 30-50 m. A total of 119 reverse-circulation 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 are currently being modelled and evaluated.

### ***Underground and Surface/Exploration Diamond Drilling Activities Completed in 2021***

As with the drilling programs completed in 2020, the on-going drilling programs in 2021 mainly targeted the down-plunge areas of the orebodies “A”, “B”, “C” and “D”. The holes were designed to intersect the projected plunges and dips of the mineralized zones as close to perpendicular as possible.

In 2021, a total of 46.7 km of underground delineation, infill and exploratory drilling was completed at Turmalina.

A summary of the significant intersections of the infill and exploration drilling campaigns completed at Turmalina in 2021 has been gathered in this AIF, as of December 31<sup>st</sup>, and is provided in Table 3 below. A summary of the significant Late 2020 and 2021 diamond drilling intersections pertaining to the surface brownfields exploration programs Zona Basal, Pontal South and Faina are provided in Table 3a below:

**Table 3: Summary of Significant Drilling Intersections, 2021 - Turmalina Mine Operation**

<b>Hole ID</b>	<b>From (m)</b>	<b>To (m)</b>	<b>DownHole Interval (m)</b>	<b>Estimated True Width (m)</b>	<b>Gold Grade (g/t Au)</b>	<b>GT (ETW)</b>
<b>FTS1919</b>	3,70	13,40	9,70	6,43	3,26	20,96
	311,65	312,55	0,90	0,60	1,12	0,67
<b>FTS1915</b>	36,60	46,40	9,80	8,81	22,05	194,26
	43,00	46,40	3,40	3,05	59,93	182,79
	101,65	103,40	1,75	1,53	5,82	8,90
<b>FTS1987</b>	109,50	120,35	10,85	9,82	3,20	31,42
	259,40	263,65	4,25	3,87	4,39	16,99
<b>FTS2060</b>	55,15	66,75	11,60	8,97	5,04	45,21
<b>FTS2118</b>	96,80	104,40	6,75	6,21	3,01	18,69
	107,30	115,50	8,20	7,48	5,94	44,43
<b>FTS2119</b>	113,95	123,80	9,85	8,75	4,74	41,48
	126,80	128,80	2,00	1,69	3,36	5,68
<b>FTS2121</b>	152,70	158,30	5,60	4,97	7,61	37,82
<b>FTS2123</b>	147,80	158,15	12,50	10,37	3,05	31,62
<b>FTS2018</b>	83,04	86,60	3,56	3,15	1,87	5,89

Hole ID	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT (ETW)
	93,92	104,65	10,73	8,85	5,61	49,65
FTS1889	51,59	55,88	4,29	3,10	4,50	13,95
	75,06	77,12	2,06	1,06	2,57	2,72
FTS2019	112,92	121,40	8,48	7,32	5,62	41,13
FTS2020	77,59	80,64	3,05	2,85	1,04	2,96
	115,20	117,86	2,66	1,99	13,87	27,60
	141,92	146,05	4,13	3,97	3,86	15,32
	151,30	154,37	3,07	2,81	6,08	17,08
FTS2021	98,69	100,39	1,70	1,25	3,39	4,24
	118,57	130,24	11,67	10,29	4,39	45,17
FTS2022	64,40	75,15	10,75	7,77	1,71	13,29
	95,77	99,15	3,38	2,64	1,35	3,56
	121,28	127,86	6,58	5,23	6,61	34,57
FTS2023	131,51	134,75	3,24	2,95	4,07	12,01
	139,25	144,87	5,62	4,89	6,15	30,07
FTS2018	83,04	86,60	3,56	3,15	1,87	5,89
	93,92	104,65	10,73	8,85	5,61	49,65
FTS1889	51,59	55,88	4,29	3,10	4,50	13,95
	75,06	77,12	2,06	1,06	2,57	2,72
FTS2019	112,92	121,40	8,48	7,32	5,62	41,13
FTS2020	77,59	80,64	3,05	2,85	1,04	2,96
	115,20	117,86	2,66	1,99	13,87	27,60
	141,92	146,05	4,13	3,97	3,86	15,32
	151,30	154,37	3,07	2,81	6,08	17,08
FTS2021	98,69	100,39	1,70	1,25	3,39	4,24
	118,57	130,24	11,67	10,29	4,39	45,17
FTS2022	64,40	75,15	10,75	7,77	1,71	13,29
	95,77	99,15	3,38	2,64	1,35	3,56
	121,28	127,86	6,58	5,23	6,61	34,57
FTS2023	131,51	134,75	3,24	2,95	4,07	12,01
	139,25	144,87	5,62	4,89	6,15	30,07
FTS2025	119,68	126,59	6,91	5,25	1,78	9,35
	132,16	149,77	17,61	15,15	3,68	55,75
FTS2027	44,59	52,19	7,60	6,37	2,46	15,67
	113,49	115,41	1,92	1,66	2,53	4,20
	130,03	136,99	6,96	6,18	2,36	14,58
	145,05	146,13	1,08	0,96	2,90	2,78
FTS2029	131,97	132,76	0,79	0,63	2,48	1,56

Hole ID	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	GT (ETW)
	176,91	189,03	12,12	9,94	3,06	30,42
FTS2043	73,26	75,11	1,85	1,74	1,90	3,31
	80,36	81,41	1,05	0,99	3,54	3,50
	94,06	98,68	4,62	4,36	4,97	21,67
FTS2030	45,43	47,68	2,25	1,75	2,14	3,75
	80,11	88,66	8,55	6,85	3,47	23,77
	115,62	119,90	4,28	3,64	1,63	5,93
	171,86	176,50	4,64	3,99	2,60	10,37
FTS2031	162,90	175,13	12,23	10,45	7,52	78,58
FTS2032	109,11	112,83	3,72	3,21	10,58	33,96
	135,23	141,66	6,43	5,67	2,15	12,19
FTS2033	172,16	177,28	5,12	4,03	6,84	27,57
	190,31	193,81	3,50	2,80	2,89	8,09
FTS2004	109,09	112,49	3,40	3,10	3,44	10,66
	146,77	156,10	9,33	8,25	3,52	29,04
	202,36	204,70	2,34	2,15	3,45	7,42
	210,18	218,83	8,65	7,95	2,67	21,23
FTS2097	97,37	99,49	2,12	1,82	1,82	3,31
	129,66	139,86	10,20	9,82	4,96	48,71
FTS2136	81,26	82,27	1,01	0,92	1,32	1,21
	111,30	118,53	7,23	6,90	7,38	50,92
	147,52	148,32	0,80	0,70	2,60	1,82
	159,49	160,39	0,90	0,65	5,28	3,43
FTS2135	71,80	74,12	2,32	2,25	3,58	8,06
	77,71	79,92	6,16	6,05	6,16	37,27
	148,37	149,44	1,07	0,91	5,76	5,24
FTS2005	3,47	5,53	2,06	1,92	5,65	10,85
	93,59	102,30	8,71	8,15	3,83	31,21
	139,51	141,40	1,89	1,65	1,96	3,23
	174,34	175,34	1,00	0,86	5,70	4,90
	191,83	195,44	3,61	3,10	5,54	17,17

**Table 3a: Summary of Significant Late 2020 and 2021 diamond drilling intersections of the surface brownfields exploration programs “Zona Basal”, “Pontal South” and “Faina”**

**Summary of Significant Diamond Drilling Intersections, 2021 Drilling Programs  
Jaguar Mining Inc. – Brownfields Exploration Programs (Turmalina)**

Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
FFP001	FAINA-PONTAL	511.424,45	7.818.871,47	695,70	277,00	7,35	8,1	0,75	1,81
FFP002	FAINA-PONTAL	511.556,26	7.818.776,44	695,16	331,10	106,3	107,3	1	0,25
FFP002	FAINA-PONTAL					141,95	142,65	0,7	0,32
FFP002	FAINA-PONTAL					165	166,1	1,1	1,28
FFP002	FAINA-PONTAL					312,3	313,3	1	0,21
FFP003	FAINA-PONTAL	511.594,59	7.818.635,63	718,65	351,40	0	5,8	5,8	0,24
FFP003	FAINA-PONTAL					9,6	10,85	1,25	0,23
FFP003	FAINA-PONTAL					15,1	16,4	1,3	0,26
FFP003	FAINA-PONTAL					83,3	84,15	0,85	1,62
FFP003	FAINA-PONTAL					174,4	182,9	8,5	0,21
FFP004	FAINA-PONTAL	511.320,51	7.818.940,58	688,95	256,80	94	95	1	0,22
FSN243	CNW-FAINA	511.975,18	7.817.996,15	699,54	300,55	61,65	62,65	1	0,36
FSN243	CNW-FAINA					69,65	71,1	1,45	0,25
FSN243	CNW-FAINA					75	75,85	0,85	0,25
FSN243	CNW-FAINA					279,15	280,15	1	0,22
FSN244	CNW-FAINA	512.031,85	7.817.819,44	715,30	351,65	276,15	277,15	1	0,21
FSN244	CNW-FAINA					290,2	295,2	5	0,41
FSN244	CNW-FAINA					301,15	301,85	0,7	0,2
FSN244	CNW-FAINA					334,9	339,9	5	0,43
FSN245	CNW-FAINA	512.130,39	7.817.682,99	702,48	349,15	130,4	131,43	1,03	0,46
FSN245	CNW-FAINA					134,35	135,4	1,05	0,32
FSN245	CNW-FAINA					144	150,5	6,5	0,21
FSN245	CNW-FAINA					192,65	197,75	5,1	0,56
FSN245	CNW-FAINA					278,94	279,9	0,96	0,32
FSN245	CNW-FAINA					289,46	290,48	1,02	2,52

**Summary of Significant Diamond Drilling Intersections, 2021 Drilling Programs  
Jaguar Mining Inc. – Brownfields Exploration Programs (Turmalina)**

Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
FSN246	CNW-FAINA	512.313,37	7.817.542,77	704,48	301,05	58,1	59,15	1,05	0,44
FSN246	CNW-FAINA					160,35	163,95	3,6	6,93
FSN246	CNW-FAINA					161,2	163,95	2,75	8,96
FSN246	CNW-FAINA					186,51	187,67	1,16	0,31
FSN246	CNW-FAINA					262,7	263,65	0,95	0,24
FSN246	CNW-FAINA					266,2	268,3	2,1	0,27
FUH168A	FAINA	511.766,38	7.818.316,66	722,83	285,40	109,63	111,65	2,02	0,83
FUH168A	FAINA					134,75	141,5	6,75	2,18
FUH168A	FAINA					135,5	139,4	3,9	3,24
FUH168A	FAINA					162	192,8	30,8	5,38
FUH168A	FAINA					162	190	28	5,86
FUH168A	FAINA					162	164	2	17,73
FUH168A	FAINA					173,05	190	16,95	7,35
FUH168A	FAINA					207	213,9	6,9	0,48
FUH168A	FAINA					207	208	1	2,51
FUH168A	FAINA					235	237	2	0,57
FUH168A	FAINA					262	263,35	1,35	0,35
FUH169	FAINA	511.839,09	7.818.206,38	710,10	120,00	0	14,5	14,5	1,08
FUH169	FAINA					8,5	11,5	3	3,78
FUH169	FAINA					37,5	38,5	1	2,51
FUH169	FAINA					37,5	38,5	1	2,51
FUH169	FAINA					47,85	54,4	6,55	2,8
FUH169	FAINA					49	54,4	5,4	3,21
FUH170	FAINA	511.848,41	7.818.019,47	700,97	59,05	19	21	2	0,31
FUH170	FAINA					27	30	3	0,5

**Summary of Significant Diamond Drilling Intersections, 2021 Drilling Programs  
Jaguar Mining Inc. – Brownfields Exploration Programs (Turmalina)**

Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
FUH170	FAINA					38,5	39,5	1	0,34
FUH171	FAINA	511.852,59	7.818.012,32	701,09	82,65	0	16,5	16,5	6,04
FUH171	FAINA					7	16,5	9,5	10,32
FUH171	FAINA					7	16,5	9,5	10,32
FUH171	FAINA					22,3	36	13,7	8,54
FUH171	FAINA					22,3	34	11,7	9,81
FUH171	FAINA					22,3	35	12,7	9,17
FUH171	FAINA					53,3	56	2,7	0,32
FUH172	FAINA	511.785,48	7.818.139,84	711,41	201,90	0	1,5	1,5	0,29
FUH172	FAINA					24	29	5	2,1
FUH172	FAINA					24	29	5	2,1
FUH172	FAINA					133	142,8	9,8	0,45
FUH173	FAINA	511.722,24	7.818.175,17	703,60	198,10	92	93,1	1,1	0,42
FUH173	FAINA					101	104	3	2,64
FUH173	FAINA					101	102,85	1,85	4,15
FZB013	ZONA BASAL	509.653,48	7.817.488,60	737,70	85,40	4,6	20	15,4	2
FZB013	ZONA BASAL					13	17	4	4,39
FZB014	ZONA BASAL	509.654,09	7.817.489,34	737,74	113,20	0	20,45	20,45	2,39
FZB014	ZONA BASAL					7,7	16,5	8,8	3,9
FZB018	ZONA BASAL	509.617,89	7.817.645,91	715,32	200,20	62,8	64,5	1,7	0,45
FZB019	ZONA BASAL	509.618,75	7.817.645,99	715,39	156,55	0	13	13	0,31
FZB019	ZONA BASAL					4,65	5,65	1	1,97
FZB019	ZONA BASAL					73	95,3	22,3	0,37
FZB019	ZONA BASAL					79,25	80,25	1	2,13
FZB021	ZONA BASAL	509.387,86	7.817.660,48	707,74	100,80	4,45	13,5	9,05	1,54



**Summary of Significant Diamond Drilling Intersections, 2021 Drilling Programs  
Jaguar Mining Inc. – Brownfields Exploration Programs (Turmalina)**

Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
FZB021	ZONA BASAL					4,45	6,45	2	5,3
FZB022	ZONA BASAL	509.842,93	7.817.471,23	714,88	186,65	57,5	62,5	5	0,37
FZB022	ZONA BASAL					74	82	8	0,82
FZB022	ZONA BASAL					110,8	116	5,2	1,02
FZB023	ZONA BASAL	509.843,45	7.817.469,21	714,68	161,45	115,6	121,6	6	0,87
FZB023	ZONA BASAL					136,75	139,7	2,95	3,65
FZB023	ZONA BASAL					137,7	138,7	1	9,01
FZB024	ZONA BASAL	509.908,81	7.817.678,97	739,19	317,25	149,3	155	5,7	0,39
FZB024	ZONA BASAL					176,5	209,1	32,6	0,63
FZB024	ZONA BASAL					202,1	205,05	2,95	1,62
FZB025	ZONA BASAL	509.821,68	7.817.583,23	749,50	198,40	40,2	45	4,8	0,97
FZB025	ZONA BASAL					49,8	55,7	5,9	0,53
FZB025	ZONA BASAL					64,1	65,3	1,2	1,27
FZB025	ZONA BASAL					114,55	120,05	5,5	1,32
FZB026	ZONA BASAL	509.777,36	7.817.690,31	749,43	147,35	65,85	77,45	11,6	1,3
FZB027	ZONA BASAL	509.754,65	7.817.755,48	739,06	209,75	40,3	50,05	9,75	1,21
FZB027	ZONA BASAL					187,95	209,75	21,8	0,59
FZB027	ZONA BASAL					189,95	193	3,05	0,91
FZB028	ZONA BASAL	509.778,32	7.817.690,39	749,30	156,70	86,4	101,8	15,4	1,04
FZB028	ZONA BASAL					88,35	97,3	8,95	1,57
FZB029	ZONA BASAL	509.734,72	7.817.872,00	712,39	157,50	14,24	18,25	4,01	0,32
FZB030	ZONA BASAL	509.592,02	7.818.089,21	679,45	102,20	72,65	75,3	2,65	0,36
FZB033	ZONA BASAL	508.929,84	7.818.261,56	747,80	119,85	27,2	28,2	1	0,88
FZB033	ZONA BASAL					27,2	51,9	24,7	0,3
FZB033	ZONA BASAL					33,5	48,9	15,4	0,36

**Summary of Significant Diamond Drilling Intersections, 2021 Drilling Programs  
Jaguar Mining Inc. – Brownfields Exploration Programs (Turmalina)**

Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
FZB033	ZONA BASAL					33,5	46,9	13,4	0,4
FZB033	ZONA BASAL					50,9	51,9	1	0,24
FZB034	ZONA BASAL	508.988,84	7.818.245,34	736,85	113,95	21,9	22,9	1	1,78
FZB034	ZONA BASAL					21,9	37,35	15,45	0,2
FZB034	ZONA BASAL					27,9	29,9	2	0,33
FZB034	ZONA BASAL					36,3	37,35	1,05	0,21
FZB034	ZONA BASAL					64,35	65,35	1	0,35
FZB035	ZONA BASAL	509.175,63	7.818.025,43	707,39	115,45	10,6	11,9	1,3	0,34
FZB036	ZONA BASAL	509.323,41	7.817.826,20	704,35	102,05	71,9	72,7	0,8	0,57
FZB037	ZONA BASAL	509.915,62	7.817.339,86	688,49	202,20	9,25	11,4	2,15	0,45
FZB037	ZONA BASAL					9,25	15,6	6,35	0,23
FZB037	ZONA BASAL					14,6	15,6	1	0,3
FZB037	ZONA BASAL					23,5	24,5	1	0,27
FZB037	ZONA BASAL					35,5	36,5	1	0,25
FZB037	ZONA BASAL					45	46	1	0,43
FZB037	ZONA BASAL					73,25	74,35	1,1	2,6
FZB038	ZONA BASAL	509.955,23	7.817.264,51	688,85	159,30	54,55	55,7	1,15	0,27
FZB038	ZONA BASAL					89,1	89,8	0,7	0,33
FZB038	ZONA BASAL					95	96	1	0,46
PTL092	PONTAL SOUTH	510.819,18	7.819.758,40	647,86	252,15	3,4	11,9	8,5	1,56
PTL092	PONTAL SOUTH					7,15	9,45	2,3	3,83
PTL092	PONTAL SOUTH					32,6	33,7	1,1	0,52
PTL092	PONTAL SOUTH					42,05	67,4	25,35	0,32
PTL092	PONTAL SOUTH					84,4	104	19,6	1,01
PTL092	PONTAL SOUTH					88,25	91,95	3,7	2,14

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Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
PTL092	PONTAL SOUTH					97,15	99,45	2,3	3,09
PTL092	PONTAL SOUTH					120,15	195	74,85	1,17
PTL092	PONTAL SOUTH					125,45	126,2	0,75	3,02
PTL092	PONTAL SOUTH					145	160,1	15,1	2,8
PTL092	PONTAL SOUTH					186,2	192,3	6,1	3,6
PTL092	PONTAL SOUTH					210,5	212,2	1,7	0,95
PTL092	PONTAL SOUTH					224,7	227,2	2,5	0,82
PTL092	PONTAL SOUTH					236,2	237,6	1,4	0,36
PTL093	PONTAL SOUTH	510.824,89	7.819.696,26	650,15	252,25	4,65	5,65	1	1,15
PTL093	PONTAL SOUTH					31,45	32,65	1,2	1,05
PTL093	PONTAL SOUTH					43,25	46,5	3,25	0,48
PTL093	PONTAL SOUTH					72,85	73,85	1	0,22
PTL093	PONTAL SOUTH					74,85	75,8	0,95	0,24
PTL093	PONTAL SOUTH					77,8	78,8	1	0,23
PTL093	PONTAL SOUTH					90,1	96,65	6,55	0,8
PTL093	PONTAL SOUTH					91,05	91,9	0,85	3,28
PTL093	PONTAL SOUTH					102,7	103,95	1,25	1
PTL093	PONTAL SOUTH					110	110,7	0,7	0,26
PTL093	PONTAL SOUTH					117,6	119,55	1,95	0,48
PTL093	PONTAL SOUTH					175,85	177,95	2,1	0,27
PTL094	PONTAL SOUTH	510.988,33	7.819.423,76	637,90	229,00	2	3,5	1,5	0,35
PTL094	PONTAL SOUTH					10,65	11,75	1,1	0,32
PTL094	PONTAL SOUTH					47	80,1	33,1	2,28
PTL094	PONTAL SOUTH					51	72,95	21,95	3,19
PTL094	PONTAL SOUTH					130,3	139,05	8,75	1,03

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Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
PTL094	PONTAL SOUTH					134,95	136,75	1,8	2,86
PTL094	PONTAL SOUTH					149	150	1	0,26
PTL094	PONTAL SOUTH					156,9	164	7,1	0,39
PTL095	PONTAL SOUTH	511.155,44	7.819.359,09	637,48	251,00	22,4	23,45	1,05	0,28
PTL095	PONTAL SOUTH					73	74	1	0,39
PTL095	PONTAL SOUTH					112,25	131,9	19,65	0,72
PTL095	PONTAL SOUTH					122,9	126,1	3,2	2,51
PTL095	PONTAL SOUTH					171,7	172,8	1,1	1,01
PTL096	PONTAL SOUTH	510.947,52	7.819.568,40	631,42	202,05	115,7	165,1	49,4	1,95
PTL096	PONTAL SOUTH					115,7	138,75	23,05	1,93
PTL096	PONTAL SOUTH					115,7	120,45	4,75	2,82
PTL096	PONTAL SOUTH					129	136,7	7,7	3,39
PTL096	PONTAL SOUTH					145,5	165,1	19,6	2,6
PTL096	PONTAL SOUTH					152,4	165,1	12,7	3,5
PTL096	PONTAL SOUTH					177,7	178,45	0,75	0,42
PTL097	PONTAL SOUTH	510.932,75	7.819.673,65	643,06	279,90	52,15	54,1	1,95	4,53
PTL097	PONTAL SOUTH					52,15	53,05	0,9	9,57
PTL097	PONTAL SOUTH					52,15	54,1	1,95	4,79
PTL097	PONTAL SOUTH					52,15	53,05	0,9	10,13
PTL097	PONTAL SOUTH					80,05	95,3	15,25	1,83
PTL097	PONTAL SOUTH					81,05	90,2	9,15	2,41
PTL097	PONTAL SOUTH					118,15	130,75	12,6	0,51
PTL097	PONTAL SOUTH					123,8	125,8	2	2,33
PTL097	PONTAL SOUTH					143,25	144,95	1,7	1,11
PTL097	PONTAL SOUTH					162,15	163,15	1	0,28

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Hole ID	Exploration Target	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Gold Grade (g/t Au)
PTL097	PONTAL SOUTH					182,1	193,05	10,95	0,8
PTL097	PONTAL SOUTH					189,7	190,8	1,1	2,43
PTL097	PONTAL SOUTH					220,95	221,95	1	0,32

*Sample Preparation, Analyses and Security*

Sampling

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

Surface/Exploration Channel Sampling

- i. Channel samples are regularly collected from outcrops and trenches.
- ii. The sites to be sampled are cleaned with a hoe, exposing the material by scraping it.
- iii. Structures are mapped and the lithologic contacts defined, and samples marked so that no sample has more than one lithology.
- iv. Samples have a maximum length of 1 m and are from 1 to 2 kg in weight.
  - Each sample is collected manually in channels with average widths between 5 and 10 cm and about 3 cm deep, using a hammer and a chisel.
  - Either an aluminum tray or a thick plastic canvas drop 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 surveyed.

Diamond Drilling Core Sampling

1. Surface drilling is performed by contractors with holes of HQ and/or NQ diameters.
2. Underground drilling is performed either by Jaguar or by contractors with holes in BQ and LTK diameters.
3. Drill holes are accepted only if they have more than 85% recovery from the mineralized zone.
4. All the drill holes have their deviations measured by Reflex Gyro or equivalent survey tool.
5. The cores from underground drill holes are stored in wooden or plastic boxes of 1 m length with 5 m of core per box (BQ or LTK diameters).
6. The number, depth, 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.
7. The progress interval and core recovery are identified inside the boxes by small wooden plates.
8. During logging, all of the geological information, progress, and recovery measurements are verified, and the significant intervals are defined for sampling.
9. Samples are identified in the boxes by highlighting their side or by labels.
10. Samples are cut lengthwise with the help of a diamond saw and a hammer into approximately equal halves.

