

# **GREAT PANTHER MINING LIMITED**

# ANNUAL INFORMATION FORM FOR THE YEAR ENDED DECEMBER 31, 2020

March 11, 2021

# GREAT PANTHER MINING LIMITED ("COMPANY") ANNUAL INFORMATION FORM

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# 1. IMPORTANT INFORMATION ABOUT THIS DOCUMENT

#### 1.A. DATE OF INFORMATION

Unless otherwise noted, all information contained in this Annual Information Form ("AIF") is as at December 31, 2020.

#### 1.B. NOMENCLATURE

In this AIF, unless the context otherwise dictates, "Great Panther" or the "Company" refers to Great Panther Mining Limited, and its subsidiaries.

#### 1.C. FINANCIAL INFORMATION AND REPORTING CURRENCY

The Company prepares its consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). IFRS differs in some respects from Generally Accepted Accounting Principles in the United States, and thus the Company's financial statements may not be comparable to financial statements of US companies.

The Company's financial statements are presented in United States dollars (the reporting and functional currency of the Canadian parent company). Financial, share price and operating information presented in this AIF is presented in US dollars ("USD"), unless otherwise noted. Unless we have specified otherwise, all references to dollar amounts, \$ or US\$ are to USD. All references to C\$ are to Canadian dollars.

# 1.D. CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain of the statements and information in this AIF constitute "forward-looking statements" within the meaning of the United States "Private Securities Litigation Reform Act" of 1995 and "forward-looking information" within Canadian securities laws (collectively, "forward-looking statements"). All statements, other than statements of historical fact, addressing activities, events or developments that the Company expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the words "anticipates", "believes", "expects", "may", "likely", "plans", "intends", "expects", "may", "forecast", "project", "budgets", "guidance", "targets", "potential", and "outlook", or similar words, or statements that certain events or conditions "may", "might", "could", "can", "would", or "will occur. Forward-looking statements reflect the Company's current expectations and assumptions and, are subject to a number of known and unknown risks, uncertainties and other factors which may cause the Company's actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

In particular, this AIF includes forward-looking statements as noted throughout the document relating to estimates, forecasts, and statements as to management's expectations, opinions and assumptions with respect to the future guidance and outlook of production of gold, silver, lead and zinc; profit, operating and capital costs, growth expenditures and cash flow; grade improvements; sales volume and selling prices of products; capital and exploration expenditures, plans, timing, progress, and expectations for the development and mine life of the Company's mines and projects, including its planned exploration and drilling programs (metres drilled), plans to evaluate future financing opportunities, including the potential to use at-the-market facilities, planned use of proceeds from financings completed by the Company; the Company's Mineral Resource and Mineral Reserve estimates for each of its operations and projects and the assumptions upon which they are based; the timing of production and the cash and total costs of

production; sensitivity of earnings to changes in commodity prices and exchange rates; the impact of foreign currency exchange rates; expenditures to increase or define Mineral Reserves and Mineral Resources; sufficiency of available capital resources; title to claims; expansion and acquisition plans; and the future plans and expectations for the Company's properties and operations. Examples of specific information in this AIF that may constitute forward-looking statements are:

Regarding the Tucano gold mine ("Tucano"):

- expectations regarding the mine life for Tucano and the ability to operate Tucano after 2023 based on converting Mineral Resources into Mineral Reserves within the mine plan;
- expectations regarding the ongoing geotechnical control of the Urucum Central South pit
   ("UCS") and related slope stability, the ability to continue mining and the ability to continue
   to include the UCS pit as part of the Mineral Resource and Mineral Reserve estimate;
- expectations regarding the production profile for Tucano and its ability to meet the production and cost guidance for 2021;
- expectations regarding Tucano's significant exploration potential, including regional, and multiple in-mine and near mine opportunities with the potential to extend the mine life by converting Mineral Resources to Mineral Reserves or discovering new Mineral Resources and its plans to complete drilling in 2021 targeting these opportunities;
- plans to continue infill drilling and related expectations and timing regarding the potential for an underground mine and possible plans to make a decision to complete a feasibility study following completion of an underground targeted drill program; and
- expectations regarding operating and capital expenditures at Tucano.