11. 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.
12. The remaining drill core from the surface-based drill holes are stored at a secure offsite location near the mine.
13. The whole core is sampled for the shorter-length, short-term planning type drill holes in LTK diameter completed from underground set ups (the LM-series drill holes).
14. All exploration samples, since 2019, were sent to either the internal laboratory in Caeté or the ALS Chemex Brazil laboratories, and all results were checked and validated using industry-standard QAQC procedures and protocols.

#### Underground Production Channel Sampling

- The sectors of the underground walls to be sampled are cleaned with pressurized water. Structures are mapped, lithologic contacts are defined, and samples marked so that no sample has more than one lithology included. Samples have an average length of 1 m and are from 2 to 3 kg in weight.
- Channel samples are taken 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 70 cm to 1.30 m, average widths between 5 and 10 cm, and are about 3 cm deep.
- Two sets of channel samples on the face are regularly collected. Once the work area has been secured, one set of channel samples is taken from the floor level, and the second set is taken at waist height.
- At roughly 3 m intervals, the development walls/faces are sampled by channel sampling.
- Either an aluminum tray or a thick plastic canvas is used to collect the material. The samples are then stored in a thick plastic bag and identified by a numbered label, protected by a thin plastic cover and placed with the sample.
- At the sampling site, samples are identified by spray-type ink.
- Sketches are drawn with lithological and structural information. The sample locations are surveyed.
- The channel sampling batches also accommodate blank samples for the QAQC laboratory control.

#### *Security of Samples - Sample Preparation and Analysis*

For the surface-based exploration drill holes completed in the past, samples were prepared at the SGS laboratories in Belo Horizonte. For other drill holes and sampling channels, samples are prepared at Jaguar's mine site laboratories 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 is by standard fire assay procedures, using a 50 g or 30 g sample and an atomic absorption (AA) finish.

The SGS laboratory based in Belo Horizonte meets international analytical standards and ISO 17025 compliance protocols. Analytical results from the SGS laboratory were forwarded to Jaguar's Exploration or Mine Departments by email, followed by mailed hard copies.

Since 2019, the core samples pertinent to growth (exploration) drilling activities carried out underground were sent to the ALS Chemex Brazil laboratory. The internal core sample preparation was undertaken as follows: half of the sawed sample is forwarded to the analytical laboratory for analysis, while the remaining half of the core is stored in a secure location at the mine site. The drill core samples are transported in securely sealed bags and sent for physical preparation to the independent ALS Chemex Brazil (subsidiary of ALS Global) laboratory located in Vespasiano, Minas Gerais, Brazil. The analyses are conducted at ALS Global's respective facilities (fire assay is conducted by ALS Global in Lima, Peru and multi-elementary analyses are conducted by ALS Global in Vancouver, Canada). ALS has accreditation in a global management system that meets all requirements of international standards ISO/IEC 17025:2005 and ISO 9001:2015. All major ALS geochemistry analytical laboratories are accredited to ISO/IEC 17025:2005 for specific analytical procedures.

A process control laboratory at Turmalina analyzes the shift and plant samples, while all delineation drill core, channel and exploration drill core samples from the Turmalina underground operation are forwarded to the in-house laboratory located at the Caeté mine site.

At Jaguar's Caeté laboratory, the samples are dried and then crushed. A 1 kg sub-sample of the crushed material is selected for pulverization to approximately 70% minus 200 mesh. The ring-and-puck pulverizers 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 taken 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.

#### *Quality Assurance and Quality Control*

The Caeté laboratory carries out an internal program of Quality Assurance/Quality Control (QA/QC) for all drill core samples. No QA/QC is performed for channel samples. The QA/QC protocol includes carrying out a duplicate analysis after every 20 samples, representing an insertion frequency of 5%.

Commercially sourced standard reference materials are inserted at a frequency of every 45–50 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 stage.

The results of the blanks, duplicates and standards are forwarded to Jaguar's head office on a monthly basis for insertion into Jaguar's internal database (BDI). There, 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 inserted into the main database.

#### *Mineral Resources Estimates - Combined (Turmalina, Faina and Pontal)*

Table 4 summarizes the Turmalina Mine Complex Mineral Resources as of December 31<sup>st</sup>, 2021. The total Mineral Resources for the Turmalina Mine Complex as estimated by Jaguar staff comprise 4.653 million t at an average grade of 4.31 g/t Au - containing 645,000 oz. of gold in the Measured and Indicated Resource category, and 3.848 million t at an average grade of 4.31 g/t Au - containing 602,000 oz. of gold in the Inferred Mineral Resource category. The Mineral Resources figures include Turmalina and two satellite deposits, Faina and Pontal. A cut-off grade of 1.49 g/t Au was used to report the Mineral Resources for the Turmalina Mine, and cut-off grades of 3.80 g/t Au and 2.90 g/t Au were used to report the Mineral Resources for the Faina and Pontal deposits, respectively.

The conceptual operational scenarios considered during the preparation of previous Mineral Resources estimates for the Faina and Pontal 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. Preliminary metallurgical tests have been completed on samples of fresh, unoxidized mineralization from the two satellite deposits from that conceptual perspective. They have yielded unacceptably low recoveries when the material is considered potential feed to the existing Turmalina Plant and have concluded that the mineralization at both deposits is refractory.

An alternative conceptual operational scenario was developed for the current update of the Mineral Resources. The mineralized material will be excavated by means of underground mining methods and transported to the Turmalina Plant for processing. A gold-rich flotation concentrate unit is envisioned to be constructed after appropriate upgrades have been made to the existing plant. The gold-rich flotation concentrate would either be shipped off-site

for oxidation and gold recovery by a third party or sent to an oxidation circuit that would be constructed on-site before treatment by CIL .

**Table 4: Summary of Mineral Resources as of December 31<sup>st</sup>, 2021**

As of December 31st 2021	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)
<b>Underground Turmalina Gold Complex</b>												
Ore Body A	989	5,85	186	263	3,49	30	1251	5,36	216	211	3,73	25
Ore Body B	264	3,19	27	337	4,11	44	601	3,70	72	267	4,10	35
Ore Body C	530	3,41	58	1600	3,49	180	2130	3,47	238	1697	2,93	160
<b>Sub-Total Turmalina</b>	<b>1783</b>	<b>4,73</b>	<b>271</b>	<b>2199</b>	<b>3,59</b>	<b>254</b>	<b>3982</b>	<b>4,10</b>	<b>525</b>	<b>2176</b>	<b>3,15</b>	<b>221</b>
Faina	72	7,39	17	189	6,66	42	261	6,87	58	1542	7,26	360
Pontal	251	5,00	40	159	4,28	22	410	4,72	62	130	5,03	21
<b>Total - Turmalina UG</b>	<b>2106</b>	<b>4,85</b>	<b>328</b>	<b>2547</b>	<b>3,86</b>	<b>318</b>	<b>4653</b>	<b>4,31</b>	<b>645</b>	<b>3848</b>	<b>4,86</b>	<b>602</b>
Turmalina Waste/Void Tonnes Total	1079											

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Turmalina Gold Complex include the Turmalina Mine, the Faina deposit and the Pontal deposit.
3. Mineral Resources at Turmalina Complex are estimated at a cut-off grade of 1.49 g/t Au at Turmalina, 3.80 g/t Au at Faina and 2.90 g/t Au at Pontal.
4. Mineral Resources at the Faina and Pontal deposits remain unchanged from those stated as at December 31, 2015.
5. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounces at Turmalina.
6. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.50 Brazilian Reais: 1 US Dollar for Turmalina.
7. A minimum mining width of 3.50 m was used at Turmalina.
8. Mineral Resources are inclusive of Mineral Reserves at Turmalina and Pilar mines. No Mineral Reserves are currently present at Faina and Pontal.
9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
10. Numbers may not add due to rounding.

Jaguar prepared the Mineral Resource depletion for YE2021 under the supervision of Jonathan Victor Hill, who is a Qualified Person within the definition of the NI 43-101 for Mineral Resources. Jaguar is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors that could materially affect the Mineral Resources estimates.

*Mineral Resources Estimate - Turmalina Mine*

The 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's staff.

The mineralized material for each individual Orebody was classified by Jaguar 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, clipping polygons were prepared to aid in the estimation of the Mineral Resources. As appropriate, the clipping polygons were prepared in either plan or longitudinal views. The clipping polygons were drawn to include continuous volumes of blocks whose estimated grades were above the stated cut-off grade and were not located in mined out areas. The clipping polygons were used to appropriately code the block model and report the Mineral Resources. After depletion, using the excavated wireframes, and considering a cut-off grade of 1.49 g/t Au, Jaguar's staff estimates that the Mineral Resources at Turmalina comprise 3.982 million t at an average grade of 4.10 g/t Au - containing 525,000 oz. of gold in the Measured and Indicated Resources category; and 2.176 million t at an average grade of 3.15 g/t Au - containing 221,000 oz. of gold in the Inferred Mineral Resources category. The Mineral Resources for the Turmalina mine are presented in further detail in Table 5.

**Table 5: Summary of Mineral Resources by Orebody as of December 31<sup>st</sup>, 2021**

As of December 31st 2021	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)
<b>Underground Turmalina Gold Complex</b>												
Ore Body A	989	5,85	186	263	3,49	30	1251	5,36	216	211	3,73	25
Ore Body B	264	3,19	27	337	4,11	44	601	3,70	72	267	4,10	35
Ore Body C	530	3,41	58	1600	3,49	180	2130	3,47	238	1697	2,93	160
Sub-Total Turmalina	1783	4,73	271	2199	3,59	254	3982	4,10	525	2176	3,15	221

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Turmalina Mine.
3. Mineral Resources at Turmalina Mine estimated at a cut-off grade of 1.49 g/t Au.
4. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounce at Turmalina.
5. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.50 Brazilian Reais: 1 US Dollar for Turmalina.
6. A minimum mining width of 3.50 m was used at Turmalina.
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.

Jaguar prepared the YE 2021 Mineral Resources depletion under the supervision of Jonathan Victor Hill, who is a Qualified Person within the definition of the NI 43-101 for Mineral Resources. Jaguar is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors that could materially affect the Mineral Resource estimates.

*Mineral Reserves Estimate – Turmalina Mine*

Mineral Reserves reported below for Turmalina are as of December 31<sup>st</sup>, 2021. Table 6 summarizes the Mineral Reserves as estimated by Jaguar.

**Table 6: Turmalina Mineral Reserves as of December 31<sup>st</sup>, 2021**

As Of December 31st, 2021	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)
<b>Turmalina Gold Complex</b>									
Ore Body A	448	4,81	69	155	3,25	16	603	4,41	85
Ore Body B	183	2,88	17	138	3,83	17	321	3,29	34
Ore Body C	381	3,27	40	872	3,45	97	1253	3,40	137
<b>Total - Turmalina</b>	<b>1012</b>	<b>3,88</b>	<b>126</b>	<b>1165</b>	<b>3,47</b>	<b>130</b>	<b>2177</b>	<b>3,66</b>	<b>256</b>

Notes:

1. CIM (2014) definitions are followed for Mineral Reserves.
2. Mineral Reserves at Turmalina were estimated at a break-even cut-off grade of 2.13 g/t Au.
3. Mineral Reserves are estimated using an average long-term gold price of \$1,650 per ounce and a US\$/BRL\$ exchange rate of 5.50 at both mines.
4. A minimum mining width of 3.50 m was used at Turmalina.
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.

The Mineral Reserves consist of selected portions of the Measured and Indicated Resources within designed stopes and associated development, designed by Bruno Tomaselli, FAUSIMM, an employee of Deswik Brasil 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 designs below 2.50 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 100%. 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.

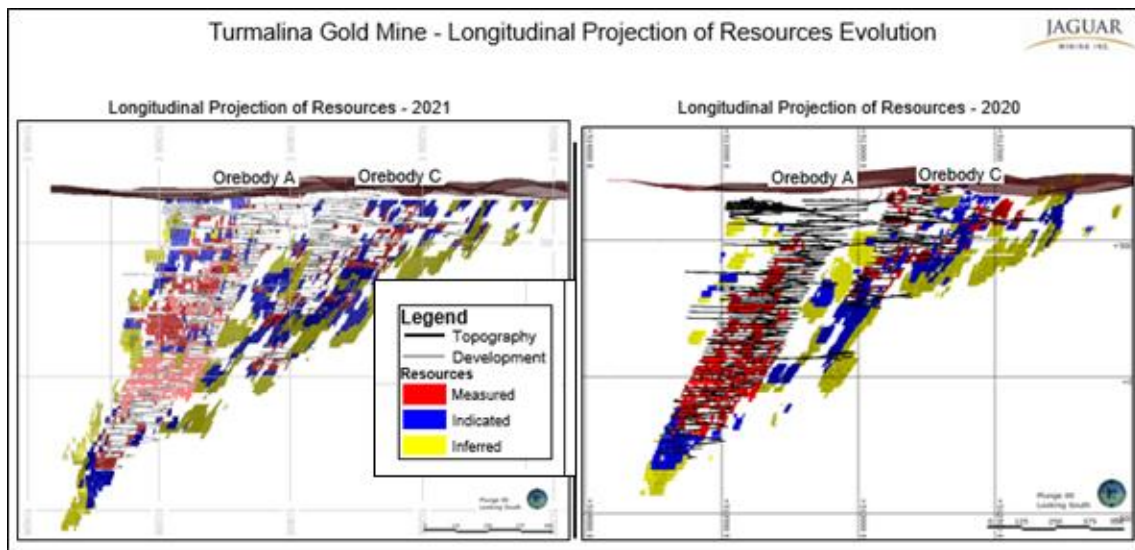
*Cut-Off Grade*

A break-even cut-off grade of 2.13 g/t Au was estimated for Mineral Reserves, using a gold price of \$1,650/oz., an average gold recovery of 90%, and the 2021 cost data for the Turmalina Mine. Gold prices used for reserves are based on consensus, long-term forecasts from banks, financial institutions, and other sources.

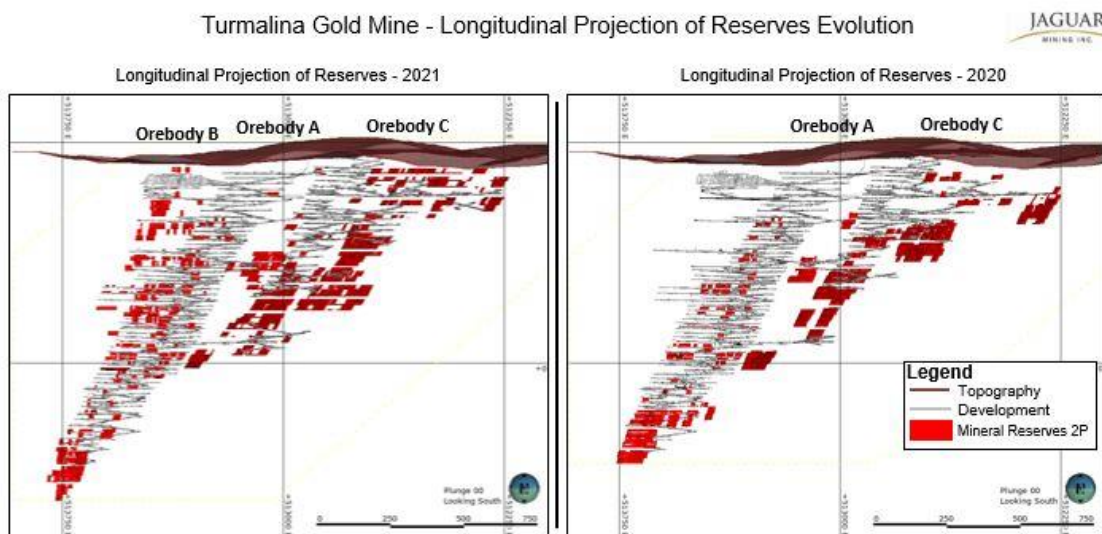
Cost data was stated in US dollars, using the exchange rate at the time of the reporting (approximately 5.5 BRL to the US dollar). A majority of Turmalina costs are denominated in BRL.

The tables/illustrations 5a and 6a below (longitudinal projections of the Turmalina deposit) are panoramas of the resources and reserves inventory of the Turmalina operation by the end of the 2021 Year and by the end of the 2020 Year, respectively.

**Table 5a: Illustration: Turmalina Mineral Resources as of Dec. 31<sup>st</sup>, 2021, and as of Dec. 31<sup>st</sup>, 2020**



**Table 6a: Illustration: Turmalina Mineral Reserves as of Dec. 31<sup>st</sup>, 2021, and as of Dec. 31<sup>st</sup>, 2020**



### *Mining Operations and Metallurgical Process*

The Turmalina Mine Complex consists of a number of tabular bodies known as Orebodies A, B and C. Two satellite deposits, Faina and Pontal, are located along strike to the northwest.

The main production of the mine has been from Orebody A, which is dominated by a steeply northeast-dipping tabular deposit, with a strike length of approximately 250 m to 300 m, and an average thickness of 6 m. Mineralization has been outlined to depths of 1,100 m to 1,300 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. Therefore the zone is much wider overall to the northwest direction (up to 10 m in thickness).

Orebody B includes two thinner, lower-grade lenses parallel to the Orebody A. These two 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. The mineralization in this deposit zone has been outlined along a strike length of approximately 350 m to 400 m and to depths of 650 m to 700 m below surface. Orebody B is narrower along its entire strike length.

Orebody C is a mineralized structure located to the southwest in the structural footwall of Orebody A. This mineralized structure strikes northwest and dips steeply to the northeast. Orebody C had 3 historical open pit mines. The 3 paysoots associated with these old open pits are locally wider and of a higher grade than the overall C Orebody structure. The C-SE ore shoot has provided the bulk of underground production to date. The plunge of C-SE was better defined in 2019 with detailed mapping and structural geology analysis, which allowed drill targeting the down plunge extension and thereby increasing the Mineral Resource. The C-Central Ore shoot was defined underground in 2019. Drilling was targeted down plunge, and with modelling and evaluation, a Mineral Resource was estimated. Mine development accessed the C-Central ore shoot in 2019 with initial stope production, adding a new mine production area. During 2020, development on the C-structure was advanced towards the northwest and intersected mineralization that reflected the down plunge continuity of the mineralization previously exploited from the C-NW Open Pit. This initial access development, channel sampling and diamond drilling provided sufficient data to allow a new stoping area to be defined, and some stope production was completed from late 2020.

The mineralization in the C-structure has been outlined along a strike length of approximately 1,000 m to 1,400 m and to depths of 800 m to 1000 m below the surface. The mineralized structure can be defined, in a broad sense, based on current knowledge available from ore development on level 4, as being part of a district scale transcurrent/transform shear zone, which is manifested and focused within a 4–20 m wide package of mineralized, variably silicified, iron-rich volcano-metasediments and graphitic schists. The metamorphic grade corresponds to the lower amphibolite facies. Mineralization (disseminated, fine-grained, pyrite-arsenopyrite and pyrrhotite) occurs in conjunction with foliation-parallel mm-cm scale quartz stringers consistently mapped along the entire mineralized structure. Grades and thicknesses do vary along strike according to the compartmentalized (compressional–extensional) structural domains present along and within the shear zone. To date, drilling has defined an overall average plunge to the mineralization with an azimuth of 35° and a dip of 55°.

Two recently discovered mineralized lenses are located between Orebody A and the previously known lenses comprising Orebody C. These new lenses were discovered as a result of the exploration drilling that was carried out from the underground drill bays to define and evaluate the lower portions of the C-SE mineralized lenses. As these are newly discovered lenses, their full limits and economic potential are not fully understood at the moment. Therefore, the presence of potentially economic mineralization 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.

### *Mining Method*

The mining method currently in use is Longhole Sublevel Stopping with delayed backfill. Backfill consists of rock fill or a cemented paste fill product prepared from detoxified CIL tailings in a plant located near the mill.

The mine is accessed from a 5 m x 5.5 m primary decline located in the footwall of Orebody A and a ramp system for Orebody C. The Orebody A ramp portal is located at the elevation 695 MASL. Currently, levels are divided into three sublevels spaced 20 metres apart vertically that are driven from the ramp. The current level spacing is 57 m, with sublevels placed at every 20 m vertically. Sill pillars are left between levels. Sill pillar thickness is determined by geotechnical modelling. At each level and sublevel, drifts are developed in the mineralized zone to expose the footwall contact. The drift is extended in both directions along the strike, under geological control until the limits of the orebodies are reached. The hanging wall is supported with cable bolts before mining begins. The hanging wall is delineated with short diamond drill holes with a small mobile drill when the Orebody is wider than the drift. The ore development is then widened (drilled and blasted) to follow the footwall contact prior to stoping, except in certain areas where the orebody widens, explained below

Transverse stoping is used where geotechnical evaluation indicates a requirement to limit spans to less than orebody width. Cemented paste fill is used in primary stopes to limit hanging wall spans.

A longitudinal retreat mining sequence is used for the remainder of the ore. Sublevels are spaced at 20 metres vertically with normally three sublevels between sill pillars. Stopes are nominally 40 metres along strike between partial rib pillars but are modified to fit the geometry of ore grade zone and by geotechnical modelling. The size of partial rib pillars and sill pillars are designed based on stope specific geotechnical modeling and local ore thickness. Partial rib pillars limit the stope span and prevent backfill dilution. Rock backfill is normally used. However, paste fill is available if justified to eliminate ore remaining in pillars or justified by geotechnical modelling.

Orebody A has demonstrated a decrease in area and grade with depth at the deepest levels of the mine. Orebody C has become the primary mine production area with 54% of the Mineral Reserves and with mining at shallower depths.

Orebody C has multiple subparallel ore lenses. Ramps and ore accesses are developed in the ore structures where practical to replace footwall waste development with ore development. This provides access for mining the multiple ore lenses.

Orebody B is accessed from orebody A. and provides 13% of the ore reserve.

Jaguar observed ground conditions to be good. The main decline, portions of which were developed more than ten years ago, did not exhibit any roof or wall deterioration. Primary support in the mine is provided by the use of Swellex, grouted rebar, and, in the wider areas, grouted cable bolts. In areas of friable ground, split-sets are used to hold welded-wire mesh in place.

Development is completed using two-boom electric-hydraulic jumbos and six cubic yard load-haul-dump (LHD) units. In order to create adequate working space for the equipment.. Two single-boom jumbos are used for the installation of ground support. Drilling of the production holes and cable bolt holes is completed by using a fleet of three longhole fandrills. Development and stope mucking are completed using a fleet of four LHD units, 10 t to 14 t capacity, (one ST14 and three ST1030 units), and two front end loaders with development waste hauled to stopes or remuck areas. Ore haulage to the surface is by a fleet of Volvo fixed frame and articulated 30 t trucks.

Ventilation for the mine is a pull system. Air is drawn down the haulage ramps and is exhausted via three vent raises. The levels are ventilated using auxiliary ventilation fans and ducting. Pumping water out of the mine is done using centrifugal pumps. The water is pumped level to level and then to the surface.

#### *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 Project are associated with obligations laid out in the various licences.

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

Environmental monitoring for verification of environmental control systems continues in progress, in compliance with the conditions established in the licences as well as in the 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 a mine are being done maintenance the permit stay according with the legal standards. This report will be protocol in the environmental agency in 2022 to support the continuity of the license's reassessment process.

#### *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 base, details the mining operations at Turmalina over than 5 years. There is, however, good potential to extend the mine life much further through infill drilling campaigns and the subsequent conversion of a great part of the Mineral Resources inventory into Mineral Reserves.

#### *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.

## 2. Caeté Mining Complex

The scientific and technical information contained in this AIF relating to the Company's Caeté Mining Complex from December 31, 2017 to December 31, 2021 updated as disclosed by an updated version of the Turmalina Technical Report being uploaded on SEDAR on April 6<sup>th</sup>, 2022 was 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, Dorota E-Rassi, P. Eng., Renan Lopes, CP (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.

#### *Property Description and Location*

The Caeté Mining Complex, which includes the Pilar and Roça Grande Mines and the Caeté Plant, 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 11,928 ha of mining and exploration concessions. The property is 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 concessions related to Caeté's Pilar and Roça Grande Mines 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 currently supplies power to the project site. Diesel back-up generators provide emergency power.

#### *History*

Jaguar acquired the Pilar property from Vale in December 2003, and, in November 2005, the two companies entered into a mutual exploration and option agreement with respect to the RG mineral concessions.

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, a number of key events occurred with respect to the Caeté Project. 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.

In September 2008, expansion plans at the Caeté Project continued as TechnoMine completed the NI 43-101 feasibility study technical report. 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 Isabel 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. Capital expenditures for the Caeté Project totalled \$127 million.

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.

In June 2011, Jaguar filed a NI 43-101 compliant technical report prepared by TechnoMine on a number of targets located within the Caeté mining complex. This technical report added 159,250 oz. of Measured and Indicated Mineral Resources and 92,040 oz. of Inferred Mineral Resources for the Caeté mining complex.

Gold production at the Caeté plant was 46,373 oz. in 2021, 51,050 oz. in 2020, 40,682 oz. in 2019, 41,788 oz. in 2018 and 38,686 oz. in 2017.

### *Geological Setting*

Shortly after the Portuguese discovered Brazil in 1500, Portuguese explorers known as Bandeirantes ventured into the interior of the country from Rio de Janeiro and Salvador and discovered alluvial gold in the mid-16<sup>th</sup> century. Later, the Bandeirantes ventured into the country's interior primarily from São Paulo. Gold found in stream drainages in several parts of the Iron Quadrangle was a major factor in the development of the region. During the 17<sup>th</sup> and 18<sup>th</sup> centuries, an era commonly referred to as the 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 Iron Quadrangle was the principal region for 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 or Early Proterozoic Banded Iron Formations ("BIF") contained within greenstone belt supracrustal sequences.

The orebodies are emplaced in Archean age meta-volcanic and meta-sedimentary rock packages of the Nova Lima Group. The hosting rock packages are intensively folded and sheared along a NE-SW regional trend.

- *Pilar*

The Pilar Orebody is located at the base of the Nova Lima Group, a stratigraphic horizon with a predominance of meta-mafic and meta-ultramafic volcanic rock packages, but also represented by both clastic and chemical meta-sedimentary sequences. The meta-volcanic rocks are predominantly represented by talc schists, meta-basalts, meta-dunites, meta-peridotites and serpentinites. Secondarily, at the stratigraphic record, meta-sedimentary schists with variable amounts of carbonaceous material, sericite, carbonate, chlorite and quartz do occur. Banded iron formations (BIFs) and meta-chert layers are mainly hosted in the metasedimentary unit.

The original bedding can be observed everywhere; however, commonly displaying variable dip directions due to folding geometries with associated plunging fold axes oriented to the SE orientation. The main mineralized BIF layer, as mapped at the Pilar operation, is continuous along 10 km of strike length, and shows variable widths between 5 to 50 m. At the Pilar property, the northern extremity of the outcropping regional BIF trend, known as "São Jorge Target", is intercepted by a shear zone that is the engine of strong hydrothermal alteration processes that overprint and mineralize the main regional BIF package. At the surface, the São Jorge Target gold mineralization is characterized by high contents of gossanic limonite, as a direct result of the weathering of the sulphides contained in fresh BIFs underground (pyrite, pyrrhotite, and arsenopyrite).



Hydrothermal alteration related to the above-mentioned shear zone is characterized by the introduction of large quantities of sericite, chlorite, carbonate, silica, sulphides and gold into the host rocks.

A preliminary interpretation of the gold mineralization at Pilar is that the BIF layer and the gold were deposited simultaneously, in an early mineralization event. Later, due to the shearing events, additional gold was intruded in the system, culminating in remobilization and concentration processes, and the generation of the known ore shoots. 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°.

Reverse faulting (low-angle thrust faults) with variable dipping angles is observed at the western border of the Pilar deposit stratigraphy, resulting in the older rocks (talc schists sequence) being thrust over a younger rock package. As a result, the orebodies associated with the eastern BIF limbs and sectors of the folded Pilar deposit constitute 'blind' targets, being identified only after the underground development of the eastern BIF-hosted orebodies were completed.

- *Roça Grande*

The Roça Grande (RG) mine is hosted in the upper unit of the Nova Lima Group. Dominant rock types at RG are meta-volcaniclastics (tuffs) represented by quartz-sericite-chlorite schists with variable amounts of carbonaceous material, BIFs, metacherts and graphitic schists. Bedding is well defined by the iron carbonate and siliceous facies of the BIF laminations, with an average strike direction of N70° E and a dip at 30° SE.

Folds are very common, and they regularly present plunging axes pointed towards the orientation 110°/30°. A total of four BIF horizons are recognized in the Roça Grande property. Two of them host the gold mineralization, as identified during the past Vale and Jaguar exploration activities. These two mineralized zones are roughly parallel to each other and are named "Structure 1" and "Structure 2". The Northern Structure (Structure 1) hosts the RG-01 mineralized body, and the South Structure (Structure 2) hosts the RG-02, RG-03 and RG-06 mineralized bodies. The RG-07 mineralized body, associated with quartz lodes, is located immediately at the hanging-wall of Structure 1.

The rock packages examined in the Pilar and Roça Grande orebodies were subjected to different degrees of hydrothermal alteration, resulting in the development of alteration carbonates and chlorites, sericite haloes and quartz veins. Disseminated sulphides (pyrite, arsenopyrite, stibnite, pyrrhotite, and chalcopyrite) are common within the quartz veins.

#### *Mineralization*

- *Pilar*

The mineralization at Pilar is hosted by a number of host rock units including the BIFs, along with mafic schists and talc-chlorite schists. Gold mineralization is associated with sulphide mineralization, consisting of disseminated arsenopyrite and pyrrhotite. Quartz veins and veinlets can also be present, but the presence of quartz is not a prerequisite for the presence of higher gold values. The sulphide minerals occur mostly as disseminations in the host rocks, but they can locally achieve semi-massive to massive concentrations over a few tens of centimetres. Quartz veins are typically less than 1 m in width and can be observed to be of two distinct generations. The quartz veins of the first generation are typically associated with the main gold mineralization and have been folded. The quartz veins of the second generation are typically lower grade (or barren) and have not been affected by foldings.

The currently mined orezones of the Pilar deposit are hosted by banded iron formation layers. The remaining mineralized lenses are hosted by packages of mafic and ultramafic volcanic schists.

- *Roça Grande*

At Roça Grande, gold mineralization is more commonly associated with BIF horizons. In the RG01, RG02, RG03 and RG06 mineralized bodies, the gold mineralization is developed roughly parallel to the primary bedding and is related to centimetre-scale bands of massive to disseminated pyrrhotite and arsenopyrite. In many cases, better gold values are located along with the hanging-wall contact of the banded iron formation sequence and are hosted by carbonate-facies banded iron formations. The grades generally decrease towards the footwall zones, where the banded iron formation becomes more silica-rich. The thicknesses of the banded iron formations are observed to be affected by broad-scale boudinaged/extension structures. Better gold grades are found in the thicker portions of the boudins, while the narrower/tip portions of the boudinaged structures have lower gold grades. Late-stage, barren quartz veins are also ubiquitously present, and displaying boudinaged geometries.

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.

#### *Deposit Types - Iron Quadrangle district*

Gold mineralization has been found mainly within three general types of deposits in the Iron Quadrangle district:

1. Syngenetic deposits. These are hosted by BIFs and chemical sedimentary rock sequences (meta-cherts). Gold is typically associated with fresh to limonite-rich sulphide masses, ranging from disseminated to massive, in association with the BIF layers, or hydrothermally altered schists rich in quartz, chlorite and sericite. Disseminated sulphides hosted in quartz schists, BIFs, and meta-cherts have also been economically exploited.
2. Epigenetic deposits. These are dominated by hydrothermal quartz veins swarms (silicification zones). Gold is related to masses of grayish and microcrystalline quartz containing fresh to weathered sulphides and, in a few places, to the presence of visible free gold. The quartz veins swarms are hosted by hydrothermally altered schists rich in quartz, chlorite, carbonate and sericite.
3. Paleo-placer deposits. Conglomerates contain clasts of quartzite, milky quartz, massive and banded chert, felsic volcanic rocks, and quartz schists. The matrix can be quartzitic, arkosic, or carbonaceous. Locally, rounded (buckshot) pyrite and crystalline pyrite are abundant in the matrix.

Most gold-bearing units in the Iron Quadrangle, with the exception of the gold-bearing conglomerates, are strongly controlled spatially and geometrically by linear structures such as fold axes, stretching lineations, and intersection lineations. The orebodies form bladed or cigar shapes and geometries, showing great continuity along the plunge direction and relatively small dimensions laterally (along the strike of the host units). They can be longer than 5 km along the plunge direction, such as the main orezones of the Morro Velho and Cuiabá Mines. The thickness of the individual orezones of the deposits varies from a few metres to more than 30 metres.

Economic gold grades are directly associated sulphide phases, mainly pyrite, pyrrhotite and arsenopyrite. The distribution of the mineralized bodies is often controlled by intersection lineations and fold axes.

#### *Exploration History*

- *Pilar*

In 2006, Jaguar started an exploration campaign at the Pilar property in order to complete a mineral resource evaluation in accordance with NI 43-101 guidelines.

In 2010 and 2011, Jaguar completed an underground drilling program to investigate the down-plunge continuity of the mineralization between Levels 4 and 10 at Pilar.

In 2014, the magnetic data from the airborne Companhia de Desenvolvimento Econômico de Minas Gerais (“CODEMIG”) survey was re-processed.

A high-definition induced polarization ground survey covering the south extension of Pilar was carried out in 2015. The estimated depth of penetration of the survey was up to 1,000 m.

Geological mapping and a total of 744 soil samples were collected on the Pacheca and Cubas targets in 2015. Anomalous values (0.15 g/t Au to 0.48 g/t Au) were outlined along an 800 m long area oriented in a northeast-southwest direction.

- *Roça Grande*

Initial exploration activities carried out by Vale in the Roça Grande Mine area consisted of regional geological, geochemical and geophysical surveys, along with excavation of a number of exploration trenches and diamond drilling to evaluate the gold mineralization found in the area. In total, 4,746 soil samples were collected, and 4,350 m of trenches were excavated during the 1973 to 1993 period.

Soil sampling programs have been carried out throughout the various claim blocks that comprise the CCA project. Jaguar has intensively drilled the RG orebodies. Four mineralized bodies named RG01/07, RG02, RG03 and RG06 were selected for infill diamond drilling and underground exploration started in the RG01/07 orebody. The following has been completed through December 2010:

1. RG01/07: 10,625 m in 111 surface and underground drill holes and 5,906 m in ramps and drifts
2. RG02: 16,580 m in 59 surface drill holes and 1,168 m in ramps and drifts
3. RG03: 9,407 m in 56 surface drill holes
4. RG06: 7,954 m in 55 surface drill holes

During 2011 and subsequent to the completion of the Caeté Feasibility Study, Jaguar completed 9,983 m in 71 drill holes at the RG01/07 body as part of an underground infill-drilling program. In 2012 and 2013, Jaguar performed 13,922 m and 10,142 m of underground delineation drilling, respectively, in the mineralized body RG01/07.

#### *Drilling*

- *Pilar*

In 1989, Vale conducted the first exploratory drilling at the Pilar deposit. From 1989 to 1994, a total of 11,163 m of exploratory diamond drilling were performed. Eldorado Gold Corp. executed a 3,069 m diamond drilling campaign to evaluate the deposit from 2002 to 2003.

In 2006, Jaguar started an exploration campaign at the Pilar property that targeted the Pilar Sul, São Jorge and São Jorge Extensão sectors of the deposit. The exploration effort comprised three phases, as follows:

Phase 1: After interpretation of the available data, an exploratory diamond-drilling program was carried out to test the structural controls and the continuity of the mineralization to 200 m below the surface. Mineralized shoots mainly occurred within the BIF. The holes intercepted several significant mineralized intervals and pointed out the need for additional investigation of the structural geology of the area. During this phase, a total of 6,489 m was drilled in 36 diamond drill holes.

Phase 2: Diamond drill holes tested the structural control and the continuity of the mineralization to 300 m below the surface. Mineralized shoots occurred both within the BIF and the shear zone. A total of 12,926 m in 41 holes was drilled during Phase 2.

Phase 3: Underground exploration and underground and surface diamond drilling was conducted during this phase. Infill underground drilling was completed to delineate mineralization at 693 MASL. Surface drilling was carried out to obtain more data on the structural control and the main zones of mineralization. Through December 2010, Jaguar completed a total of 10,390 m in ramps and drifts, 11,200 m of underground drilling in 180 holes, and 10,186 m of surface drilling in 19 holes.

Late in 2010 and during 2011 (subsequent to the Caeté Feasibility Study), Jaguar completed an underground drilling program to investigate the down-plunge continuation of the mineralization to Level 11, approximately 860 m from the surface. A total of 12,574 m in 44 drill holes were completed, confirming the extension of the mineralized zones to depth. Delineation drilling underground continued in 2012 and 2013.

A small program of exploration drilling (9 holes, 910 m) was carried out in November 2014 to test near-surface targets in the proximity of the crown pillar of Pilar. From late 2014 to May 2015, Jaguar carried out an underground exploration-drilling program focused on testing for additional gold mineralization along with the down-plunge projections of Orebodies A, B and C. In all, 90 holes were completed for a total length of 14,875 m.

In 2017, Jaguar conducted an underground exploration diamond drill program with nine holes in a total of 4,258 m to check the BA, BF and BFII orebodies' down-plunge. All exploration drill holes were performed by Major Drill in NQ diameter. All samples were sent to ALS Chemex Brazil laboratories to assay, and all results were checked and validated.

Jaguar continued to carry out a drilling program during 2018 that continued to focus on locating and beginning to define the down-plunge extensions of the BA, BF, and BF II mineralized zones located between elevation 350 m to -210 m, approximately 200 m below the bottom of the ramp. The drilling program also provided additional detailed, infill information for those mineralized intersections discovered by the 2017 drilling program. A total of 87 definition holes were completed in 2018 for a total length of approximately 2,190 m. A total of 76 exploration and delineation drill holes were completed in 2018 for a total length of approximately 11,510 m.

The drilling procedures at Pilar were similar to those used at RG. Surface diamond drilling was carried out by the drilling contractor Mata Nativa. The underground drilling program in 2015 was completed by Geosol Ltd. of Belo Horizonte using BQ (36.5 mm), and LTK (36.3 mm) sized equipment. Infill drilling programs carried out from underground stations were completed by Jaguar staff and company-owned equipment.

### *Surface Exploration 2020-2021*

#### Córrego Brandão Target Area

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 in 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 box work 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 (during 2021) has tested a relatively restricted portion of the semi-regional-scale fold structure mapped and targeted by Jaguar since 2020.

This first full drilling year (2021) at the target saw forty-four (44) diamond drill holes completed, totalling 5,670.40 m of perforation. This drilling campaign has 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 widely open laterally and down-plunge.

All exploratory diamond drill-core samples from the Córrego Brandão target were analyzed at the ALS laboratory in Belo Horizonte (fire assay for gold - 50 g - analytical method).

This 2021 initial shallow diamond drilling campaign has confirmed that the Corrego Brandão target has near-surface open pit potential to add feedstock to the nearby Jaguar's Caeté processing plant. The depths, thicknesses, grades and initial resources estimate of the intercepts received to date have been very encouraging. Jaguar currently expects to be positioned to fast track the evaluation and permitting process once another year of diamond drilling is completed in 2022, 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 the Córrego Brandão target 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.

Fresh (non-weathered) high-grade ("proximal") exploratory drilling interceptions are mainly characterized by massive concentrations of light-brown colored iron-bearing carbonates, disseminated magnetite, dark-green chlorites, and visible modal concentrations of disseminated crystals of pyrite and arsenopyrite.

Based on drilling completed by the end of 2021 at Córrego Brandão, a maiden Inferred Mineral Resource for the Córrego Brandão target is reported as 1,072,000 tonnes @ 1.48 g/t Au (51,000 Oz Au).

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 occur 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 summary of the successive drilling campaigns completed at the Pilar mine is provided in Table 7, and a summary of the significant intersections obtained at the Pilar Mine and at the Córrego Brandão exploration area are provided in Table 8 and Table 8a, respectively. In 2021, 33,342 m of drilling were completed at the Pilar underground operation. It is important to note that the reported intersections underground do not 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 8.

The last filed Technical Report considered drilling data until May 2020. Table 8 below lists the more relevant drilling interceptions obtained at the Pilar underground operation from June 2020 to December 31<sup>st</sup>, 2021.

**Table 7: Summary of Drilling Campaigns, Pilar  
Jaguar Mining Inc. – Caeté Operations**

Period	Target	Diamond Drilling		Roto-Percussive Drilling	
		No. Holes	Total Length (m)	No. Holes	Total Length (m)
<b>Vale</b>					
1989-1994	-	65	11,812	60	2,960
2002-2003	-	10	3,069	-	-
<b>Sub-total, Vale</b>	<b>-</b>	<b>75</b>	<b>14,881</b>	<b>60</b>	<b>2,960</b>
<b>Jaguar</b>					
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	UG-Exploration	31	4,005	-	-
	UG-Definition	121	9,705	-	-
2013	UG- Exploration	40	5,978	-	-
	UG-Definition	51	3,557	-	-
	UG- Exploration	60	8,398	-	-
2014	UG-Definition	125	10,818	-	-
	Surface Exploration	9	910	-	-
2015	UG- Exploration	30	6,477	-	-
	UG-Definition	12	879	-	-
2016	UG- Exploration	19	2,994	-	-
	UG-Definition	89	8,143	-	-
2017	UG- Exploration	23	7,081	-	-
	UG-Definition	150	9,534	-	-
2018	UG- Exploration	3	328	-	-
	UG-Definition	172	12,172	-	-
	UG-Definition	83	6,206	-	-
2019	UG-In-Fill	20	3,293	-	-
	UG-Exploration	22	4,822	-	-
	UG-Definition	108	4,942	-	-
2020	UG-In-Fill	30	4,262	-	-
	UG-Exploration	145	18,362	-	-
	UG-Definition	38	1,961	-	-
2021	UG-In-Fill	47	6,042	-	-
	UG-Exploration	176	24,617	-	-
<b>Sub-total, Jaguar</b>		<b>1,999</b>	<b>203,083</b>	<b>-</b>	<b>-</b>

**TABLE 8: SUMMARY OF SIGNIFICANT INTERSECTIONS, FROM JUNE 2020 TO  
DECEMBER 2021, DRILLING PROGRAMS, PILAR MINE  
Jaguar Mining Inc. – Caeté Mining Complex**

<b>Hole ID</b>	<b>From</b>	<b>To</b>	<b>Core Length (m)</b>	<b>Estimated True Width (m)</b>	<b>Average Grade (g/t Au)</b>
PPL689	105.0	115.9	11.0	10.1	71.2
PPL629	13.2	19.0	5.8	5.4	40.4
	43.2	45.2	2.0	1.9	3.7
	55.7	61.7	6.0	5.5	13.1
	61.7	64.2	2.5	2.2	5.9
PPL666	22.3	28.7	6.5	2.0	4.5
	52.9	55.9	3.0	1.4	5.4
PPL641	2.0	7.0	5.0	2.3	7.1
	9.8	13.0	3.2	1.1	6.1
	61.0	65.4	4.4	1.5	2.9
FSB817A	45.8	47.8	2.0	1.5	2.2
FSB843	10.6	12.6	2.0	1.9	4.1
	23.6	26.6	3.1	2.9	2.1
PPL643	13.0	19.0	6.0	2.4	1.2
	23.0	24.9	1.9	1.0	2.1
PPL694	210.5	226.0	15.6	6.2	1.6
	229.0	241.8	12.8	5.1	4.5
	253.1	272.1	19.0	6.1	3.6
FSB837	0.0	2.2	2.2	2.1	4.7
	6.0	9.0	3.0	1.4	1.3
	33.0	35.1	2.1	1.3	4.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL672A	47.0	49.4	2.4	2.1	12.5
PPL667	25.1	29.8	4.7	4.3	2.0
	42.7	45.7	3.0	2.8	2.9
	49.7	51.7	2.0	1.9	4.5
PPL581	0.0	12.0	12.0	9.6	1.2
	18.0	22.0	4.0	3.2	3.4
	46.0	55.0	9.0	6.9	4.7
PPL642	3.0	11.5	8.6	3.5	2.7
PPL668	55.6	61.3	5.7	5.0	4.0
PPL691	2.8	19.1	16.3	9.2	2.7
PPL648	52.0	54.0	2.0	1.3	3.2
PPL591	9.0	12.5	3.5	2.8	3.2
	24.0	33.3	9.3	2.6	1.8
	95.0	99.2	4.2	1.6	1.6
	112.5	116.5	4.0	1.6	2.7
	148.0	153.0	5.0	2.4	1.4
PPL597	169.8	172.8	3.0	2.5	2.2
FSB884A	0.0	10.6	10.6	4.2	5.1
FSB866	21.0	25.0	4.0	3.5	3.6
FSB867	9.0	18.0	9.0	7.9	1.1
FSB822	0.0	12.2	12.2	5.7	2.8
FSB865	20.6	23.0	2.5	2.1	4.7
PPL724	9.8	19.4	9.6	4.5	1.6
	31.9	36.0	4.1	2.8	6.3
PPL728	4.0	7.2	3.2	2.2	28.0



Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	10.0	13.0	3.0	2.1	1.9
	22.2	33.0	10.8	5.5	8.5
	59.0	62.0	3.0	2.5	1.7
	105.0	110.0	5.0	4.0	2.6
PPL719	53.4	60.6	7.3	5.0	1.6
	62.3	75.9	13.6	9.0	3.6
PPL703	37.1	70.5	33.4	9.0	6.9
PPL705	21.8	24.8	3.0	0.9	2.1
	28.4	34.4	6.0	1.8	15.4
	49.3	66.1	16.8	5.8	2.8
PPL701	44.5	56.7	12.2	5.4	5.5
	69.0	74.0	5.0	2.3	3.2
PPL686	52.5	55.5	3.0	2.9	2.4
	61.0	65.7	4.7	1.7	5.5
	86.1	90.0	3.9	3.3	3.3
FSB911	13.0	15.0	2.0	1.9	2.0
FSB909	16.0	29.5	13.5	4.3	2.6
FSB879	22.0	28.5	6.5	3.3	4.1
PPL707	33.2	36.0	2.8	2.0	5.3
	46.7	49.4	2.7	2.0	1.9
	67.6	70.2	2.6	1.9	5.6
PPL767	14.2	16.2	2.1	1.7	4.1
	53.6	56.7	3.1	2.6	4.2
PPL704	33.0	39.9	6.9	1.6	3.7
	48.0	51.8	3.8	2.1	7.6

<b>Hole ID</b>	<b>From</b>	<b>To</b>	<b>Core Length (m)</b>	<b>Estimated True Width (m)</b>	<b>Average Grade (g/t Au)</b>
PPL669	76.8	85.9	9.1	9.0	3.8
PPL693	171.6	181.9	10.2	4.2	4.6
	186.8	191.6	4.8	2.8	2.3
	217.7	242.5	24.8	6.5	3.7
PPL727	32.0	41.0	9.0	4.1	3.6
	43.0	49.8	6.8	2.9	1.4
	69.0	73.0	4.0	3.6	2.2
PPL772	8.3	12.4	4.1	1.8	3.1
	106.5	110.5	4.1	2.3	1.1
PPL731	33.0	39.0	6.0	1.7	3.8
	40.1	53.0	12.9	3.6	4.2
	56.0	58.0	2.0	1.2	8.1
	61.0	71.0	10.0	2.8	5.0
	79.0	89.0	10.0	2.4	2.1
	97.0	102.3	5.3	3.9	3.5
	107.4	141.7	34.3	6.0	7.2
	146.0	150.0	4.0	2.8	4.5
FSB903	0.0	9.4	9.4	3.6	3.8
PPL726	184.7	189.7	5.0	2.5	5.7
	197.5	202.9	5.4	2.5	4.8
	209.5	212.0	2.5	2.3	1.9
	214.0	220.0	6.0	5.3	2.3
	231.0	241.0	10.0	4.2	7.3
	244.0	248.0	4.0	2.0	3.0
FSB912	1.0	3.0	2.0	1.7	3.3