Regarding the Guanajuato Mine Complex (the "GMC") which comprises the Guanajuato Mine ("Guanajuato"), the San Ignacio Mine ("San Ignacio"), and the Cata processing plant:

- expectations that the Company will maintain operations while it continues to wait for the
  results of the CONAGUA evaluation of the technical information submitted for the expansion
  of the GMC TSF (lifts 18 and 19) and that the Company can successfully extend is current
  tailings storage capacity through to June 2021 while it awaits CONAGUA approval;
- expectations that the current tailings footprint at the GMC can be maintained and can support
  operations until May 2023, which capacity is subject to receipt of further permits and
  approvals;
- expectations that permits associated with the use and expansion of the TSF at the GMC will
  be granted in due course and on favourable terms, with no suspension of the GMC's
  operations;
- expectations that additional Mineral Resources may be identified at the GMC, including
  whether or not such Mineral Resources can be defined as Mineral Reserves, and expectations
  that these Mineral Resources can be mined without first completing a feasibility study and
  converting these Mineral Resources into Mineral Reserves;
- expectations that the Company will receive any additional water use and discharge permits required to maintain operations at the GMC; and
- expectations regarding the results of exploration programs at Guanajuato in 2021.

#### Regarding the Topia mine ("Topia"):

- expectations regarding continued mining and grade recoveries at Topia given the absence of Mineral Reserves;
- expectations that the Phase II TSF can be operated as planned on the basis of positive results
  of monitoring and the availability of the Phase III TSF, which is expected to be available for

- use after constructing retaining walls and erosion controls around the base of the facility, without interruption; and
- expectations that the Company will be able to achieve compliance with the voluntary environmental audit program authorized by the PROFEPA in a timely manner, and that upon completion of the compliance program, further reviews will not lead to future suspensions of operations.

# Regarding the Coricancha Mine Complex ("Coricancha"):

- expectation that pending proposals for modification of an approved closure plan will conclude with the approval of the MEM, which may also resolve any related fines or penalties;
- expectations regarding the availability of funds to restart production, the timing of any production decision and the ability to restart the mine as a commercially viable mine;
- expectations regarding the costs to restart Coricancha;
- expectations that Coricancha can be restarted and operated on the operating assumptions confirmed by the bulk sample program which are preliminary in nature and are not based on Mineral Resources that have been identified as Mineral Reserves;
- expectations regarding recoveries from Nyrstar in relation to its Coricancha indemnification obligations and the potential funding obligations under bonds posted with the MEM as security for closure and reclamation obligations;
- expectations regarding the impact of the Company's constitutional case concerning reclamation and remediation of legacy tailings, and the consequences of the removal of the injunction;
- expectations regarding the reclamation process, including the cost to complete the required reclamation; and
- opportunities relating to optimization of mining, future exploration and the expansion of the mine life indicated under the preliminary economic assessment disclosed in the Coricancha Technical Report, which is preliminary in nature and are not based on Mineral Resources that have been identified as Mineral Reserves.

# Regarding general corporate matters:

- guidance or outlook as may be provided for future production, planned metres of drilling and expenditures, operating costs, capital expenditures, exploration growth costs and other expenditures for 2021 in respect of the individual mines;
- expectations that the Company will be able to generate positive cash flow from operations in 2021 prior to capital investments, exploration and evaluation and development costs, and debt repayment obligations, at current metal prices and at current exchange rates for the BRL and MXN to the USD;
- the Company's plans to pursue acquisition opportunities to complement its existing portfolio;
- expectations that along with its cash flow generated from mining activities, and its current
  cash and other net working capital, including cash raised from equity and debt financing and
  the at-the-market facility, that it will have sufficient capital resources to fund capital
  investments and projects and to repay indebtedness and carry out the programs and plans
  necessary to maintain and grow operations;
- expectations that the Company's operations will not be impacted materially by government or industry measures to control the spread of COVID-19, including the impact of future orders of federal governments to curtail or cease mining operations in Brazil or Mexico;
- expectations with respect to the future anticipated impact of COVID-19 on our operations, assumptions related to the global supply of COVID-19 vaccines and the roll-out in each