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL769	12.1	16.8	4.7	2.8	2.8
	17.7	21.6	3.9	2.3	2.1
	52.7	57.5	4.8	3.0	4.6
PPL800	106.1	110.9	4.9	4.7	1.1
	113.4	123.4	10.0	3.5	5.7
	135.4	139.4	4.0	1.9	12.7
	148.4	159.4	11.0	4.0	4.1
	181.4	187.4	6.0	2.5	4.4
FSB892	18.0	30.8	12.8	4.9	5.8
PPL702	329.0	331.2	2.2	1.9	3.4
PPL684	39.8	43.1	3.3	2.7	2.8
	48.2	55.0	6.8	5.7	1.9
	59.6	62.4	2.8	2.3	1.6
PPL750	117.8	121.1	3.3	1.9	8.8
	128.4	138.5	10.1	3.2	7.7
	160.1	173.3	13.2	4.3	3.0
PPL689	106.0	115.5	9.5	9.5	7.9
PPL683	33.1	38.0	4.9	3.2	4.0
PPL773	7.9	13.1	5.2	1.8	2.3
	14.8	21.1	6.3	1.8	2.6
	27.6	38.9	11.3	4.7	5.3
	53.7	57.7	4.0	1.7	2.3
	64.8	66.9	2.2	0.9	6.2
FSB899	23.0	27.0	4.0	3.0	2.4
PPL736	99.6	101.6	2.0	1.6	1.8

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	121.5	144.7	23.2	5.8	3.7
	148.8	152.5	3.8	3.1	2.8
FSB896	4.0	10.8	6.8	5.6	4.0
	10.8	14.8	4.0	2.7	14.4
FSB900	2.0	4.0	2.0	1.5	7.7
	16.0	18.0	2.0	1.4	2.7
FSB897	9.0	13.0	4.0	3.4	2.0
FSB920	20.0	24.0	4.0	2.8	4.8
FSB941	4.0	12.0	8.0	4.3	4.1
PPL736	99.6	101.6	2.0	1.6	1.8
	121.5	144.7	23.2	5.8	3.7
	148.8	152.5	3.8	2.5	2.8
	148.8	152.5	3.8	2.5	2.8
FSB917	34.4	36.7	2.3	2.2	6.9
	45.3	47.0	1.7	1.6	2.8
PPL706	6.0	11.0	5.0	5.0	3.4
	15.0	17.0	2.0	2.0	9.7
	79.0	83.0	4.0	4.0	16.6
	91.0	98.2	7.2	4.5	3.7
	101.3	104.6	3.3	1.0	3.9
FSB919	11.0	26.0	15.0	5.3	3.4
FSB918	9.0	12.0	3.0	2.0	8.1
	21.8	29.8	8.0	7.2	5.7
PPL735A	114.5	123.5	9.0	2.2	3.0
	128.0	142.8	14.8	3.6	5.7

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	152.0	155.7	3.7	3.5	17.9
	164.0	170.0	6.0	5.5	2.8
PPL718	87.0	89.0	2.0	1.5	2.8
PPL745	105.0	115.0	10.0	7.5	8.4
	128.3	145.0	16.7	11.0	5.3
	157.7	168.0	10.3	6.9	4.4
	175.3	181.0	5.7	4.0	8.8
PPL734	139.4	158.0	18.6	6.0	7.9
PPL751	99.8	108.0	8.3	7.3	6.9
	123.0	128.0	5.0	4.5	4.6
	143.5	149.9	6.4	5.6	7.1
	159.2	164.6	5.4	4.8	17.4
	166.8	170.0	3.2	3.0	16.8
PPL771	7.1	18.6	11.5	3.9	2.1
	22.6	30.4	7.8	2.9	1.9
	58.0	60.8	2.8	1.3	1.7
	116.8	129.7	12.9	7.5	3.3
PPL738	93.9	102.4	8.5	2.4	5.3
	106.3	125.6	19.3	4.9	7.0
PPL768	3.4	5.0	1.6	0.8	4.8
	61.0	65.0	4.0	2.5	1.7
	80.0	83.0	3.0	2.1	2.9
PPL813	55.8	58.5	2.7	2.5	1.6
FSB916	8.0	10.0	2.0	1.4	5.0
	23.0	32.0	9.0	6.0	4.0

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	44.0	49.0	5.0	3.6	3.7
PPL752	96.0	100.9	5.0	1.7	5.7
	149.1	166.8	17.7	4.9	3.1
FSB974	17.0	19.2	2.2	1.5	7.1
	28.0	39.7	11.7	8.6	2.2
FSB965A	0.0	10.0	10.0	3.4	2.5
	19.0	29.0	10.0	3.2	3.0
	35.4	43.5	8.1	2.5	10.5
PPL732A	97.0	104.0	7.0	2.2	2.1
	112.0	114.0	2.0	1.1	37.9
FSB963	5.0	9.0	4.0	3.7	4.1
	53.0	69.0	16.0	4.9	3.8
FSB966	16.0	24.0	8.0	3.3	4.9
	32.0	36.0	4.0	1.8	7.1
	43.0	47.0	4.0	1.9	3.1
PPL733	71.9	75.8	3.8	1.7	6.3
	112.0	116.4	4.4	2.0	4.3
PPL774	13.5	15.5	2.0	1.8	5.3
	20.0	26.0	6.0	2.6	3.3
	63.0	65.0	2.0	0.9	2.8
PPL788	6.0	10.0	4.0	2.0	2.4
	50.0	54.0	4.0	1.7	6.2
	68.0	71.0	3.0	2.8	1.6
	88.0	91.0	3.0	2.0	1.6
PPL636	2.9	13.9	11.0	6.1	2.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	43.0	48.2	5.3	3.8	1.7
PPL770	10.3	16.0	5.7	1.4	1.8
	58.4	66.0	7.6	3.6	3.5
	101.0	110.0	9.0	4.8	2.2
	135.0	139.2	4.2	2.5	2.2
FSB958	0.0	19.0	19.0	4.9	3.9
	38.0	45.0	7.0	2.4	2.8
FSB964	4.0	14.0	10.0	2.5	2.6
	22.0	28.0	6.0	2.3	1.6
FSB962	3.0	15.0	12.0	3.2	3.5
	18.6	25.0	6.4	1.5	3.0
	38.0	52.0	14.0	3.1	2.4
FSB967	0.0	13.4	13.4	2.4	2.1
FSB961	3.0	11.0	8.0	3.9	4.2
PPL787	83.5	85.5	2.0	1.7	7.3
FSB952	0.0	2.0	2.0	1.7	1.7
	4.0	13.0	9.0	3.4	9.8
	21.0	26.0	5.0	1.8	17.5
FSB907	1.3	3.0	1.7	1.4	9.5
	17.3	22.0	4.7	2.4	8.8
FSB944	0.0	4.0	4.0	3.0	5.3
	11.2	14.3	3.2	2.5	10.5
	18.0	20.0	2.0	1.6	3.6
	48.0	55.0	7.0	2.5	2.8
FSB943	0.0	3.0	3.0	2.2	4.6

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	5.0	9.0	4.0	1.5	5.4
	11.0	19.7	8.7	2.0	4.4
	32.0	36.0	4.0	1.4	8.4
	59.0	70.0	11.0	2.8	3.2
	71.0	75.3	4.3	1.3	1.9
FSB960	2.0	16.9	14.9	4.7	5.6
	18.2	23.0	4.9	1.5	2.4
PPL785	2.0	7.0	5.0	2.0	1.5
	74.0	76.0	2.0	1.5	1.0
PPL775	9.0	11.0	2.0	1.8	3.5
	16.0	19.8	3.8	1.5	3.0
PPL783	18.0	24.0	6.0	4.6	1.5
	55.0	58.8	3.8	2.8	1.8
PPL781	37.2	39.4	2.3	1.6	1.9
PPL715	9.0	17.0	8.0	5.0	2.8
	31.0	33.0	2.0	1.3	1.6
PPL727	71.0	73.0	2.0	2.0	4.1
	76.0	79.0	3.0	3.0	1.2
FSB945	0.0	18.0	18.0	4.9	4.1
	43.0	48.0	5.0	1.7	3.0
FSB946	0.0	24.3	24.3	5.8	2.4
PPL776	6.0	10.0	4.0	1.3	2.3
	14.0	17.0	3.0	2.9	1.5
	35.0	38.1	3.1	1.1	4.1
FSB954	1.0	7.0	6.0	2.0	2.0



Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	22.9	25.9	3.1	1.0	8.9
PPL742	105.4	109.3	4.0	1.3	17.4
	111.0	113.8	2.8	1.0	10.3
FSB947	0.0	20.0	20.0	6.0	14.5
	46.4	48.0	1.6	0.4	4.1
FSB968	0.0	30.0	30.0	7.6	5.9
FSB969	2.5	14.0	11.5	2.9	2.4
	18.0	39.3	21.3	8.3	9.7
	51.0	57.0	6.0	1.5	3.2
PPL784	68.9	70.7	1.9	0.7	3.9
PPL762	112.5	127.0	14.5	7.2	4.4
PPL814	79.8	81.5	1.7	1.3	30.2
	56.0	60.3	4.3	1.9	3.1
FSB970	7.8	19.2	11.4	5.1	3.9
FSB971	8.0	34.0	26.0	22.0	5.8
	49.0	55.5	6.5	2.7	5.1
PPL760	98.0	122.1	24.1	10.5	2.8
	153.5	158.5	5.0	2.0	6.6
	187.4	190.0	2.6	1.0	1.9
FSB908	19.4	25.1	5.7	1.7	5.7
	33.0	38.8	5.8	1.8	5.0
FSB973	1.0	6.9	5.8	1.5	2.6
PPL825	78.0	80.0	2.0	1.8	6.8
	96.7	99.0	2.3	0.8	2.2
PPL739	96.5	98.5	2.1	2.0	9.0

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	108.5	123.5	15.0	7.5	4.5
	139.5	147.5	8.0	6.7	7.3
PPL798	63.2	66.2	3.1	2.2	2.1
	147.5	154.5	7.0	4.5	2.8
PPL789	35.0	39.0	4.0	1.3	2.7
	64.0	73.0	9.0	2.6	2.4
	80.1	88.0	7.9	2.6	1.7
FSB975	38.8	41.3	2.5	0.8	4.7
PPL744	129.6	138.0	8.4	2.8	2.9
PPL868	32.7	39.0	6.3	1.9	2.0
	127.1	130.5	3.4	1.5	1.9
	153.4	156.3	2.8	0.7	1.8
PPL864	119.8	132.0	12.2	4.1	3.5
	135.0	145.0	10.0	4.1	3.8
	160.0	162.0	2.0	1.0	2.8
FSB957	1.0	5.0	4.0	1.4	2.3
	41.7	46.1	4.4	1.7	10.4
	47.0	52.4	5.4	2.0	1.3
PPL866	17.0	19.0	2.0	1.7	3.0
PPL777	10.0	15.0	5.0	2.0	1.6
	22.0	24.0	2.0	0.9	4.1
FSB959	2.4	5.2	2.8	1.9	2.3
	41.7	46.1	4.4	3.8	10.4
PPL786	4.1	7.2	3.2	1.5	2.4
	25.5	29.5	4.0	1.6	20.6

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	82.2	88.1	5.9	1.8	1.5
FSB976	0.0	4.9	4.9	2.6	8.1
PPL875	110.0	117.0	7.0	2.7	3.7
PPL748	79.0	85.2	6.2	1.7	2.6
	92.0	101.0	9.0	2.6	8.2
	115.0	117.0	2.0	1.2	2.2
PPL867	23.0	28.1	5.1	1.9	2.3
	40.3	42.8	2.6	0.9	1.8
FSB981	2.1	3.8	1.8	1.2	4.0
PPL872	40.3	45.4	5.2	2.1	1.7
	58.5	63.7	5.3	2.3	1.9
	82.2	86.8	4.6	2.1	3.3
	92.9	104.2	11.3	3.4	2.2
	114.5	120.0	5.5	2.2	7.5
FSB989	0.0	6.3	6.3	1.6	8.6
	27.0	29.0	2.0	0.7	4.3
	41.0	57.0	16.0	3.4	3.4
PPL778	2.6	5.3	2.8	0.7	1.8
	27.6	32.3	4.7	1.2	2.3
PPL780	34.0	41.0	7.0	2.1	2.0
	79.0	85.0	6.0	1.2	1.8
FSB997	14.3	16.5	2.2	0.6	3.7
PPL792	0.0	2.0	2.0	1.4	4.2
	24.0	29.0	5.0	3.7	2.6
	72.0	77.0	5.0	3.9	1.8

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL824	4.9	7.5	2.6	1.7	6.5
	36.2	38.1	1.9	1.2	2.8
	157.1	162.1	5.0	1.7	1.2
PPL764	41.9	50.1	8.3	3.5	1.6
	59.6	65.5	6.0	2.5	1.5
	71.6	75.2	3.7	1.5	1.7
	108.1	141.3	33.2	13.0	9.0
PPL805	92.3	95.3	3.0	1.3	1.9
	127.0	145.0	18.0	3.7	1.6
	159.9	166.3	6.4	2.0	1.2
	234.0	238.0	4.0	1.6	1.8
PPL779	18.0	21.0	3.0	1.4	2.1
	25.0	28.0	3.0	1.5	2.2
PPL571	25.0	29.5	4.5	2.4	1.3
PPL790A	48.3	51.4	3.2	1.4	3.2
PPL763	130.0	143.0	13.0	7.0	4.0
PPL797	154.0	167.8	13.9	8.9	7.4
PPL870	115.3	133.0	17.7	4.0	4.1
	138.0	151.5	13.5	3.2	1.7
PPL806	66.8	71.3	4.5	2.5	1.4
	82.8	91.4	8.6	3.9	5.7
	106.2	112.4	6.2	3.2	1.7
	120.3	128.1	7.8	4.1	2.0
	141.8	144.8	3.0	1.6	1.5
PPL882	60.5	64.8	4.3	2.2	1.8

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	151.2	163.2	12.0	5.0	2.8
PPL759	113.5	120.4	6.8	3.1	2.2
PPL570	16.0	25.0	9.0	3.7	2.8
	27.0	31.0	4.0	1.7	4.5
	33.0	36.0	3.0	1.2	8.4
PPL794	14.0	17.6	3.6	1.3	1.9
PPL809	52.3	58.2	6.0	2.2	2.5
	62.4	67.7	5.3	2.1	4.8
PPL822	34.4	47.0	12.7	3.7	4.6
	98.0	101.0	3.0	1.3	4.5
	113.8	117.0	3.2	1.2	3.5
	151.0	154.0	3.0	1.3	1.7
PPL968	175.5	178.5	3.0	1.4	2.3
FSB761	2.9	4.5	1.6	0.6	3.3
	7.5	13.1	5.6	1.9	9.3
	24.7	32.1	7.4	2.5	2.3
FSB762	2.0	9.0	7.0	2.2	5.2
	35.0	38.0	3.0	1.0	2.1
PPL880	73.0	77.0	4.0	2.0	2.3
	120.0	135.0	15.0	6.0	9.4
	138.0	141.4	3.4	1.3	3.7
	144.0	148.0	4.0	1.5	20.6
PPL966	126.7	129.2	2.5	0.7	1.7
	139.0	141.0	2.0	0.6	3.9
PPL765	55.5	67.1	11.6	5.2	4.1

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	82.5	91.0	8.6	3.6	11.3
	100.0	104.5	4.5	1.9	10.7
	112.0	115.5	3.5	1.4	7.3
PPL964	81.1	84.0	2.9	1.5	1.6
	101.0	108.2	7.2	3.3	2.4
PPL934	39.0	43.0	4.0	1.0	2.9
PPL933	39.0	42.0	3.0	1.2	1.3
PPL967	155.7	162.5	6.8	2.2	3.2
PPL974	94.7	96.7	2.0	0.5	2.7
FSB767	65.3	76.3	11.0	2.1	8.3
PPL884	93.9	109.0	15.2	4.1	5.4
	178.0	183.0	5.0	1.4	2.1
	187.0	191.6	4.6	1.8	6.7
FSB990	10.0	14.8	4.8	4.8	3.0
PPL764	106.5	141.3	34.8	3.1	7.9
	189.0	199.0	10.0	2.2	4.3
PPL924	27.0	29.8	2.8	1.2	2.6
FSB792	29.0	47.2	18.3	5.2	5.4
PPL987	96.9	100.0	3.1	3.0	6.2
PPL965	112.5	119.5	7.0	2.7	3.4
PPL914	33.0	35.0	2.0	1.3	3.9
	62.6	67.7	5.1	3.0	2.8
PPL883	91.0	110.0	19.0	5.1	7.4
	114.0	121.0	7.0	1.7	5.1
	127.0	146.8	19.8	4.2	4.6

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	154.0	157.0	3.0	1.4	3.1
PPL766	78.0	87.7	9.7	5.0	3.4
	90.9	114.0	23.1	4.0	14.2
	138.8	161.0	22.2	3.0	2.3
	176.0	190.4	14.4	6.6	4.7
	191.4	198.0	6.6	3.0	2.7
	202.0	286.0	84.0	3.0	2.8
FSB768	20.0	32.5	12.5	3.0	4.8
FSB779	13.8	17.7	3.9	3.9	2.0
	50.0	54.4	4.4	1.3	2.2
PPL987	96.9	100.0	3.1	1.8	7.8
	104.7	108.6	3.8	1.5	1.7
PPL878	92.3	102.0	9.8	2.9	6.9
	121.0	124.0	3.0	1.0	2.2
	179.6	190.9	11.3	2.9	1.2
PPL990	107.0	109.8	2.8	1.1	3.3
PPL973	77.6	80.6	3.0	2.0	2.2
	101.6	105.5	4.0	3.5	1.6
PPL917	128.0	133.0	5.0	1.1	2.0
	145.2	164.1	18.9	4.7	3.3
PPL804	45.7	47.7	2.1	1.0	6.5
	183.5	185.4	1.8	0.8	3.3
	278.3	309.5	31.2	10.3	3.1
PPL879	112.5	120.0	7.5	2.3	5.5
	123.0	147.7	24.7	6.6	2.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
FSB780	17.5	21.9	4.4	2.2	6.1
FSB781	43.2	55.8	12.6	2.7	3.1
FSB820	6.4	12.9	6.5	2.5	2.7
FSB824	12.0	22.0	10.0	4.3	2.8
PPL886	104.0	107.0	3.1	1.7	3.6
	112.3	114.0	1.8	0.9	3.9
PPL600	14.1	20.1	6.0	3.5	1.7
	249.5	262.5	13.0	6.5	4.8
FSB814	34.0	40.0	6.0	3.9	7.1
FSB849	18.0	42.3	32.0	3.5	6.0
PPL817	5.0	7.6	2.6	1.2	4.6
	16.7	19.7	3.0	1.3	2.1
	78.0	81.5	3.5	1.1	6.2
	90.9	95.7	4.8	1.3	1.5
FSB823	8.8	16.8	8.0	3.5	4.5
PPL796	86.0	95.0	9.0	5.8	4.6
	99.0	106.0	7.0	5.2	1.6
	108.0	112.0	4.0	2.6	1.9
PPL884	93.9	108.0	14.2	6.0	6.7
PPL601	68.0	74.0	6.0	1.2	3.0
	179.5	185.5	6.0	1.3	2.0
	187.7	190.7	3.0	1.3	1.9
PPL603	1.8	5.7	4.0	1.6	2.0
	10.1	12.5	2.5	1.1	8.1
	114.0	118.0	4.0	1.3	1.5



Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	144.0	154.9	10.9	3.2	1.3
	193.6	202.9	9.3	2.9	5.6
PPL635	95.0	101.0	6.0	2.6	3.1
PPL638	106.8	124.2	17.5	6.2	4.5
PPL632	86.5	88.6	2.1	1.7	1.9
PPL895	71.9	76.0	4.1	3.0	2.7
	92.5	98.7	6.2	3.5	2.9
	103.0	113.2	10.1	6.5	5.6
	116.7	122.0	5.3	3.5	4.8
PPL947	70.0	79.0	9.0	5.0	29.0
	90.8	95.0	4.2	2.0	1.7
	111.8	114.5	2.7	1.5	1.6
PPL950	26.4	29.4	3.0	1.5	2.5
	150.0	153.5	3.5	2.5	8.0
PPL609	139.7	142.5	2.8	1.5	2.7
PPL637	114.0	116.0	2.0	1.0	3.1
	134.3	137.0	2.8	1.4	2.4
FSB987	0.0	6.6	6.6	3.1	1.8
FSB814	34.0	40.0	6.0	3.9	7.1
FSB849	18.0	42.3	32.0	3.5	6.0
PPL817	5.0	7.6	2.6	1.2	4.6
	16.7	19.7	3.0	1.3	2.1
	78.0	81.5	3.5	1.1	6.2
	90.9	95.7	4.8	1.3	1.5
FSB823	8.8	16.8	8.0	3.5	4.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL796	86.0	95.0	9.0	5.8	4.6
	99.0	106.0	7.0	5.2	1.6
	108.0	112.0	4.0	2.6	1.9
PPL884	93.9	108.0	14.2	6.0	6.7
PPL601	68.0	74.0	6.0	1.2	3.0
	179.5	185.5	6.0	1.3	2.0
	187.7	190.7	3.0	1.3	1.9
PPL603	1.8	5.7	4.0	1.6	2.0
	10.1	12.5	2.5	1.1	8.1
	114.0	118.0	4.0	1.3	1.5
	144.0	154.9	10.9	3.2	1.3
	193.6	202.9	9.3	2.9	5.6
PPL635	95.0	101.0	6.0	2.6	3.1
PPL638	106.8	124.2	17.5	6.2	4.5
PPL632	86.5	88.6	2.1	1.7	1.9
PPL895	71.9	76.0	4.1	3.0	2.7
	92.5	98.7	6.2	3.5	2.9
	103.0	113.2	10.1	6.5	5.6
	116.7	122.0	5.3	3.5	4.8
PPL947	70.0	79.0	9.0	5.0	29.0
	90.8	95.0	4.2	2.0	1.7
	111.8	114.5	2.7	1.5	1.6
PPL950	26.4	29.4	3.0	1.5	2.5
	150.0	153.5	3.5	2.5	8.0
PPL609	139.7	142.5	2.8	1.5	2.7

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL637	114.0	116.0	2.0	1.0	3.1
	134.3	137.0	2.8	1.4	2.4
FSB987	0.0	6.6	6.6	3.1	1.8
PPL948	0.0	2.2	2.2	1.4	2.1
	19.9	22.6	2.8	1.8	1.9
	43.3	60.5	17.2	2.6	10.5
FSB760	17.3	22.5	5.2	2.0	2.9
FSB942	35.0	39.1	4.1	1.7	10.4
FSB983	23.3	31.2	7.9	1.9	5.9
PPL949	86.4	97.3	10.9	5.2	5.8
	104.4	108.3	3.8	1.8	2.1
	114.2	122.7	8.5	4.0	5.2
	132.8	142.6	9.8	4.1	1.9
PPL839	23.8	25.8	2.0	1.5	3.8
FSB927A	10.0	18.7	8.7	8.7	7.4
FSB927A	10.5	14.4	3.9	3.9	4.3
FSB939	11.0	16.5	5.5	4.0	1.2
	28.3	32.0	3.7	3.0	1.6
	36.0	40.5	4.5	4.0	1.6
FSB856	17.5	31.0	13.5	12.0	6.6
PPL807A	148.5	164.0	15.5	10.0	5.0
FSB937	25.6	27.6	2.0	1.5	7.0
FSB939	28.3	32.0	3.7	3.0	1.6
	36.0	40.5	4.5	3.5	1.6
PPL819	65.5	69.8	4.3	2.0	2.2

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	79.3	89.3	10.0	4.5	5.3
PPL943	30.3	35.7	5.4	1.7	4.1
FSB940	24.7	30.5	5.8	1.5	9.0
	32.5	35.5	3.0	1.4	3.7
	67.5	70.5	3.0	1.4	3.2
PPL937	25.6	28.6	3.0	1.5	4.8
PPL952	45.4	50.4	5.1	2.4	3.9
	80.7	85.5	4.8	2.2	2.5
	96.2	100.4	4.2	1.8	2.7
	114.1	122.4	8.3	3.6	2.8
	157.1	169.8	12.7	3.3	2.6
	171.8	173.5	1.7	0.7	2.6
PPL953	83.0	87.0	4.0	1.9	6.9
PPL948A	0.0	2.9	2.9	1.8	2.2
	42.4	48.0	5.7	3.8	1.8
	50.0	60.1	10.1	6.1	2.1
PPL603	1.8	5.7	4.0	1.5	2.4
	10.1	12.5	2.5	1.1	7.4
	193.6	202.9	9.3	2.9	5.1
PPL945	3.8	5.8	2.0	0.8	3.3
	36.5	41.5	5.0	2.0	3.1
FSB921	0.0	5.1	5.1	1.7	2.1
PPL611A	124.7	128.8	4.1	1.3	2.5
	132.7	135.3	2.6	0.9	2.9
PPL960	118.7	146.0	27.4	7.0	6.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
PPL603	1.8	5.7	4.0	1.6	2.4
	10.1	12.5	2.5	1.0	7.4
	193.6	202.9	9.3	3.0	5.1
FSB936	0.0	3.9	3.9	1.8	4.8
	19.1	20.6	1.5	1.1	5.0
	48.3	65.6	17.3	4.7	15.1
	96.7	100.4	3.8	1.5	4.4
	103.6	117.6	14.0	2.8	2.6
FSB937	0.0	3.5	3.5	1.5	3.3
	51.4	72.3	20.9	4.9	4.8
PPL605	189.9	191.3	1.4	0.7	5.1
FSB922	0.0	14.4	14.4	5.0	3.4
	29.4	32.4	3.0	1.2	2.0
PPL946	83.5	88.0	4.5	2.3	1.3
PPL575	84.0	86.7	2.7	1.1	1.7
	111.0	115.0	4.0	1.3	3.4
PPL1003	114.6	129.7	15.1	10.0	3.3
	216.0	232.0	16.0	7.9	4.9
PPL488	217.9	221.4	3.4	1.0	1.7
	227.2	240.3	13.2	3.7	3.7
PPL722	51.3	67.8	16.6	4.6	1.7
PPL959	83.0	87.0	4.0	2.0	6.9
PPL740	80.1	82.7	2.6	1.3	3.3
PPL958	95.7	97.7	2.1	0.9	6.3
FSB953	39.6	48.4	8.8	3.2	2.8

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
FSB929	44.5	64.5	20.0	4.7	4.2
	74.6	80.1	5.6	1.5	2.2
FSB930	22.3	37.4	15.1	4.5	4.6
	41.4	47.4	6.0	1.8	2.9
	50.5	56.7	6.2	1.8	2.2
FSB931	34.2	48.3	14.1	2.3	4.0
	50.2	69.4	19.2	2.6	2.8
PPL951	0.0	4.0	4.0	2.3	2.0
	45.0	58.4	13.5	7.8	3.0
	137.0	154.0	17.0	9.0	1.7
	161.0	167.4	6.4	3.1	7.1
	202.5	228.3	25.8	7.5	9.5
	239.3	262.3	23.1	7.3	4.6
	264.3	273.8	9.4	5.5	2.4
	282.3	290.0	7.8	4.5	5.6
	294.4	307.3	12.9	5.8	6.8
	333.6	338.0	4.4	1.8	4.4
	349.8	357.4	7.6	3.1	2.1
PPL898	92.6	100.3	7.7	2.8	2.4
	122.2	125.4	3.1	1.2	5.6
PPL490	266.4	274.3	7.9	2.6	3.9
PPL1012	168.8	182.1	13.3	5.5	4.3
PPL900	8.7	13.6	4.9	2.9	1.7
	57.7	63.9	6.2	2.5	3.4
	68.8	76.2	7.4	1.8	6.5

Hole ID	From	To	Core Length (m)	Estimated True Width (m)	Average Grade (g/t Au)
	89.1	92.2	3.1	2.1	3.6
PPL483	115.1	117.0	1.9	0.9	2.0
PPL925	34.0	44.9	10.9	4.8	2.5
PPL970	43.0	50.5	7.6	2.3	12.9
	71.0	77.2	6.2	1.4	3.5
	107.5	112.0	4.5	1.2	3.0
PPL926	27.5	29.9	2.4	0.8	5.2
FSB935	54.5	58.2	3.8	0.9	1.9
	61.3	72.1	10.8	1.5	4.1
	87.5	100.0	12.5	2.0	2.2

**Table 8a: Significant drilling intersections obtained in 2021 at the Córrego Brandão Brownfields Exploration Project  
Jaguar Mining Inc. – Caeté Operations**

Summary of Significant Intersections, 2020-2021 Diamond Drilling Program Jaguar Mining Inc. – Corrego Brandão Brownfields Exploration Project									
Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)
<b>FCBR001</b>	640.028,41	7.798.106,61	1.073,68	79,25	0,00	40,00	40,00		4,20
<b>Including</b>					10,40	16,50	6,10		15,81
					27,00	28,50	1,50		33,60
					35,50	37,75	2,25		1,69
<b>FCBR002</b>	640.028,19	7.798.106,78	1.073,62	58,70	0,00	40,05	40,05		1,41
<b>Including</b>					8,50	10,25	1,75		6,29
					18,00	25,50	7,50		3,38
					29,50	35,50	6,00		2,56
<b>FCBR003</b>	639.988,14	7.798.100,32	1.067,66	59,75	13,50	25,50	12,00		1,75

**Summary of Significant Intersections, 2020-2021 Diamond Drilling Program  
Jaguar Mining Inc. – Corrego Brandão Brownfields Exploration Project**

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)
<b>Including</b>					17,35	20,85	3,50		4,73
<b>FCBR004</b>	639.988,27	7.798.100,10	1.067,67	82,75	0,00	19,95	19,95		0,91
<b>Including</b>					10,05	12,85	2,80		2,95
					14,80	19,95	5,15		1,18
<b>FCBR005</b>	640.052,35	7.798.076,08	1.071,38	87,50	0,00	46,15	46,15		0,78
<b>Including</b>					9,25	12,35	3,10		2,45
					16,55	39,05	22,50		0,94
<b>FCBR006</b>	640.070,73	7.798.050,61	1.066,33	68,05	32,75	34,55	1,80		1,98
<b>FCBR006</b>	640.070,73	7.798.050,61	1.066,33	68,05	42,00	48,40	6,40	6,40	0,73
<b>Including</b>					42,00	42,85	0,85	0,85	3,62
<b>FCBR006</b>	640.070,73	7.798.050,61	1.066,33	68,05	52,55	58,60	6,05	6,05	0,87
<b>Including</b>					54,55	55,55	1,00	1,00	1,12
					57,55	58,60	1,05	1,05	2,42
<b>FCBR007</b>	640.010,61	7.798.070,45	1.066,37	63,60	5,50	31,05	25,55		1,84
<b>Including</b>					10,65	16,80	6,15		2,41
					19,65	22,10	2,45		1,59
					24,15	25,25	1,10		14,35
					29,25	31,05	1,80		4,83
<b>FCBR007</b>	640.010,61	7.798.070,45	1.066,37	63,60	32,15	39,65	7,50		0,57
<b>Including</b>					32,15	34,15	2,00		1,06
<b>FCBR008</b>	640.036,37	7.798.047,69	1.069,38	65,00	30,35	49,15	18,80		0,84
<b>Including</b>					33,75	35,90	2,15		0,90
<b>FCBR008</b>	640.036,37	7.798.047,69	1.069,38	65,00	41,90	46,00	4,10	4,10	2,13
<b>FCBR009</b>	640.044,51	7.798.007,16	1.073,58	110,05	4,05	7,30	3,25		0,66
<b>FCBR009</b>	640.044,51	7.798.007,16	1.073,58	110,05	103,90	107,95	4,05	4,05	1,23
<b>FCBR010</b>	640.106,50	7.798.031,88	1.060,03	124,90	18,00	21,00	3,00		1,59
<b>Including</b>					19,00	20,00	1,00		3,91
<b>FCBR010</b>	640.106,50	7.798.031,88	1.060,03	124,90	34,45	41,40	6,95	5,51	2,11
<b>FCBR011</b>	640.106,39	7.798.076,50	1.058,91	87,40	0,00	8,25	8,25		0,90
<b>Including</b>					1,50	6,40	4,90		1,14
<b>FCBR012</b>	640.073,10	7.798.092,74	1.071,71	64,90	0,00	13,85	13,85		0,79
<b>Including</b>					0,00	4,15	4,15		1,17
					9,20	13,00	3,80		1,10
<b>FCBR013</b>	640.104,64	7.798.075,70	1.068,52	135,40	15,00	21,20	6,20		0,63
<b>Including</b>					15,00	19,20	4,20		0,90
<b>FCBR013</b>	640.104,64	7.798.075,70	1.068,52	135,40	99,70	103,40	3,70	3,10	1,90



**Summary of Significant Intersections, 2020-2021 Diamond Drilling Program  
Jaguar Mining Inc. – Corrego Brandão Brownfields Exploration Project**

Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)
<b>Including</b>					99,70	100,60	0,90	0,76	1,71
					102,45	103,40	0,95	0,80	5,12
<b>FCBR015</b>	640.015,82	7.798.024,67	1.069,15	109,60	77,75	91,70	13,95	13,95	0,90
<b>Including</b>					77,75	83,20	5,45	5,45	1,10
					89,50	90,60	1,10	1,10	3,32
<b>FCBR016</b>	639.995,25	7.798.086,36	1.067,38	84,35	0,00	32,50	32,50		0,44
<b>Including</b>					27,45	32,50	5,05		1,32
<b>FCBR017</b>	639.956,70	7.797.823,01	1.099,85	157,90	47,00	49,50	2,50		0,77
<b>FCBR017</b>	639.956,70	7.797.823,01	1.099,85	157,90	72,50	84,95	12,45	10,24	4,63
<b>Including</b>					73,50	80,00	6,50	5,34	2,13
					81,15	84,95	3,80	3,12	11,25
<b>FCBR019</b>	640.024,61	7.797.939,64	1.083,13	150,10	87,70	103,60	15,90	8,00	0,95
<b>FCBR021</b>	639.922,00	7.797.954,00	1.070,22	43,30	0,00	14,30	14,30		0,48
<b>Including</b>					0,00	5,80	5,80		0,90
					13,30	14,30	1,00		1,17
<b>FCBR025</b>	640.081,00	7.798.015,98	1.068,81	117,40	77,30	86,60	9,30	7,88	2,15
<b>Including</b>					77,30	82,55	5,25	4,41	3,51
<b>FCBR026</b>	640.109,00	7.798.012,00	1.058,96	100,90	19,50	21,50	2,00		0,91
<b>FCBR028</b>	640.085,17	7.798.169,13	1.059,84	100,75	16,85	37,85	21,00		0,81
<b>Including</b>					16,85	22,85	6,00		2,60
<b>FCBR030</b>	639.943,28	7.797.869,90	1.093,20	51,00	38,65	48,65	10,00		0,37
<b>FCBR031</b>	639.971,39	7.797.925,61	1.081,96	80,85	16,45	36,45	22,00		2,91
<b>Including</b>					16,45	23,45	7,00		8,14
<b>FCBR032</b>	639.988,04	7.798.014,02	1.063,31	51,20	3,50	14,80	11,30		1,38
<b>FCBR033</b>	640.078,00	7.797.984,00	1.069,66	241,90	25,50	26,50	1,00		3,65
<b>FCBR033</b>	640.078,00	7.797.984,00	1.069,66	241,90	57,60	58,60	1,00	0,64	10,70
<b>FCBR033</b>	640.078,00	7.797.984,00	1.069,66	241,90	137,90	142,90	5,00	3,20	0,63
<b>FCBR033</b>	640.078,00	7.797.984,00	1.069,66	241,90	165,90	169,90	4,00	2,56	1,11
<b>FCBR034</b>	640.135,59	7.797.971,33	1.042,22	219,40	179,30	183,30	4,00	2,56	3,12
<b>FCBS001</b>	639.908,32	7.797.739,72	1.082,56	168,30	119,95	125,75	5,80	3,41	2,17
<b>Including</b>					119,95	121,35	1,40	1,17	5,48
<b>FCBS002</b>	639.908,79	7.797.740,15	1.082,74	183,45	117,35	123,80	6,45	3,29	3,11
<b>Including</b>					119,50	123,80	4,30	2,24	4,22
<b>FCBS003</b>	639.913,21	7.797.734,94	1.082,29	191,85	114,70	123,85	9,15	5,70	2,96
<b>Including</b>					114,70	116,80	2,10	1,26	2,58
					118,80	123,85	5,05	3,33	4,24

Summary of Significant Intersections, 2020-2021 Diamond Drilling Program Jaguar Mining Inc. – Corrego Brandão Brownfields Exploration Project									
Hole ID	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	From (m)	To (m)	DownHole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)
<b>FCBS003</b>	639.913,21	7.797.734,94	1.082,29	191,85	131,05	145,05	14,00	9,84	1,09
<b>Including</b>					132,05	133,95	1,90	1,20	2,03
					137,75	141,25	3,50	2,16	1,33
<b>FCBS005</b>	639.874,38	7.797.511,18	1.101,16	252,70	139,30	143,20	3,90	3,67	0,85
<b>Including</b>					139,30	140,30	1,00	0,95	1,76
					142,30	143,20	0,90	0,85	1,41
<b>FCBS006</b>	639.874,84	7.797.511,20	1.101,18	180,15	88,20	94,55	6,35	6,35	0,94
<b>Including</b>					88,20	89,25	1,05	1,05	1,92
					92,40	94,55	2,15	2,15	1,78
<b>FCBS006</b>	639.874,84	7.797.511,20	1.101,18	180,15	102,90	109,40	6,50	6,50	0,89
<b>FCBS007</b>	639.819,91	7.797.490,15	1.092,47	275,65	52,70	58,55	5,85		0,37
<b>Including</b>					53,65	54,65	1,00		0,85
<b>FCBS008</b>	639.819,88	7.797.489,06	1.092,49	261,10	80,00	81,30	1,30	1,00	1,34
<b>FCBS008</b>	639.819,88	7.797.489,06	1.092,49	261,10	177,40	185,05	7,65	7,06	0,55
<b>Including</b>					177,40	179,35	1,95	1,80	1,20
					184,10	185,05	0,95	0,87	1,30
<b>FCBS008</b>	639.819,88	7.797.489,06	1.092,49	261,10	214,30	220,65	6,35	5,84	0,86
<b>FCBS009</b>					107,05	123,70	16,65	13,00	0,71
<b>Including</b>					111,35	113,40	2,05	1,60	1,08
					115,40	117,40	2,00	1,56	1,94
<b>FCBS009</b>	639.925,54	7.797.700,68	1.079,85	224,60	152,35	162,35	10,00	6,92	1,62
<b>Including</b>					152,35	155,35	3,00	2,34	0,89
					158,35	162,35	4,00	2,78	3,20
<b>FCBS010</b>	639.926,02	7.797.703,72	1.080,08	291,35	181,05	189,55	8,50	6,40	0,56
<b>Including</b>					182,90	183,75	0,85	0,66	1,35
					187,35	189,55	2,20	1,68	1,01

- Roça Grande

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. Core diameters are consistently HQ (63.5 mm) from the surface through the weathered rock to bedrock. At one to three m into the bedrock, the holes were reduced to NQ diameter (47.6 mm). Surface diamond drilling was carried out by the drilling contractor Mata Nativa while the underground infill drilling programs were carried out by Jaguar staff using company-owned equipment.

The diamond drill core procedures adopted by Jaguar are described below:

- Only drill holes with more than 90% core recovery from the mineralized zone were accepted.
- Drill hole deviations (surveys) were measured by Sperry-Sun or DDI/Maxibore equipment.
- The cores were stored in wooden boxes of 1 m length with 3 m of core per box (HQ diameter) or 4 m of core per box (NQ diameter). The hole's number, depth and location were identified in the boxes by an aluminum plate on the front of the box and by a water-resistant ink mark on its side. The progress interval and core recovery are identified inside the boxes by small wooden or aluminum plates.

Drill collars were set out using a theodolite or global positioning system (GPS). All holes were drilled within three m of the intended, planned location. Azimuth and inclination for the angle holes were set by Brunton compass, deemed accurate to within 2° azimuths and <1° inclination.

Following completion of the holes, the collars were surveyed with theodolite and cement markers were emplaced. Downhole surveys were completed on all holes more than 100 m long using Maxibor equipment.

A small program of 14 surface-based exploration holes, for a total length of 794 m, was completed in September 2014 to test targets in the areas of the existing open-pit mines.

A summary of the drilling campaigns completed at RG is provided in Table 9.

**Table 9: Summary of Drilling Campaigns, Roça Grande**

Jaguar Mining Inc. – Caeté Operations						
Period	Target	Diamond Drilling		Roto-Percussive Drilling		
		No. Holes	Total Length (m)	No. Holes	Total Length (m)	
<b>Vale</b>						
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
<b>Sub-Total Vale</b>		<b>177</b>	<b>23,325</b>	<b>313</b>	<b>17,270</b>	
<b>Jaguar</b>						
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			
<b>Sub-Total Jaguar</b>			<b>79,407</b>			

*Sample Preparation, Analysis and Security*

Sampling

The sampling procedures used by Jaguar are as follows:

Surface/Exploration Channel Sampling

1. Channel samples are collected from outcrops and trenches as needed.
2. The sites to be sampled are cleaned with a hoe, exposing the material by scraping it.
3. Structures are mapped, the lithologic contacts are defined, and samples are marked so that no sample includes more than one lithology.
4. Samples have a maximum length of 1 m and are from 1 to 2 kg in weight.
5. Each sample is collected manually in channels with average widths between 5 and 10 cm and about 3 cm deep, using a hammer and a chisel.
6. Either an aluminum tray or a thick plastic canvas drop sheet is used to collect the material.
7. The samples are then stored in a thick plastic bag and identified by a numbered label, protected by a thin plastic cover and placed with the sample.
8. Samples are identified by small aluminum plates, labels, or small wooden poles at the sampling site.
9. Sketches are drawn with lithological and structural information. The sample locations are surveyed.

### Diamond Drilling Core Sampling

1. Surface drilling is performed by contractors with holes in HQ or NQ diameters.
2. Underground drilling is performed by Jaguar or contractors with holes in HQ, NQ, BQ and LTK diameters.
3. Drill holes are accepted only if they have more than 85% of core recovery from the mineralized zone.
4. All the drill holes have their deviations measured by Maxibor or equivalent survey tool.
5. The cores are stored in wooden boxes of 1 m length with 3 m of core per box (HQ diameter) or 4 m of core per box (NQ diameter), or 5m of core per box (BQ and/or LTK diameters).
6. The number, depth 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.
7. The progress interval and core recovery are identified inside the boxes by small wooden plates.
8. During logging, all of the geological information, progress, and recovery measurements are verified, and the significant intervals are defined for sampling.
9. Samples are identified in the boxes by highlighting their side or by labels.
10. Samples are cut lengthwise with the help of a diamond saw and a hammer into approximately equal halves.
11. 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.
12. The remaining drill core from the surface-based drill holes is stored at a dedicated core storage facility that is located at RG.
13. For many of the underground-based drill holes, samples are cut lengthwise with the help of a diamond saw and a hammer into approximately equal halves.
14. 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.
15. Since 2019 exploration drilling samples were sent to either the ALS Chemex Brazil laboratories or the internal laboratory in Caeté, and all results were checked and validated using industry-standard QAQC protocols and procedures.

### Underground Production Channel Sampling

16. The sectors of the walls/underground exposures to be sampled are cleaned with pressurized water. Structures are mapped, lithologic contacts are defined, and samples marked so that no sample has more than one lithology included. Channel samples have a maximum length of 1 m and are from 2 to 3 kg in weight.
17. Channel samples have been taken by manually opening the channels, using a hammer and a small steel pointer crowned by carbide or a small jackhammer.
18. The channel samples have lengths ranging from 50 cm to 1 m, average widths between 5 and 10 cm, and are approximately 3 cm deep.
19. Two sets of channel samples are regularly collected on the underground faces. One set of channel samples is taken from the top of the muck pile once the work area has been secured. The second set of channel samples is taken at the waist height once the heading has been mucked clean and secured.
20. Channel samples from the walls and back are collected at approximately 5 m intervals. 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.
21. Either an aluminum tray or a thick plastic canvas is used to collect the material. The samples are then stored in a thick plastic bag and identified by a numbered label, protected by a thin plastic cover and placed with the sample.
22. At the underground sampling sites, samples are identified with liquid ink.

For surface-based exploration drill holes, samples were prepared at the ALS laboratories in Belo Horizonte. For other drill holes and channels, samples are prepared at Jaguar's mine site laboratories 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 is by standard fire assay procedures, using a 50 g or 30 g sample and an atomic absorption (AA) finish.

All samples from 2015 to 2021 drilling programs executed at the Pilar and Roça Grande mines were analyzed for gold at either Jaguar's mine site laboratory or the ALS Chemex laboratory located in Belo Horizonte.

The ALS laboratory based in Belo Horizonte meets international analytical standards and compliance protocols. Analytical results from the ALS laboratory were forwarded to Jaguar's Exploration or Mine Departments by email, followed by a hard copy.

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

At Jaguar's Caeté laboratory, samples from the Roça Grande and Pilar mines have been dried and then crushed. A 1 kg sub-sample of the crushed material is selected for pulverization to approximately 70% minus 200 mesh. The ring-and-puck pulverizers 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 taken 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 locations of the underground channel samples are surveyed at all times.

#### *Quality Assurance and Quality Control*

The Caeté laboratory carries out an internal program of Quality Assurance/Quality Control (QA/QC) for all drill core samples. The QA/QC protocol includes carrying out a duplicate analysis after every 20 samples, representing an insertion frequency of 5%.

Commercially sourced standard reference materials (Rocklabs standards) are inserted at a frequency of 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 stage.

A number of pulp samples were forwarded to the ALS Chemex laboratory in Vespasiano, Minas Gerais, for third-party check analyses and the analytical results compared favourably with the Caeté analyses.

The results of the blanks, duplicates, and standards are forwarded to Jaguar's head office on a monthly basis for insertion into Jaguar's internal database (BDI). There, 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 inserted into the main database.

*Mineral Resources Estimates (combined - Pilar and Roça Grande)*

Table 10 summarizes the Mineral Resources as of December 31<sup>st</sup>, 2021, based on a \$1,800/oz. gold price for both the Pilar Mine and the Roça Grande Mine. The total Mineral Resources for the Caeté Mine Complex (Pilar and Roça Grande), as estimated by Jaguar, comprise 4.799 million t at an average grade of 3.81 g/t Au - containing 588,000 oz. of gold - in the Measured and Indicated Resources category; and 3.014 million t at an average grade of 4.17 g/t Au - containing 405,000 oz. of gold in the Inferred Mineral Resource category. The Mineral Resources include the Roça Grande and Pilar mines altogether. A cut-off grade of 1.66 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. By Q1-2022, after the completion of the initial exploratory diamond drilling campaign, an envisaged initial inferred resources-base for the surficial Córrego Brandão target has been estimated as 1.072 million tonnes @ 1.48 g/t Au (51,000 Oz Au).

**Table 10: Summary of Mineral Resources as of December 31<sup>st</sup>, 2021**

As of December 31st 2021	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)
<b>Underground Caeté Gold Complex</b>												
<b>Pilar</b>												
Ore Body BA	396	4,30	55	176	3,80	22	573	4,15	76	31	3,70	4
Ore Body BF	734	4,22	99	198	4,19	27	931	4,21	126	293	4,33	41
Ore Body BFII	428	4,07	56	61	4,09	8	489	4,07	64	29	3,16	3
Ore Body BFIII	28	4,29	4	33	4,34	5	61	4,32	8	79	3,63	9
Ore Body Torre	75	2,99	7	286	3,28	30	361	3,22	37	288	3,74	35
Ore Body SW	224	3,44	25	637	3,45	71	861	3,45	95	1330	4,37	187
Others	454	3,29	48	108	3,36	12	562	3,30	60	75	4,04	10
<b>Total - Pilar</b>	<b>2338</b>	<b>3,91</b>	<b>294</b>	<b>1499</b>	<b>3,60</b>	<b>173</b>	<b>3837</b>	<b>3,79</b>	<b>467</b>	<b>2125</b>	<b>4,21</b>	<b>288</b>
Roça Grande	197	3,42	22	765	4,02	99	962	3,90	121	889	4,08	117
<b>Total - Caeté UG</b>	<b>2535</b>	<b>3,87</b>	<b>316</b>	<b>2264</b>	<b>3,74</b>	<b>272</b>	<b>4799</b>	<b>3,81</b>	<b>588</b>	<b>3014</b>	<b>4,17</b>	<b>405</b>
Pilar Waste/Void Tonnes Total	815											
<b>Open Pit - Caeté Gold Complex</b>												
Córrego Brandão	0	0,00	0	0	0,00	0	0	0,00	0	1072	1,48	51
Córrego Brandão Waste	8508											

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Caete Gold Complex include the Pilar and Roça Grande underground mines and the Córrego Brandão open pit deposit.
3. Mineral Resources at Caete Complex are estimated at a cut-off grade of 1.66 g/t Au for Pilar and 1.80 g/t for Roça Grande. For Córrego Brandão the resources are defined by pit optimization using Lerchs-Grossmann algorithm.
4. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounce at Pilar, Roça Grande and Córrego Brandão.
5. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.50 Brazilian Reais: 1 US Dollar for Pilar and Roça Grande.
6. A minimum mining width of 2.00 m was used at Pilar. For Córrego Brandão, pit optimization was used for Lerchs-Grossmann algorithm.
7. Mineral Resources are inclusive of Mineral Reserves at the Pilar mine. No Mineral Reserves are currently present at Roça Grande and Córrego Brandão.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Numbers may not add due to rounding.

Jaguar Mining prepared the Mineral Resources estimates under the supervision of Jonathan Victor Hill, who is a Qualified Person within the definition of the NI 43-101 for Mineral Resources. Jaguar is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other factors that could materially affect the Mineral Resource estimates.

### *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 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 Mineral Resources at Roça Grande comprise 0.962 million t at an average grade of 3.90 g/t Au - containing 121,000 oz. of gold in the Measured and Indicated Resources category; and 0.889 million t at an average grade of 4.08 g/t Au - containing 117,000 oz. of gold in the Inferred Mineral Resources category.

Jaguar prepared the Mineral Resources estimates under the supervision of Jonathan Victor Hill, who is a Qualified Person within the definition of the NI 43-101 for Mineral Resources. Jaguar is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other factors that could materially affect the Mineral Resource estimates.

It is Jaguar's opinion that 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 60 g/t Au for the BA Orebody to 20 g/t Au for the LHW Orebody. The Mineral Resources are reported by Jaguar 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 of December 31<sup>st</sup>, 2021.

The mineralized material for each orebody was classified by Jaguar 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 with previous production experience with this deposit.

A cut-off grade of 1.66 g/t Au is used for reporting the Mineral Resources. This cut-off grade was calculated with the use of a gold price of \$1,800/oz. and the actual cost data for Pilar. Gold prices used for reserves are based on consensus, long-term forecasts from banks, financial institutions, and other sources. For Mineral Resources, gold prices used are slightly higher than those for Mineral Reserves.

At a cut-off grade of 1.66 g/t Au, Jaguar estimates that the Mineral Resources at Pilar comprise 3.837 million t at an average grade of 3.79 g/t Au - containing 467,000 oz. of gold - in the Measured and Indicated Resource category; and 2.125 million t at an average grade of 4.21 g/t Au - containing 288,000 oz. of gold in the Inferred Mineral



Resource category.

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

The Mineral Resources are presented in further detail in Table 11.

**Table 11: Summary of Mineral Resources by Orebody as of December 31<sup>st</sup>, 2021**

As of December 31st, 2021	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)
<b>Caeté Gold Complex</b>									
Pilar									
Ore Body BA	119	3.64	14	118	3.41	13	237	3.52	27
Ore Body BF	365	4.20	49	133	4.05	17	498	4.16	67
Ore Body BFII	298	4.07	39	55	3.77	7	353	4.03	46
Ore Body BFIII	14	4.66	2	21	4.21	3	35	4.39	5
Ore Body Torre	30	3.00	3	138	3.25	14	167	3.20	17
Ore Body SW	178	3.44	20	338	3.60	39	516	3.55	59
Others	218	3.19	22	85	3.39	9	303	3.24	32
<b>Total - Pilar</b>	<b>1221</b>	<b>3.80</b>	<b>149</b>	<b>887</b>	<b>3.60</b>	<b>102</b>	<b>2108</b>	<b>3.71</b>	<b>251</b>

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources at the Caete Gold Complex include the Pilar and Roça Grande underground mines and the Córrego Brandão open pit deposit.
3. Mineral Resources at Caete Complex are estimated at a cut-off grade of 1.66 g/t Au for Pilar and 1.80 g/t for Roça Grande. For Córrego Brandão the resources are defined by pit optimization using Lerchs-Grossmann algorithm.
4. Mineral Resources are estimated using a long-term gold price of \$1,800 per ounce at Pilar, Roça Grande and Córrego Brandão.
5. Mineral Resources are estimated using an average long-term foreign exchange rate of 5.50 Brazilian Reais: 1 US Dollar for Pilar and Roça Grande.
6. A minimum mining width of 2.00 m was used at Pilar. For Córrego Brandão, pit optimization is used through the Lerchs-Grossmann algorithm.
7. Mineral Resources are inclusive of Mineral Reserves at the Pilar mine. No Mineral Reserves are currently present at Roça Grande and Córrego Brandão.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Numbers may not add due to rounding.

Jaguar prepared the Mineral Resources estimates under the supervision of Jonathan Victor Hill, who is a Qualified Person within the definition of the NI 43-101 for Mineral Resources. Jaguar is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors that could materially affect the Mineral Resource estimates.

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

#### *Mineral Reserve Estimates*

Table 12 summarizes the Mineral Reserves for Pilar as of December 31<sup>st</sup>, 2021, based on a gold price of \$1,650 per ounce. A break-even cut-off grade of 2.11 g/t Au was used to report the Mineral Reserves for Pilar. The 2P Reserves at December 31<sup>st</sup>, 2021, were estimates based on additions and depletions recorded by the excavation solids generated by the operation until December 2021.

Mineral Reserves have not been estimated for the Roça Grade Mine.

**Table 12: Pilar Mineral Reserves as of December 31<sup>st</sup>, 2021**

As Of December 31st, 2021	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)
<b>Caeté Gold Complex</b>									
<b>Pilar</b>									
Ore Body BA	119	3,64	14	118	3,41	13	237	3,53	27
Ore Body BF	365	4,20	49	133	4,05	17	498	4,16	66
Ore Body BFII	298	4,07	39	55	3,77	7	353	4,02	46
Ore Body BFIII	14	4,66	2	21	4,21	3	35	4,39	5
Ore Body Torre	30	3,00	3	138	3,25	14	168	3,21	17
Ore Body SW	178	3,44	20	338	3,60	39	516	3,54	59
Others	218	3,19	22	85	3,39	9	303	3,25	31
<b>Total - Pilar</b>	<b>1222</b>	<b>3,80</b>	<b>149</b>	<b>888</b>	<b>3,59</b>	<b>102</b>	<b>2110</b>	<b>3,71</b>	<b>251</b>

Notes:

1. CIM (2014) definitions are followed for Mineral Reserves.
2. Mineral Reserves at Pilar were estimated at a cut-off grade of 2.11 g/t Au.
3. Mineral Reserves are estimated using an average long-term gold price of \$1,650 per ounce and a US\$/BRL\$ exchange rate of 5.50 at both mines.
4. A minimum mining width of 2.00 m was used at Pilar.
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.

Dilution was addressed in two ways: internal or planned dilution 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 achievable outlines. Additional volumes included in this manner average 15% across the Mineral Reserves.

#### *Cut-Off Grade*

Mineral Reserves were calculated using a break-even cut-off grade of 2.11 g/t Au, calculated using the following inputs:

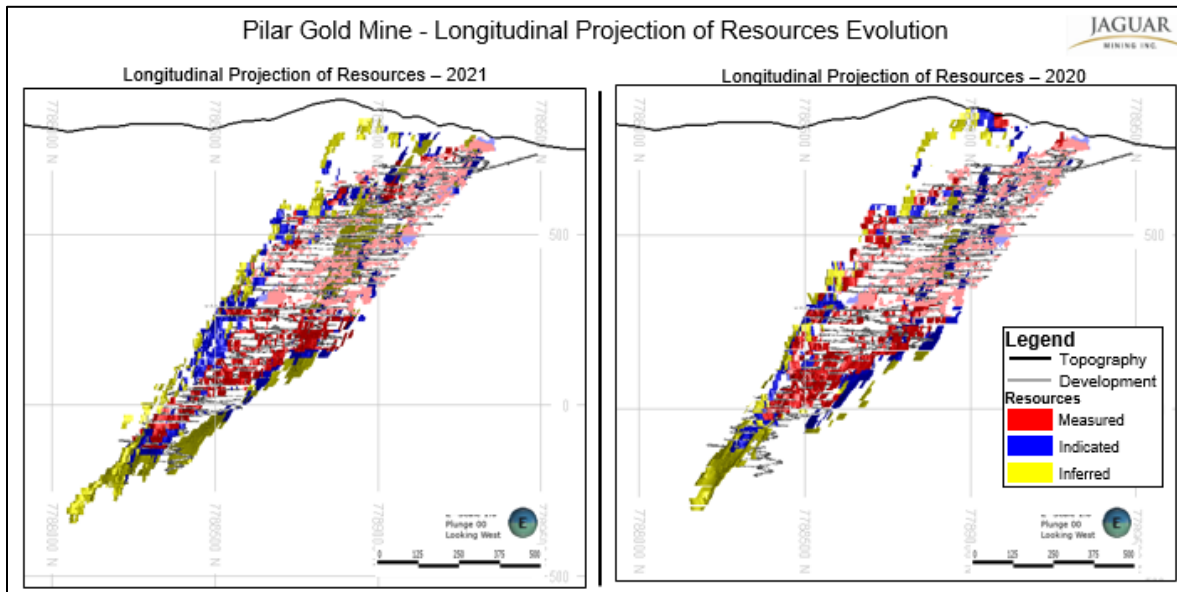
- Gold price of \$1,650/oz.
- Exchange rate of US\$1.00: BRL\$5.50
- Metallurgical recovery of 90%
- Operating costs of BRL\$282/t

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.

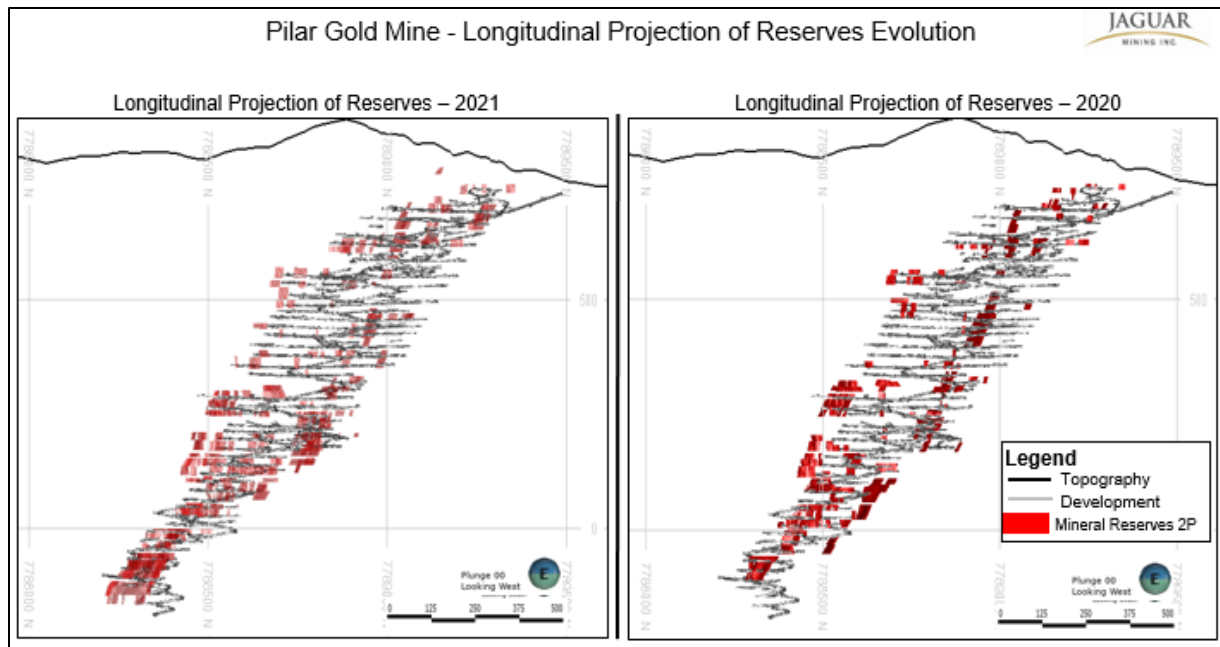
It is Jaguar’s opinion that the Pilar Mineral Reserves estimates were prepared in a professional and diligent manner by qualified professionals and that the estimates comply with CIM (2014).

The tables/illustrations 13 and 14 below (longitudinal projections of the Pilar deposit) are panoramas of the resources and reserves inventory of the Pilar operation by the end of the 2021 Year and by the end of the 2020 Year, respectively.

**Table 13: Illustration: Pilar Mineral Resources as of Dec. 31<sup>st</sup>, 2021 and as of Dec. 31<sup>st</sup>, 2020**



**Table 14: Illustration: Pilar Mineral Reserves as of Dec. 31<sup>st</sup>, 2021 and as of Dec. 31<sup>st</sup>, 2020**



#### *Mining Operations and Metallurgical Process*

The Caeté Gold 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.

At Pilar, gold mineralization is contained within a shear zone with an average 50° to 60° dip. The mineralization is structurally complex due to intense folding and displacements (up to 2 m) due to local faulting. This results in direction changes and pinching and swelling of the ore zones over relatively short distances. The ore zones hanging-wall (HW) and footwall (FW) contacts with the non-economic wall-rocks are almost everywhere visible by eye, though sampling shows that there are, on some occasions, a few surprising assay results (variable gold grades) within the ore-hosted BIF formation. The orebody is approximately 250 to 350 m along strike, and the orebody is accessed and mined along strike via crosscuts perpendicular to the orebody.

#### *Mining Methods*

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 is used when ore geometry does not favour longhole mining.

Ventilation for the Pilar Mine is a pull system. Air is drawn down through the ramp and up an exhaust rise near the ramp. Ventilation on the levels uses auxiliary fans and vent ducting. Water is pumped to the surface using submersible pumps, pumped from level to level, then to the surface.

The Pilar Mine is accessed from a five metre by five metre primary decline located in the footwall of the deposit. The portal is located at an elevation of 760 MASL. The Pilar Mine is divided into levels with Level 01 established at elevation 690 MASL. All ore is hauled to the surface via the ramp using both contractors and company personnel. From this point, the level spacing is 75 m vertical, i.e., Level 02 is at elevation 615 MASL, Level 03 at elevation 540 MASL, etc. A three-metre-thick sill pillar is left between levels. Sublevels are excavated from the main ramp at 20 m vertical intervals to provide intermediate access to the mining panels. At each level and sublevel, drifts are developed near the centre of the mineralized zone to expose the footwall and to hang wall contacts. The drift is extended in both directions along strike, under geological control for alignment, continuing to expose the contacts until the limits

of the deposit are reached. This provides for two working faces per sublevel.

Production at the Pilar Mine is predominantly achieved by the longhole mining method, which is carried out on a longitudinal retreat sequence towards the central access. Stopes are up to 50 m in length and are separated by three metre to five-metre-wide pillars, depending on the thickness of the zone. In order to reduce external dilution, five metre high by five-metre-long pillars are strategically left in the stope when there are adjacent stopes in parallel. The stope is then drilled from the lower drift underneath the pillar. When the mining of each longhole stope has been completed, the excavation is filled using development waste. Development waste volume is well matched to the backfill volume needed. There are times when development waste rock is either hauled to the surface or hauled from the surface to an underground stope being filled due to timing. The mine has the potential to use hydraulically placed cemented classified flotation tailings backfilling. Mining then proceeds upward to the next sublevel, and the sequence is repeated until the sill pillar is reached. Stopes are mined from several sublevels simultaneously in order to provide the required number of active workplaces needed to meet production targets.

The Pilar Mine is highly mechanized. Development and mining activities are accomplished with a fleet of two two-boom and two one-boom electric-hydraulic jumbos. Longhole drilling is completed with three Sandvik production drills. Four 10t Sandvik LH410 LHD units are used for mucking. A fleet of seven Volvo A30 articulated trucks are used to haul the broken rock to the surface. Contractors are used to supplement development and haulage, as well, and the fleet is adjusted to meet the demand.

Ground conditions were observed by RPA/SRL Consultants to be good. The main decline, portions of which were developed up to ten to fifteen years ago, did not exhibit any roof or wall deterioration. Primary support in the Pilar Mine is provided by using split sets, grouted rebar and, in the wider areas, grouted cable bolts. Two single-boom electric-hydraulic jumbos are used for rock bolting.

The addition of ground control engineers to Jaguar's workforce has resulted in improved quality of backfill and overall ground support at the mines. As mentioned previously, 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.

#### *Recovery Methods*

The Caeté processing plant has a design capacity of 720,000 tonnes per annum (tpa) of ROM ore. Since 2019, the plant has processed feed from the Pilar mine only. Over the past four years of operation, the Caeté processing plant operated at approximately 60% of its design capacity. The Pilar Mine increased the permitted mining rate in early 2022 to 500,000 tonnes per annum or 69% of plant design capacity.

The overall recovery rate achieved in 2021 was 87.5%.

The process flowsheet primarily consists of the following unit steps.

- Crushing
- Grinding
- Gravity Gold Recovery
- Flotation
- Leaching & Carbon-in-Pulp
- Elution process
- Electrowinning
- Detoxification
- Tailings Dam
- Dry Stacking

The ore from the Pilar Mine is transported by trucks to the crusher circuit and placed in the ROM stockpile. The crushing circuit is made up of a primary jaw crusher in an open circuit, and secondary and tertiary cone crushers operating in a closed circuit.

The ROM stockpile ore is fed to the jaw crusher through a vibrating feeder. The jaw crusher discharge feeds a multi-deck screen, which feeds either the secondary or tertiary crushing, the final product conveyor. The secondary cone crusher operates in a closed circuit with a double-deck screen. Product from the double deck screen either recirculates back to the secondary crusher, feeds the tertiary crusher, or goes to the final product conveyor. The tertiary cone crusher operates in a closed circuit with a single deck screen, with the product recycling to the crusher or going to the final product conveyor, which goes to the crushed ore stockpile. The final particle size of the crushing process is 16 mm.

#### *Grinding & Gravity Gold Recovery*

The grinding circuit consists of a ball mill with a capacity of up to 100 t per hour, operating in closed circuit with a series of hydrocyclones. The overflow from the hydrocyclones (-200 mesh (74µm)) proceeds to the flotation circuit, and the underflow (+200 mesh (74µm)) either feeds the gravity concentration circuit (75%) or is recycled to the ball mill feed (25%).

Gravity concentration at the Caeté plant uses a centrifugal gravity concentrator (Knelson) to recover fine particles of gravity gold. The gravity concentrates proceed to an intense cyanidation plant (Acacia), from which the gold bearing solution is pumped directly to a dedicated set of electrolytic cells. The precipitate from the cells is sent to a refinery for further processing into doré gold bars.

The flotation circuit consists of a series of twelve (12) impellers, with 500 cubic foot 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 thickener underflow slurry (35% solids w/w) is pumped to an agitated conditioning tank, where lime and oxygen are added, and then further pumped to a set of three agitated leach tanks operating by gravity, in series.

The four CIP tanks are designed to hold activated carbon in each tank through a screen that allows slurry to flow from tank to tank but retains the carbon in each tank. The carbon interacts with the slurry, adsorbing the gold cyanide complex created in the leach tanks.

The gold loaded carbon is transferred to a desorption column. A hot solution (approx. 98° C) of 1.5% caustic soda and 0.5% cyanide concentration is pumped upwardly through the elution column to remove or desorb the gold cyanide complex from the carbon.

After the electrowinning process, the concentrate is withdrawn and sent to a 3<sup>rd</sup> party smelter-refinery. Smelting produces a gold doré containing about 80% gold. The doré gold is then refined, obtaining pure gold bars (minimum 99.99%).

#### *Environmental Considerations and Permitting - Pilar and Caeté*

The mining title for Pilar (claim 830.463/1983) initially belonged to the Companhia Vale do Rio Doce ("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 LAS RAS 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 stake pile and one paralyzed open-pit (RG2E) that receives non-hazardous tailing. 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 dry stake 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 in November 12, 2021, process SEI 2090.01.0004742/2021-80, valid for ten years, until November 29, 2031.

#### *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 extends over than 5 years.

#### *Markets*

All gold produced at the Caeté operation is transported to São Paulo on a weekly basis for refining and sale at market prices.

## Non-Material Mineral Properties

### 1. Acurui Exploration JV Project with Iamgold Corporation

Jaguar signed in August 2020 an option agreement (the “Iron Quadrangle Agreement”) with IAMGOLD Corporation on a package of 28 exploration tenements covering an area of some 27,141.75 Ha in the Iron Quadrangle geological environment. The Iron Quadrangle Agreement stipulates that Jaguar has the option to earn an initial 60% interest in the Package by spending \$6.0 million in exploration expenditures over four years commencing in the third quarter of 2020. Jaguar will be the project operator and subject to oversight by a technical committee with representatives from both companies. Under the terms of the Agreement, the following will apply:

- The Earn-in period will include a minimum expenditure of \$500,000 per annum, and the exploration program must include the completion of a minimum of 5,000 metres of diamond drilling over the option agreement time frame;
- Upon Jaguar vesting an initial 60% interest, IAMGOLD may elect to participate and fund its pro-rata share of ongoing expenditures under a conventional 60:40 JV that will be formed for this purpose and will be agreed upon by both companies;
- Once the 60:40 JV is in place, both parties will be required to fund their pro-rata share for ongoing expenditures or be subject to dilution. Should either party dilute to < 10% interest, their interest will revert to a 1.5% NSR.

Exploration activities and highlights from exploration completed by Jaguar since the announcement of the Agreement include:

- A 150 square km UAV (Drone) high-resolution magnetics survey, which is believed to be the largest survey ever attempted in South America with this technology, was coupled with a thorough review of historical data and focused on the ground geological mapping and geochemical soil and follow-up rock-chip sampling programmes.
- A significant, > 30 square km (3,000 Ha) previously unrecognized extension of the highly prospective Ouro Fino Formation of the Rio das Velhas Greenstone Belt has been defined. The Ouro Fino Formation is considered one of the most prospective geological units in the Rio das Velhas Greenstone Belt.
- Jaguar’s exploration team has defined, to date, a series of five stratigraphic and structural trends within the JV Area which, collectively representing a prospective, previously under-explored strike length of more than 50km. Within those trends, at least six priority drill targets have been generated based on geophysical, geochemical and structural targeting criteria;
- The potential and extent of these trends are confirmed via their clear association with strike-extensive, consistent gold (> 50ppb Au) and/or pathfinder element (Arsenic > 200 ppm, Antimony > 10ppm) in soil anomalies. Follow-up outcrop rock-chip sampling delivered encouraging results ranging up to 11.76 g/t Au;
- The newly defined prospective trends are distinct geological entities propagating off the major crustal scale Paciência-São Vicente lineament. This regionally important lineament is a major gold bearing geological structure transecting the Rio das Velhas Greenstone Belt, and within the area of interest, hosts two of Jaguar’s underground mines (Santa Isabel and Marzagão - currently inactive) which previously provided feed to the 2,000 tpd Paciência (CPA Plant - currently on care-and-maintenance).
- In September 2021, Jaguar initiated drill-testing activities on some of the initial targets delineated, with at a total of 764.78 m drilled in five diamond drill holes by year-end 2021. Two Targets, “Rio de Pedras” and



“Boa Viagem”, were tested with these initial holes. The Rio de Pedras target is a sulphide-bearing and hydrothermally altered metavolcanoclastic and carbonaceous rock package located at the footwall zone of a regionally magnetic banded iron formation (BIF) horizon. The Boa Viagem target comprises gold in soil anomalies related to the mapped “Manso shear zone structure”, a geological environment where numerous gold old diggings (from the Brazilian colonial times) have been found and sampled with encouraging results.

## 2. CentroGold Project (also referred to as the Gurupi Project)

On September 17, 2017, Jaguar and Oz Minerals agreed to an accelerated earn-in agreement, pursuant to which Oz Minerals will earn up to a 100% ownership interest in the CentroGold Project after meeting certain milestones and making a series of payments to Jaguar. The agreement provides Oz Minerals with the right to acquire 100% of Jaguar’s interest in the CentroGold Project by paying Jaguar an aggregate cash payment of \$4 million in two installments of \$2 million each and committing to a Net Smelter Return (“NSR”) royalty due to Jaguar. Jaguar received an initial aggregate cash payment of \$4 million. The Company has an additional \$5 million from Oz Minerals to be collected in a series of 10 installments of \$500,000. Those receivables are expected to be received at the beginning of the month in which Oz Minerals receives clear title and access to the project. In July 2019, Oz Minerals published an Australian Joint Ore Reserve Committee (“JORC”) code-compliant prefeasibility study technical report for the CentroGold Project, announcing Mineral Reserves of 1,100,000 ounces of gold.

### Definitive Agreement with Metalla for the sale of the Company’s Net Smelter Return Royalty

On March 15, 2021, Jaguar executed a Definitive Agreement with Metalla Royalty & Streaming Ltd. (MTA) (“Metalla”) for the sale of the Company’s NSR royalty from gold production at the CentroGold Project. The NSR is comprised of a 1% net smelter return on the first 500,000 ounces of gold sold, a 2% net smelter return from 500,001 to 1,500,000 ounces of gold, and a 1% net smelter return on gold sales exceeding 1,500,000 ounces of gold.

The Metalla NSR was sold for an aggregate consideration valued at up to \$18 million, receivable as follows:

- Immediate: \$7 million in cash upon executing the Definitive Agreement (received);
- Milestone 1: \$7 million in Metalla common shares upon grant of all project licenses, the lifting or extinguishment of the injunction imposed on the CentroGold Project with no pending appeals and, if necessary, the completion of any and all community relocations; and
- Milestone 2: \$4 million payment to Jaguar in cash upon the CentroGold Project achieving commercial production.

The Company received an upfront payment of \$7 million from the sale of the NSR, and contingent considerations for Milestone 1 and Milestone 2 were applied, given that the completion of these milestones is dependent on the performance of an unrelated third party. As a result of the sale, the Company: (i) transferred its NSR title to Metalla and derecognized the \$8.5 million CentroGold project royalty interest asset, (ii) received and recorded \$7 million in Cash, (iii) recorded \$0.2 million in legal and consulting costs associated with the transaction, and (iv) recognized a \$1.7 million loss on sale of the CentroGold royalty interest to Other non-operating expenses in its condensed interim consolidated statement of operations and comprehensive income.

## 3. Paciência Mining Complex

The Paciência mining complex consists of an underground mine (Santa Isabel) and a CIP processing plant (the “Paciência Plant”). 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.

The well-built facilities remain functional. However, it is clear that, based on the defined resources, the underground mine cannot support a start-up of the facility at this time. To restart operations, the Company would need to identify

sufficient feed for a sustained operation by carrying out exploration and development of the mineral deposits that surround the facility. Some delineated reserves available for mining exist, but these reserves will not sustain an economic plant start-up. Ultimately, the Company may start up, redeploy, sell or joint-venture or otherwise monetize the Paciência processing facility. The Company has not established a timeframe to complete the Paciência remediation plans and restart production as it intends to focus on optimizing production and costs at the Turmalina and Caeté operations.

### 3. Sabará

During 2011 and 2012, Sabará remained on care and maintenance. In 2013, the Sabará operation was shut down, and remediation work began to restore the Sabará plant area and the open pit areas with re-vegetation. The Company continued to restore the Sabará plant area from 2017 to 2021, and this work will continue until completion, expected in 2022.

#### **Ownership of Property Interests**

When buying a property in Brazil, a preliminary sales agreement between the buyer and the seller is executed, which establishes the conditions for that sale. Following the execution of the agreement, a public deed of purchase and sale is held before the Real Estate Registry Office, and subsequently, the purchaser is registered as the new owner on the title of the property issued by the Real Estate Registry Office. This title is the official document that confirms ownership of the property. Some of these agreements are registered and filed with the Brazilian government.

With regard to assets, proof of ownership is established by a purchase and sale agreement.

With regard to mining rights, when a company is interested in a certain area, it asks the ANM for Exploration Consent to verify the potential of the area. This authorization is valid for three years and can be renewed for an additional three years, during which the company must carry out all studies required to verify the feasibility of the area. At the end of the Exploration Consent period, the company must submit a Final Exploration Report to the ANM. If it has a positive outcome, the company will request from the ANM, within one year, an Exploitation Permit containing a life of mine plan. If the ANM is satisfied with the plan presented by the company, the Agency will grant the company the concession to explore the mining rights of that area. The concession granted by the ANM is the official document that confirms that the company is the holder of the mining rights.

To the knowledge of the Company, its ownership of property interests (or assets) is not materially impacted by the laws and/or customs in Brazil, except for the fact that there is currently legislation that restricts the number of lands that can be acquired by a non-Brazilian company. Specifically, non-resident individuals and non-domiciled foreign legal entities are subject to restrictions for the acquisition or lease for agricultural purposes, or arrendamento, of rural properties in Brazil. Limitations also apply to legal entities domiciled in Brazil controlled by foreign investors, such as Jaguar's wholly-owned subsidiary, MSOL. The limitations are set forth mainly in Law No. 5,709/1971 and Decree No. 74,965/1974. However, changes to the aforementioned restrictions are currently under consideration in Brazil, with a new bill to be voted on. If passed, it would relax these restrictions and increase flexibility under the applicable legislation.

#### **Permits, Licences and Other Regulatory Approvals**

The following permits, licences 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 licences or prospecting permits issued by the ANM. The ANM is responsible for the administration of all mining and exploration licences and prospecting permits. According to local regulations, the Company must submit a final exploration

report before the expiry date of any licence 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. 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 Licence, 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 Licence, 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 Licence 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 licences 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 licences 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.

## RISK FACTORS

### I. Risks Relating to the Gold Industry

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

Gold prices are volatile and 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, hedging activities and increased production due to improved mining and production methods. While the price of gold has recently been strong, there can be no assurance that gold prices will remain at such levels or be such that Jaguar's properties can be mined at a profit. Some credible industry experts predict that gold will continue to increase in price during 2022 and the next several years. However, other credible industry experts expect that the price of gold has generally peaked during the recent pandemic and resulting economic crisis. As economies slowly recover over the next few years, the price of gold will decrease and be worth much less per ounce than it is today.

***Mining is inherently risky and subject to conditions and events beyond Jaguar's control.***

Mining involves various types of risks and hazards, including:

- environmental hazards;
- unusual or unexpected geological operating conditions, such as rock bursts, structural cave-ins or slides;
- flooding, earthquakes and fires;
- labour disruptions;
- industrial accidents;
- unexpected mining dilution, such as what occurred at Turmalina in 2017;
- metallurgical and other processing problems; and/or
- metal losses and periodic interruptions due to inclement or hazardous weather conditions.

These risks could result in damage to, or destruction of, mineral properties, production facilities or other properties, personal injury or death, environmental damage, delays in mining, increased production costs, monetary losses and possible legal liability.

Jaguar may not be able to obtain insurance to cover these risks at affordable premiums or at all. Insurance against certain environmental risks, including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from production, is not generally available to Jaguar or other companies within the mining industry. Jaguar may suffer a materially adverse effect on its business if it incurs losses related to any significant events that are not covered by its insurance policies.

***Calculation of Mineral Reserves and Mineral Resources and metal recovery is only an estimate, and there can be no assurance about the quantity and grade of minerals until Mineral Resources are actually mined.***

The calculation of Mineral Reserves, Mineral Resources, and corresponding grades being mined or dedicated to future production is imprecise and depends on geological interpretation and statistical inferences or assumptions drawn from drilling and sampling analysis, which might be unpredictable. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Until Mineral Reserves or Mineral Resources are actually mined and processed, the quantity of Mineral Reserves or Mineral Resources and grades must be considered as estimates only. Any material changes in Mineral Reserves, Mineral Resources, grade or stripping ratio at Jaguar's

properties may affect the economic viability of Jaguar's properties. In addition, there can be no assurance that metal recoveries in small-scale laboratory tests will be duplicated in larger-scale tests under on-site conditions or during production.

***Significant uncertainty exists related to inferred Mineral Resources.***

There is a risk that inferred Mineral Resources referred to in this AIF 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.

**II. Risks Relating to Jaguar's Business**

***Jaguar's operations involve exploration and development, and there is no guarantee that any such activity will result in commercial production of mineral deposits.***

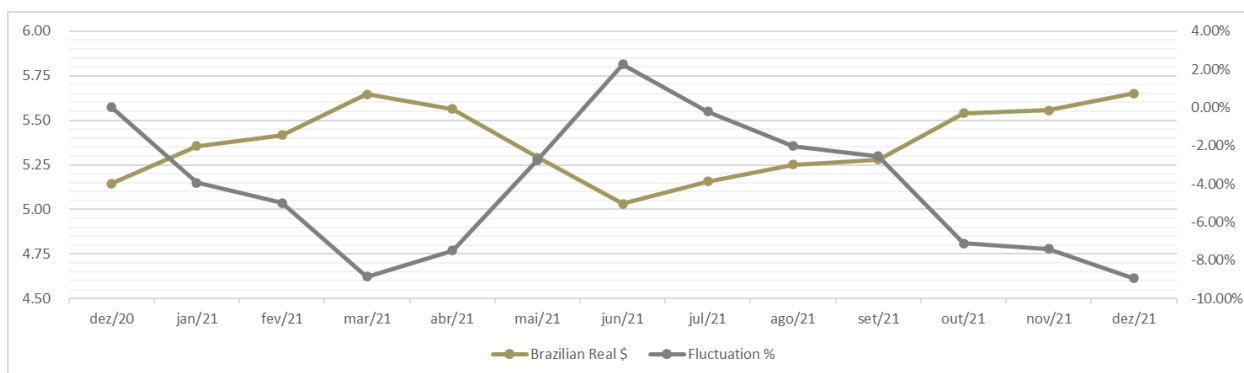
The proposed programs on the exploration properties in which Jaguar holds an interest are exploratory in nature, and such properties do not host known bodies of commercial ore. The development of these mineral properties is contingent upon, among other things, obtaining satisfactory exploration results. Mineral exploration and development involve substantial expenses related to locating and establishing Mineral Reserves, developing metallurgical processes and constructing mining and processing facilities at a particular site. It also involves a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to mitigate adequately. As a result, few properties that are explored are ultimately developed into producing mines, and there is no assurance that commercial quantities of ore will be discovered on any of Jaguar's exploration properties. There is also no assurance that, even if commercial quantities of ore are discovered, a mineral property will be brought into commercial production or that it will be profitable if brought into production. The discovery of mineral deposits is dependent upon a number of factors, including the technical skill of the exploration personnel involved. The commercial viability of a mineral deposit is also dependent upon, among a number of other factors, its size, grade, proximity to infrastructure, current metal prices, and government regulations, including regulations relating to required permits, royalties, allowable production, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but any of these factors, or the combination of any of these factors, may prevent Jaguar from receiving an adequate return on invested capital. In addition, depending on the type of mining operation involved, several years can elapse from the initial phase of drilling until commercial operations are commenced. Some ore reserves may become unprofitable to develop if there are unfavourable long-term market price fluctuations in gold or significant increases in operating or capital costs. Most of the above factors are beyond Jaguar's control, and it is difficult to ensure that the exploration or development programs proposed by Jaguar will result in a profitable commercial mining operation.

***Fluctuations in currency exchange rates may adversely affect Jaguar's financial position and results of operations.***

Fluctuations in currency exchange rates, particularly 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 a major portion of Jaguar's operating expenses is 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):



During the year ended December 31, 2021, the Brazilian Real weakened against the US dollar.

***Competition for new mining properties may prevent Jaguar from acquiring interests in additional properties or mining operations.***

The gold mining industry is intensely competitive. Significant and increasing competition exists for gold and other mineral acquisition opportunities throughout the world. Some of the competitors are large, more established mining companies with substantial capabilities and greater financial resources, operational experience and technical capabilities than Jaguar. As a result of this competition, Jaguar may be unable to acquire rights to additional attractive mining properties on terms it considers acceptable. Increased competition could adversely affect Jaguar’s ability to attract necessary capital funding or acquire an interest in additional operations that would yield Mineral Reserves or result in commercial mining operations.

***Jaguar relies on its management and key personnel, and there is no assurance that such persons will remain at Jaguar or that it will be able to recruit skilled individuals.***

Jaguar relies heavily on its management. Jaguar does not maintain “key man” insurance. 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. 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 capital costs, operating costs, production and economic returns may differ significantly from those estimated by Jaguar, and there can be no assurance that any future development activities will result in profitable mining operations.***

Capital and operating costs, production and economic returns, and other estimates contained in the feasibility studies 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 sold and all-in sustaining costs per ounce sold\* for the years ending December 31, 2021, 2020, and 2019 were as follows:

		2021	2020	2019
Turmalina	Cash operating costs per ounce sold	\$881	\$660	\$800
	All-in sustaining costs per ounce sold	\$1,251	\$1,109	\$1,379

<b>Pilar</b>	Cash operating costs per ounce sold	\$790	\$637	\$811
	All-in sustaining costs per ounce sold	\$1,031	\$858	\$1,119
<b>Consolidated</b>	Cash operating costs per ounce sold	\$831	\$647	\$608
	All-in sustaining costs per ounce sold	\$1,215	\$1,044	\$1,349

<sup>1</sup> Cash operating costs per ounce sold and all-in sustaining costs per ounce sold are non-IFRS measures with no standard definition under IFRS. Refer to the non-IFRS financial performance measures section of the Company's MD&A.

***Increases in energy costs or the interruption of Jaguar's energy supply may adversely affect Jaguar's results of operations.***

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.

***There can be no assurance that the interests held by Jaguar in its properties are free from 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.

***Jaguar is exposed to risks of changing political stability and government regulation in the country in which it operates.***

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.

***Jaguar is subject to additional business and financial risks inherent in doing business in Brazil.***

The Company's principal operations and mineral properties are located in Brazil. There are additional business and financial risks inherent in 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 2021, out of 180 countries in the world, Canada was ranked 13th with a CPI score of 74, the United States was ranked 27th with a CPI score of 67, and Brazil was ranked 96th with a CPI score of 38. The average score on the 2020 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. High-profile examples of alleged corruption were reported in 2021. Beginning on October 3, 2021, the International Consortium of Investigative Journalists (“ICIJ”) published another 11.9 million leaked documents with 2.9 terabytes of data. This was the second leak by ICIJ, and these leaks have become known as the “Panama Papers.” This leak in 2021 exposed the secret offshore accounts of 35 world leaders, including current and former presidents, prime ministers and heads of state, as well as more than 100 billionaires, celebrities and business leaders. The initial leak of the Panama Papers occurred in 2016, exposing 11.5 million confidential documents. Brazil did not escape scrutiny from the 2021 leak of the Panama Papers. One of the noteworthy names was Paulo Guede. He, while in office as Brazil’s minister of economy, is alleged to have kept a company in the British Virgin Islands with almost US\$10 million invested in a Credit Suisse account in New York, USA. Roberto Campos Neto, the Chairman of Brazil’s Central Bank, was also featured in the 2021 release of the Panama Papers. Both deny any wrongdoing.

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.

***The ability of Jaguar to pay a dividend will be dependent on the financial condition of Jaguar.***

The declaration, timing, amount and payment of dividends are at the discretion of the Board and will depend upon, among other things, Jaguar’s future earnings, cash flows, acquisition capital requirements and financial condition, and other relevant factors. Although Jaguar has paid a regular dividend for the six most recently completed quarters, there can be no assurance that it will be in a position to declare any future dividends (at the current dividend amount or at all) due to the occurrence of one or more of the risks described herein.

***Jaguar is subject to significant governmental regulations.***

Jaguar’s mining and exploration activities are subject to extensive local laws and regulations. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities, which may require operations to cease or be curtailed, or corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation of such requirements, could have a materially adverse impact on Jaguar and cause increases in capital expenditures or production costs or reductions in levels of production at producing properties or require abandonment or delays in the development of new mining properties.

***Jaguar’s operations are subject to numerous governmental permits, which are difficult to obtain, and it may not be able to obtain or renew all of the permits it requires, or such permits may not be timely obtained or renewed.***

Government approvals and permits are sometimes required in connection with Jaguar’s operations. Although Jaguar believes it has all of the material approvals and permits to carry on its operations, Jaguar may require additional approvals or permits or may be required to renew existing approvals or permits from time to time. Obtaining or renewing approvals or permits can be a complex and time-consuming process. There can be no assurance that Jaguar



will be able to obtain or renew the necessary approvals and permits on acceptable terms, in a timely manner, or at all. To the extent such approvals are required and not obtained, Jaguar may be delayed or prohibited from proceeding with planned exploration, development or mining of mineral properties.

Under current regulations, all exploration activities that the Company undertakes through its subsidiaries must be carried out on valid exploration licences or prospecting permits issued by the DNPM, a department of the Brazilian federal government. The DNPM is responsible for the administration of all mining and exploration licences and prospecting permits. According to local regulations, the Company must submit a final exploration report before the expiry date of any licence or permit, which is usually three years from the date of grant. However, Brazilian mining laws and regulations are currently undergoing a major restructuring, and draft legislation to this effect has been submitted to the federal legislature for review and approval. The effects of this restructuring will, if adopted, be far-reaching in the ways that mining rights can be acquired and maintained in the country. Current proposals include an auction process for new licences, minimum expenditures designed to eliminate the “warehousing” of mining permits and licences as well as new fee schedules. They also provide for landowner participation where applicable. It is the Company’s understanding, based on consultations with local counsel, that licences currently held in good standing will be grandfathered and not subject to certain requirements of the proposed new regime. Production from the Company’s mines results in a 1.5% royalty fee payment to the CFEM on the value of the ore produced. However, and as mentioned above, the Brazilian government is currently considering the adoption of new mining legislation that would include increases in the CFEM royalties.

Environmental permits are granted for one- to ten-year periods, and all local agencies have the right to monitor and evaluate compliance with the issued 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.

The work the Company carries out on its exploration licences is largely restricted to drilling and ancillary activities associated with the drilling programs (i.e., low impact road construction, drilling stations). As such, the reclamation costs in respect of drilling activities are not material to the Company and are factored into the budget for exploration programs.

***Jaguar is subject to substantial environmental laws and regulations that may increase its costs and restrict its operations.***

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. This is especially true following the high-profile Brumadinho dam disaster that occurred on January 25, 2019, when Dam I—a tailings dam at Vale’s Córrego do Feijão iron ore mine, 9 kilometres east of Brumadinho, Minas Gerais, Brazil—suffered a catastrophic failure. Compliance with environmental laws and regulations may require significant capital outlays and may cause material changes or delays in, or the cancellation of, Jaguar’s intended activities. There can be no assurance that future changes in environmental regulation, if any, will not be materially averse to Jaguar’s operations. Specifically, new laws and regulations, amendments to existing laws and regulations, or more stringent enforcement of existing laws and regulations could have a materially adverse impact on the Company, increase costs, cause a reduction in levels of production and/or delay or prevent the development of new mining properties.

In light of tailings dam incidents 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 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 plan 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 others impacts. All these processes stayed in line with the new legislation in Brazil by the National Mining Agency (ANM) in 2021.

***Land reclamation requirements for Jaguar's mining and exploration properties may be burdensome.***

Land reclamation requirements are generally imposed on companies engaged in mining operations and mineral exploration activities in order to minimize the long-term effects of land disturbance. Reclamation may include requirements to control the dispersion of potentially deleterious effluents and reasonably re-establish pre-disturbance landforms and vegetation. In order to carry out reclamation obligations imposed on Jaguar in connection with its mining and exploration activities, Jaguar must allocate financial resources that might otherwise be spent on further exploration and development programs. If Jaguar is required to carry out unanticipated reclamation work, its financial position could be adversely affected.

***Jaguar may need additional capital to accomplish its exploration and development plans or to cover its expenses and maintain adequate working capital, and there can be no assurance that financing will be available on terms acceptable to Jaguar or at all.***

Depending on gold prices and Jaguar's ability to achieve its plans and generate sufficient operating cash flow from its existing operations, the Company may require substantial additional financing to accomplish its exploration and development plans, maintain adequate working capital, or fund any non-operating expenses that may arise or become due such as interest, tax (in Canada or Brazil) or other expenses. Failure to obtain sufficient financing, or financing on terms acceptable to Jaguar, may result in a delay or indefinite postponement of exploration, development or production on any or all of Jaguar's properties or even a loss of an interest in a property, or an inability to pay any of Jaguar's non-operating expenses which could also lead to late fees or penalties, depending on the nature of the expense. The only source of funds now available to Jaguar is through production at Turmalina and Caeté, the sale of debt or equity capital, properties, royalty interests or the entering into of joint ventures or other strategic alliances in which the funding sources could become entitled to an interest in Jaguar's properties or projects. Additional financing may not be available when needed. If funding is available, the terms of such financing might not be favourable to Jaguar and might involve substantial dilution to existing shareholders. If financing involves the issuance of debt, the terms of the agreement governing such debt could impose restrictions on Jaguar's operation of its business. Failure to raise capital when needed could have a materially adverse effect on Jaguar's business, financial condition and results of operations.

***Jaguar is exposed to risks of labour disruptions and changing labour and employment regulations.***

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.

***Substantially all of Jaguar's assets are held by foreign subsidiaries that are subject to the laws of the Federal Republic of Brazil.***

Jaguar conducts operations through its wholly owned foreign subsidiary MSOL, and substantially all of Jaguar's assets are held through this entity. Accordingly, any governmental limitation on the transfer of cash or other assets between Jaguar and MSOL could restrict Jaguar's ability to fund its operations efficiently. Any such limitations or the perception that such limitations may exist now or in the future could have an adverse impact on Jaguar's prospects, financial condition and results of operations.

***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, has a favourable approach to employees of the Company. As such, corporate labour compliance is a key success factor in Brazilian-based operations to minimize the impact of labour claims. The Company has historically not been in full compliance of labour regulations, nor did it have the proper procedures in place to support labour claims defenses, which led to the bulk of the litigation provisions recorded.

***Jaguar may be subject to impacts on production if the road route between the Pilar Mine and the Caeté site cannot be used due to rain or other events.***

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 50 km by road from the Caeté plant. Ore from Pilar is hauled to the Caeté plant. 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.

***Global financial conditions may negatively impact its operations and share pricing.***

Current global financial conditions have been characterized by increased volatility, particularly the markets for commodities, including gold. Access to public financing has been negatively impacted by several factors, including efforts by financial institutions to deliver their balance sheets in the face of current economic conditions. These factors may impact the ability of Jaguar to obtain equity or debt financing in the future on terms favourable to Jaguar. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. If Jaguar had to idle any of its producing properties or delay the development of any project, there is no assurance that it would be able to restart production or development without undue delay, if at all. If such increased levels of volatility and market turmoil continue, Jaguar's operations could be adversely impacted, and the trading price of its common shares may be adversely affected.

***The trading price for Jaguar's common shares is volatile and has been, and may continue to be, greatly affected by the ongoing market volatility.***

Securities of mineral exploration and early-stage base metal production companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries. Jaguar's common share price is also likely to be significantly affected by short-term changes in gold prices or its financial condition or results of operations as reflected in its quarterly earnings reports. Other factors unrelated to Jaguar's performance that may have an effect on the price of its common shares include the following: the extent of analytical coverage available to investors concerning Jaguar's business may be limited if investment banks with research capabilities do not continue to follow Jaguar's securities; the lessening in trading volume and general market interest in Jaguar's securities may affect an investor's ability to trade significant numbers of Jaguar's common shares; and the size of Jaguar's public float may limit the ability of some institutions to invest in Jaguar's securities. As a result of any of these factors, the market price of Jaguar's common shares at any given point in time may not accurately reflect Jaguar's long-term value.

***Jaguar's mineral properties in Brazil operate in an emerging market and are subject to political, economic, social and geographic risks of doing business in Brazil***

The Company's mining and development properties in Brazil expose the Company to the socioeconomic conditions in Brazil, as well as to the laws governing the mining industry in the country. Inherent risks with conducting foreign operations include, but are not limited to: high rates of inflation, changes in monetary and exchange policies, changes in interest rates, decreased liquidity in the domestic capital and lending markets, energy shortages, military repression, war or civil war, social and labour unrest, organized crime, hostage-taking, terrorism, violent crime, extreme fluctuations in currency exchange rates, expropriation and nationalization, renegotiation or nullification of existing concessions, licences, permits and contracts, illegal mining, changes in taxation policies, restrictions on foreign exchange and repatriation and changing political norms, currency controls and governmental regulations that favour or require the Company to award contracts in, employ citizens of, or purchase supplies from a particular jurisdiction.

Failure to comply strictly with applicable laws, regulations and local practices relating to mineral rights applications and tenure could result in loss, reduction or expropriation of entitlements or the imposition of additional local or foreign parties as joint venture partners with carried or other interests. In addition, changes in government laws and regulations, including taxation, royalties, the repatriation of profits, restrictions on production, export controls, changes in taxation policies, environmental and ecological compliance, expropriation of property and shifts in the political stability of the country, could adversely affect the Company's exploration, development and production initiatives in Brazil.

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes significant changes in policies and regulations. Changes, if any, in mining or investment policies or shifts in political attitude in Brazil or any of the jurisdictions in which the Company operates may adversely affect the Company's operations or profitability. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, importation of parts and supplies, income and other taxes, expropriation of property, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety.

Uncertainty over whether the Brazilian government will implement changes in policy or regulation may contribute to economic uncertainty in Brazil. Historically, Brazilian politics have affected the performance of the Brazilian economy. Past political crises have affected the confidence of investors and the public, generally resulting in an economic slowdown.

Global economic crises could negatively affect investor confidence in emerging markets or the economies of the principal countries in Latin America, including Brazil. Such events could materially and adversely affect the Company's business, financial condition and results of operations.

The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an adverse effect on the Company's business, results of operations and financial position.

***Inflation in Brazil, along with Brazilian governmental measures to combat inflation, may have a significant negative effect on the Brazilian economy and, as a result, on the Company's financial condition and results of operations.***

In the past, high levels of inflation have adversely affected the economies and financial markets of Brazil, and the ability of its government to create conditions that stimulate or maintain economic growth. Moreover, governmental measures to curb inflation and speculation about possible future governmental measures have contributed to the negative economic impact of inflation in Brazil and have created general economic uncertainty. As part of these measures, the Brazilian government has at times maintained a restrictive monetary policy and high interest-rates that have limited the availability of credit and economic growth. Brazil may experience high levels of inflation in the future. Inflationary pressures may weaken investor confidence in Brazil and lead to further government intervention in the economy, including interest rate increases, restrictions on tariff adjustments to offset inflation, intervention in foreign exchange markets and actions to adjust or fix currency values, which may trigger or exacerbate increases in inflation, and consequently, have an adverse impact on the Company. In an inflationary environment, the value of uncollected accounts receivable, as well as of unpaid accounts payable, declines rapidly. If Brazil experiences high levels of inflation in the future and price controls are imposed, the Company may not be able to adjust the rates the Company charges the Company's customers to fully offset the impact of inflation on the Company's cost structures, which could adversely affect the Company's results of operations or financial condition.

***Corruption and fraud in Brazil relating to ownership of real estate.***

Under Brazilian law, real property ownership is normally transferred by means of a transfer deed and subsequently registered at the appropriate real estate registry office under the corresponding real property record. There are uncertainties, corruption and fraud relating to title ownership of real estate in Brazil, mostly in rural areas. In certain cases, a real estate registry office may register deeds with errors, including duplicate and/or fraudulent entries, and, therefore, deed challenges frequently occur, leading to judicial actions. Property disputes over title ownership are frequent in Brazil, and, as a result, there is a risk that errors, fraud or challenges could adversely affect the Company's ability to operate, although ownership of mining rights are separate from ownership of land.

***Repatriation of Earnings***

There is no assurance that any countries 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 foreign entities.

***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 anti-corruption 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 system 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.

***Internal controls provide no absolute assurances as to reliability of financial reporting and financial statement preparation, and ongoing evaluation may identify areas in need of improvement.***

The Company's Audit and Risk Committee actively oversees the monitoring of any identified deficiencies and weaknesses in internal controls, as well as the risks they create for the Company. The Audit and Risk Committee, and more generally the Board, oversee the timely remediation of any weaknesses and, in the interim, the mitigation of the related risks. In consultation with the Company's internal auditors, as well as the Board, the Audit and Risk Committee monitors and evaluates, among other things, the following on an ongoing basis: (i) the effectiveness of internal controls; (ii) the materiality of, and potential risks that may arise from, any deficiencies or weaknesses in internal controls; (iii) how any such deficiencies and weaknesses can be remediated; (iv) management's plan and timeframe for any such remediation; (v) the status of any ongoing remediation plans of the Company; and (vi) whether any interim measures should be adopted prior to the completion of any remediation.

The Company has invested resources to document and assess its system of internal control over financial reporting

and undertakes an evaluation process of such internal controls. Internal control over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, safeguards with respect to the reliability of financial reporting and financial statement preparation.

The Company currently believes that no material weakness exists in regard to its internal controls for financial reporting that results in a reasonable possibility that a material misstatement of the Company's financial statements will not be prevented or detected on a timely basis. However, if the Company fails to maintain the adequacy of its internal control over financial reporting, as either the Company's or the applicable regulatory standards are modified, supplemented, or amended from time to time, then the Company may not be able to ensure that it can conclude on an ongoing basis that it has effective internal controls over financial reporting. If in the future the Company is required to disclose a material weakness in its internal controls over financial reporting, then this could result in the loss of investor confidence in the reliability of the Company's financial statements, which in turn could harm the Company's business and negatively impact the trading price of its common shares. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's operating results or cause it to fail to meet its reporting obligations.

***Jaguar may be subject to community relations and social licence to operate issues, or involvement from Non-Governmental Organizations (NGOs).***

Jaguar mines in a peri-urban environment adjacent to communities surrounded by lands used for agriculture, residence, and other industry. Jaguar has no significant community relations issues at present. However, ore from Pilar is trucked to the Caeté site for processing which passes through one or two towns depending on the route. Jaguar has maintained good community relations with the neighbouring communities and city councils to date. Relations between Jaguar and its local communities may be affected by elections changing the relevant governmental authorities in whose jurisdictions Jaguar carries on business, by local community dissatisfaction with our operations, or by the involvement of an NGO opposed to mining. Community disruptions, changes in the relationship between Jaguar and the communities wherein it operates, or new involvement by NGOs opposed to mining, may have a material adverse effect on Jaguar's business, which could result in changes in operational and financial conditions. Social licence to operate in Brazil is an ongoing exposure for all companies working in Brazil, especially in the mining sector.

***Jaguar may be negatively affected by an outbreak of infectious disease or pandemic***

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. The global response to the COVID-19 outbreak has resulted in, among other things, border closures, severe travel restrictions and extreme fluctuations in financial and commodity markets. Additional measures may be implemented by one or more governments around the world in jurisdictions where the Company operates. Labour shortages due to illness, Company or government-imposed isolation programs, restrictions on the movement of personnel or possible 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. As efforts are undertaken to slow the spread of the COVID-19 virus, the operation and development of mining projects may be impacted. To date, a number of mining projects have been suspended as cases of COVID-19 have been confirmed, for precautionary purposes or as governments have declared a state of emergency or taken other actions. If the operation or development of one or more of the properties of Jaguar, or in which Jaguar holds a royalty, stream or other interest, is suspended or the development is delayed for precautionary purposes or as governments declare states of emergency or other actions are taken in an effort to combat the spread of COVID-19, it may have a materially adverse impact on Jaguar's profitability, results of operations, financial condition and the trading price of Jaguar's securities.

The adverse effects described above could be rapid and unexpected. These disruptions may severely impact the Company's ability to carry out its business plans for 2022 and beyond. Fiscal 2021 was particularly challenging for both the people of Brazil and for the Company. In June 2021, new infections reached a record number for COVID-19 cases recorded in a single day in Brazil. As at the end of the fourth quarter of 2021, 396 of the Company's approximately 1430 employees and contractors had either contracted the coronavirus, been in quarantine or otherwise been sidelined for health-related risk factors relating to COVID-19 for varying amounts of time, since the onset of the pandemic. Our operating divisions have been the hardest hit where the loss of skilled drillers and mechanics materially impacted productivity. The temporary reduction of expertise and staff, combined with the continuous reconfiguration of our operating teams and inability for movement of technical resources between mines, significantly impacted the Company's performance in 2021. The spread of the Omicron variant in late 2021 and early 2022 continues to adversely impact the workforce levels and operations of the Company. The actual and threatened spread of COVID-19 globally could adversely affect global economies and financial markets resulting in a prolonged economic downturn and a decline in the value of Jaguar's stock price.

The growing emergence of COVID-19 variants of concern that are more transmissible and carry increased health risks threaten another surge in cases and hospitalizations, which may lead to the adoption of new emergency measures. Disruptions caused by the imposition of these emergency measures may negatively impact the Company's operations. At the same time, the continued spread of COVID-19 may negatively impact, among other things: the health and well-being of our personnel, local communities, social unrest and the Company's ability to raise capital (which, in turn, could materially impact its business strategy) and to declare and pay dividends. Additionally, currency exchange rates have been volatile over the past year and the outlook for currencies remains difficult to anticipate given varying economic responses to the COVID-19 pandemic. Currently, Brazil has the world's second-highest death toll relating to COVID-19 behind the United States.

The uncertainty caused by the COVID-19 pandemic has tested many businesses' risk frameworks. In response to the pandemic, Jaguar has: increased communication internally and externally; closely monitored the actual and potential impacts of COVID-19 on the Company's operations; regularly engaged with the Board to monitor the ever-changing risk landscape in light of the pandemic; and implemented precautionary measures at its corporate offices, including limiting visits to essential personnel and ensuring proper protocols around sanitation and social distancing. While the Company continued utilizing its COVID-19 Action Plan, the operations have adapted to the safety rules and restrictions, and absenteeism has reduced to manageable levels. As of March 31<sup>st</sup>, 2022, 97% of the Jaguar workforce had been partially or fully vaccinated.

Jaguar's management will continue to monitor the situation regarding COVID-19 and may take actions that alter Jaguar's business operations as may be required by federal, provincial or local authorities, or that management determines are in the best interests of Jaguar's employees, customers, suppliers, shareholders and other stakeholders. Such alterations or modifications could cause substantial interruption to Jaguar's business, any of which could have a materially adverse effect on, among other things, Jaguar's operations or financial results. The extent to which COVID-19 and any other pandemic or public health crisis impacts Jaguar's business, affairs, operations, financial condition (including Jaguar's ability to raise funds), liquidity, availability of credit and results of operations will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the effectiveness, acceptance and availability of vaccines, as well as the duration of associated immunity and efficacy of the vaccines against emerging variants of COVID-19, which may prolong the impacts of COVID-19 on the United States, Canadian and Brazilian economies, the mining industry and Jaguar (including its workforce).

Even after the COVID-19 pandemic has subsided, Jaguar may continue to experience adverse impacts to its business as a result of the pandemic's global economic impact, including any related recession, as well as lingering impacts on Jaguar's workforce, suppliers and third-party service providers.



### ***Climate change-related risks.***

The Company and the broader mining industry can face geotechnical challenges, which could adversely impact the Company's production and profitability. Unanticipated adverse geotechnical and hydrological conditions, such as landslides, droughts, pit wall failures and rock fragility, may occur in the future and such events may not be detected in advance. Geotechnical instabilities and adverse climatic conditions can be difficult to predict and are often affected by risks and hazards outside of the Company's control, such as seismic activity, severe weather and considerable rainfall, which may lead to periodic floods, mudslides and embankment instability, which could potentially result in, among other things, slippage of material.

Geotechnical failures could result in limited or restricted access to mine sites, suspension of operations, government investigations, increased monitoring costs, remediation costs, loss of ore and other impacts, including financial liability, which could cause one or more of the Company's projects to be less profitable than currently anticipated and could result in a materially adverse effect on the Company's results of operations and financial position.

Furthermore, the occurrence of physical climate change events may result in substantial costs to respond to and/or recover from an event, and to prevent recurrent damage, through either the modification of, or addition to, existing infrastructure at the Company's operations. The scientific community has predicted an increase, over time, in the frequency and severity of extraordinary or catastrophic natural phenomena as a result of climate change. The Company can provide no assurance that it will be able to predict, respond to, measure, monitor or manage the risks posed as a result.

In addition, as climate change is increasingly perceived as a broad societal and community concern, stakeholders may increase demands for emissions reductions and call-upon mining companies to better manage their consumption of climate-relevant resources. Physical climate change events, and the trend toward more stringent regulations aimed at reducing the effects of climate change, could impact the Company's decisions to pursue future opportunities or maintain existing operations, which could have an adverse effect on its business and future operations. The Company can provide no assurance that efforts to mitigate the risks of climate change will be effective and that the physical risks of climate change will not have an adverse effect on its operations and profitability.

### **DIVIDEND**

Jaguar has paid C\$13.9 million in dividends, at C\$0.19 per common share, for the year ended December 31, 2021, C\$8.9 million in dividends, at C\$0.12 per common share, for the year ended December 31, 2020, and nil for the year ended December 31, 2019, and has plans to pay dividends in the foreseeable future. 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. See "Risk Factors - The ability of Jaguar to pay dividends will be dependent on the financial condition of Jaguar".

The Company has also announced that its Board of Directors has declared a cash dividend of C\$0.04 per common share of the Company, to be paid on March 31, 2022, to shareholders of record as of the close of business on March 25, 2022. This is the same amount as was paid in the recent previous quarters. The dividend qualifies as an eligible dividend for Canadian income tax purposes.

The Board of Directors intends to review, among other things, the Company's budget, cash flow forecast and existing market conditions on a quarterly basis in order to determine whether any additional dividends will be declared on Shares for subsequent quarters. 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 72,439,971 issued and outstanding as of December 31, 2021. 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 at its discretion from funds legally available therefore 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 infoventuresx.com.

Month	High (\$)	Low (\$)	Volume
January 2021	9.34	7.33	4,175,243
February 2021	11.30	7.95	5,031,240
March 2021	8.08	6.05	7,017,186
April 2021	7.33	6.24	2,534,156
May 2021	7.17	6.20	2,978,034
June 2021	6.57	5.20	4,130,487
July 2021	5.62	4.93	2,008,522
August 2021	5.97	4.06	2,393,512
September 2021	4.65	3.70	2,215,312
October 2021	4.81	3.71	1,343,779
November 2021	5.17	4.16	1,429,688
December 2021	4.70	3.74	1,933,212

Source: TSX InfoSuite™

## PRIOR SALES

During the financial year ended December 31, 2021, the Company issued securities as follows:

<u>Date of Issuance</u>	<u>Type of Security</u>	<u>Number of Securities Issued<sup>(1)</sup></u>	<u>Issuance/ Price per Security (in \$)<sup>(1)</sup></u>
March 30, 2021	DSUs	6,409	N/A
April 26, 2021	Common Shares <sup>(2)</sup>	1,350	\$7.13
May 31, 2021	DSUs	6,345	N/A
July 16, 2021	Common Shares <sup>(1)</sup>	6,959	\$5.14
August 20, 2021	Common Shares <sup>(1)</sup>	6,434	\$4.10
August 25, 2021	Common Shares <sup>(1)</sup>	10,361	\$4.29
August 30, 2021	DSUs	4,455	N/A
November 30, 2021	DSUs	4,505	N/A
December 1, 2021	Common Shares <sup>(2)</sup>	4,899	\$4.13

(1) Post-Consolidation basis.

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

(3) Common Shares issued in connection with the exercise of stock options.

## DIRECTORS AND EXECUTIVE OFFICERS

### Directors and Executive Officers

On August 31, 2021, the Company announced the appointment of Mary-Lynn Oke as a director of the Company and chair of the Audit & Risk Committee, effective August 30, 2021. Ms. Oke brings over 20 years of business experience built through a career which has included tax, finance, corporate, and senior leadership roles. 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. Ms. Oke currently provides senior financial and advisory services to organizations, assisting them to improve the efficiency and productivity of their businesses. She holds an Honours Bachelor of Arts in Business Administration from the Richard Ivey School of Business and is a Chartered Professional Accountant.

The table below outlines the Board members and key senior officers of Jaguar as at December 31, 2021. 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.

<b>Name &amp; Province/State of Residence</b>	<b>Position and Date of Appointment</b>	<b>Principal Occupation (past five years)</b>	<b>Number of Common Shares Beneficially Owned</b>	<b>Percentage of Common Shares Beneficially Owned</b>	<b>Number of Deferred Share Units</b>
<b>Ben Guenther</b> Nevada, United States	Director 7-Nov-2017	Manager at Platoro Mine Consulting LLC. Various Executive Positions at AngloGold Ashanti (1995-2017).	250,864	0.35%	50,034
<b>John Ellis</b> Nevada, United States	Director 24-Jun-2016	Director for Baru Gold Corp. Director for International Tower Mines and for Sunshine Silver Mines Corporation.	35,497	0.04%	127,763
<b>Luis Ricardo Miraglia</b> Minas Gerais, Brazil	Director 27-Sep-2012	Senior Partner of Azevedo Sette Advogados, a Brazilian law firm, since 2004.	63,967	0.09%	150,997
<b>Shastri Ramnath</b> Ontario, Canada	Director 11-Jun-2020	President and CEO of Exiro Minerals Corp. Chair of Orix Geoscience Corp	4,150	0.01%	47,523
<b>Mary-Lynn Oke</b> Ontario, Canada	Director 31-Aug-2021	Director for Anaconda Mining Inc. VP Hudbay Minerals Inc.	5,500	0.01%	34,437
<b>Thomas Weng</b> New Jersey, United States	Director 1-Apr-2016	Co-founder of Alta Capital Partners.	12,139	0.02%	130,925
<b>William J. Kennedy</b> Ontario, Canada	Director 6-Sep-2019	Managing Director Equity Capital Markets and Operations at Cormark Securities Inc.	10,000	0.01%	52,854
<b>Vernon Baker</b> Minas Gerais, Brazil	Officer 6-Aug-2019	Chief Executive Officer, Jaguar Mining Inc. General Manager at Goldcorp's Cerro Negro Mine	7,301	0.01%	48,800
<b>Hashim Ahmed</b> Ontario, Canada	Officer 19-Feb-2016	Chief Financial Officer, Jaguar Mining Inc. Financial Controller, Projects Barrick Gold (2008-2014).	66,623	0.09%	56,244

As at March 31, 2022, the directors and executive officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control over, a total of 456,041 common shares, representing 0.63% of the issued and outstanding common shares of the Company, as well as a total of 699,577 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

**Strategic & Finance 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 and executive 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. She currently serves as a director of Meteoric Resources NL (ASX: MEI), which has mining operations in Brazil.
- (g) Mary-Lynn Oke brings over 20 years of business experience built through a career that has included tax, finance, corporate, and senior leadership roles. 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, 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) Hashim Ahmed joined Jaguar in August 2014 as Vice President, Controller and was later appointed to the position of Chief Financial Officer in February 2016. Prior to the imposition of travel restrictions relating to COVID-19, Mr. Ahmed travelled to Brazil to meet with local management and visit the Company's material projects approximately ten times a year.
- (c) The Company's VP Exploration & Mine Geology, Jonathan Victor Hill, has over 30 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 material operations in Brazil. He is also a non-executive director of Royal Road Minerals Limited (TSXV: RYR) and Stratabound Minerals (V.SB). 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 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 was appointed Jaguar's VP of Administration after almost ten years working in different areas within Jaguar, where she developed the Internal Audit function and implemented a Risks and Compliance program. Ms. Freitas is a citizen and resident of Brazil and is fluent in Portuguese and English.

In addition to the foregoing:

- (a) Prior to the pandemic, the Company facilitated regular visits of directors and officers to Brazil, as well as site visits to the Company's material projects.
- (b) 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.
- (c) 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.
- (d) 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**

Except as stated below, 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, except as noted below, 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.

- (a) Mr. Miraglia was a director of the Company when it obtained creditor protection under the Companies' Creditors Arrangement Act (Canada) (the "CCAA") pursuant to an order granted on December 23, 2013 by the Ontario Superior Court of Justice (Commercial List) (the "Court"). On February 5, 2014, the Company obtained an order from the Court sanctioning a plan leading to an

overall capital reorganization of the Company, which was successfully implemented on April 22, 2014.

- (b) Mr. Ellis was a director of Royal Coal Corp. (“Royal Coal”), a public natural resource company listed on the TSX-V. On May 9, 2012, after Mr. Ellis ceased as a director, Royal Coal became subject to a cease trade order in British Columbia for failure to file audited financial statements for the period ending December 31, 2011, during which period Mr. Ellis served as a director. Subsequently, similar cease trade orders were also issued in Ontario, Alberta, and Manitoba. The cease trade orders all remain in effect.

## **Audit and Risk Committee and Audit Fees**

### ***Audit and Risk Committee Charter***

The Audit and Risk Committee Charter is attached as Appendix “A” 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 20 years of business experience built through a career that has included tax, finance, corporate, and senior leadership roles. 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. 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 and executive 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, 2021, and 2020, KPMG LLP, Chartered Professional Accountants (“KPMG”), charged Jaguar a total of C\$562,000 and C\$491,200, respectively, for audit services.



### ***Audit-Related Fees***

During the fiscal years ended December 31, 2021, and 2020, 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, 2021, and 2020, 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, 2021 and 2020, 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 rate, representing the amount agreed to by the parties and included in general and administrative expenses in the consolidated statements of operations and comprehensive loss. Legal fees paid to ASA were \$34,000 for the year ended December 31, 2021 (\$63,000 for the year ended December 31, 2020).

## **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, 2021.

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, 2020. 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, 2021.

## **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 “Technical Report on the Turmalina Mine, Minas Gerais State, Brazil,” dated March 31<sup>st</sup>, 2022, filed

on SEDAR on March 31<sup>st</sup>, 2022 (the “Turmalina Technical Report”). The Turmalina Technical Report was prepared by (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, Dorota E-Rassi, P. Eng., Renan Lopes, CP (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 - “Technical Report on the Roça Grande and Pilar Mines,” dated March 31, 2022, filed on SEDAR on March 31<sup>st</sup>, 2022 (the “Caeté Technical Report”). The Caeté Technical Report was principally prepared by (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, Dorota E-Rassi, P. Eng., Renan Lopes, CP (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.

Jeff Sepp, P. Eng, Peirre Landy, P. Geo, Dorota E-Rassi, P. Eng, Renan Lopes, CP (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 and have verified the data.

Jeff Sepp, P. Eng, Peirre Landy, P. Geo, Dorota E-Rassi, P. Eng, Renan Lopes, CP (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.sedar.com](http://www.sedar.com).

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, 2021.

**APPENDIX A**



**JAGUAR MINING INC.**

**CHARTER OF THE AUDIT AND RISK COMMITTEE**

**1. 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**

##### *1. 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.