- country, and the effectiveness and results of any vaccines, the lessening or increase in pandemic-related restrictions, and the anticipated rate and timing for the same;
- estimates made by management in the preparation of the Company's financial statements relating to the assessments of provisions for loss and contingent liabilities relating to legal proceedings and the estimation of the carrying value of the Company's mineral properties;
- estimates concerning reclamation and remediation obligations and the assumptions underlying such estimates;
- expectations that metallurgical, environmental, permitting, legal, title, taxation, socioeconomic, political, social, marketing or other issues will not materially affect the Company's estimates of Mineral Reserves and Mineral Resources or its future mining plans;
- expectations regarding future debt or equity financings, including any sales under the Company's existing at-the-market facility to improve working capital, fund planned capital investments and exploration programs for its operating mines, for acquisitions and to meet scheduled debt repayment obligations;
- expectations regarding access to additional capital to fund further expansion or development plans and general working capital needs; and
- expectations in respect of permitting and development activities.

These forward-looking statements and information reflect the Company's current views with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by the Company, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies. These assumptions include:

- the assumptions underlying the Company's guidance and outlook continuing to be accurate;
- continued operations at all three of the Company's mines for 2021 without significant interruption due to COVID-19 or any other reason;
- continued operations at Tucano in accordance with the Company's mine plan, including the
  expectations regarding the ongoing geotechnical control of UCS where mining restarted in
  the last week of October 2020;
- the accuracy of the Company's Mineral Reserve and Mineral Resource estimates and the assumptions upon which they are based;
- the Company's ability to mine Tucano in accordance with the production schedule set out in the Tucano Technical Report;
- ore grades and recoveries;
- prices for gold, silver, and base metals remaining as estimated;
- currency exchange rates remaining as estimated;
- capital, decommissioning and reclamation estimates;
- the Company will not be required to further impair Tucano as the current open pit Mineral Reserves are depleted through mining;
- prices for energy inputs, labour, materials, supplies and services (including transportation);
- national and international transportation arrangements to deliver Tucano's gold doré to international refineries continue to remain available, despite inherent risks due to COVID-19;
- international refineries that the Company uses continue to operate and refine the Company's gold doré, and in a timely manner such that the Company is able to realize revenue from the sale of its refined metal in the timeframe anticipated, despite inherent risks due to COVID-19;
- all necessary permits, licenses and regulatory approvals for the Company's operations are received in a timely manner, including the granting of permits for the GMC TSF in time to prevent interruption to operations;
- the Company's ability to comply with environmental, health and safety laws;

- the Topia Phase III TSF will be available when the Phase II TSF is no longer available;
- Tucano will be able to continue to use cyanide in its operations;
- management's estimates in connection with the assessment of provisions for loss and contingent liabilities relating to legal proceedings will not differ materially from the ultimate loss or damages incurred by the Company;
- the Company will be able to meet its production forecasts and generate the anticipated cash
  flow from operations for 2021 with the result that the Company will be able to meet its
  scheduled debt payments when due;
- management's estimates regarding the carrying value of its mineral properties will not change
  in future financial periods, such that it would result in further write-downs and consequential
  impairment loss;
- the accuracy of the information included or implied in the various published technical reports;
   the geological, operational and price assumptions on which these technical reports are based;
   conditions in the financial markets;
- the ability to attract and retain skilled staff;
- the ability to procure equipment and operating supplies and that there are no unanticipated material variations in the cost of energy or supplies;
- the ability to secure contracts for the sale of the Company's products (metals concentrates and gold doré);
- the execution and outcome of current or future exploration activities;
- the ability to obtain adequate financing for planned activities and to complete further exploration programs;
- the Company will not experience project delays and cost overruns, or unanticipated excessive operating cost and expenses;
- the Company's ability to maintain adequate internal control over financial reporting, and disclosure controls and procedures;
- the ability of contractors to perform their contractual obligations; and
- operations not being disrupted by issues such as workforce shortages, mechanical failures, labour or social disturbances, illegal occupations or mining, seismic events, and adverse weather conditions.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements expressed or implied by such forward-looking statements to be materially different. Such factors include, among others, risks and uncertainties relating to:

- open pit mining operations at Tucano have a limited established mine life and the Company may not be able to extend the mine life of Tucano open pit operations beyond 2023 as anticipated;
- the Company may experience an increase in COVID-19 infection amongst its employees and contractors even with the adoption of enhanced safety protocols and safeguards;
- the Company cannot provide assurance that there will not be interruptions to its operations in the future as a result of COVID-19 including: (i) the impact restrictions that governments may impose or the Company voluntarily imposes to address COVID-19, which if sustained or resulted in a significant curtailment could have a material adverse impact on the Company's production, revenue and financial condition and may materially impact the Company's ability to meet its production guidance included herein, and complete near-mine and regional exploration plans at Tucano; (ii) shortages of employees; (iii) unavailability of contractors and subcontractors; (iv) interruption of supplies and the provision of services from third parties

upon which the Company relies; (v) restrictions that governments impose to address the COVID-19 outbreak; (vi) disruptions in transportation services that could impact the Company's ability to deliver gold doré and metal concentrates to refineries; (vii) restrictions that the Company and its contractors and subcontractors impose to ensure the safety of employees and others; (viii) restrictions on operations imposed by governmental authorities; and (ix) delays in permitting;

- the Company's ability to appropriately capitalize and finance its operations, including the risk
  that the Company is: (i) unable to renew or extend existing credit facilities that become due,
  which may increase the need to raise new external sources of capital; or (ii) unable to access
  sources of capital, which could adversely impact the Company's liquidity and require the
  Company to curtail capital and exploration program, and other discretionary expenditures;
- planned exploration activities may not result in the conversion of existing Mineral Resources into Mineral Reserves or discovery of new Mineral Resources;
- the Company may be unable to meet its production forecasts or to generate the anticipated cash flow from operations, and as a result, the Company may be unable to meet its scheduled debt payments when due or to meet financial covenants to which the Company is subject;
- the inherent risk that estimates of Mineral Reserves and Mineral Resources may not be accurate and accordingly that mine production and recovery will not be as estimated or predicted;
- gold, silver and base metal prices may decline or may be less than forecasted or may experience unpredictable fluctuations;
- fluctuations in currency exchange rates (including the USD to BRL exchange rate) may increase costs of operations;
- even though a geotechnical consultant has given the approval to restart mining the UCS pit, there is no assurance that the Company will be able to continue mining through to the first quarter of 2022 as planned and be able to access the UCS Mineral Reserves, which may adversely impact the Company's production plans, future revenue and financial condition;
- challenging operational viability of Mexican operations;
- operational and physical risks inherent in mining operations (including pit wall collapses, tailings storage facility failures, environmental accidents and hazards, industrial accidents, equipment breakdown, unusual or unexpected geological or structural formations, cave-ins, flooding and severe weather) may result in unforeseen costs, shutdowns, delays in production and exposure to liability;
- there is no assurance that the Company will be able to identify or complete acquisition opportunities or, if completed, that such acquisitions will be accretive to the Company;
- management's estimates regarding the carrying value of its mineral properties may be subject
  to change in future financial periods, which may result in further write-downs and
  consequential impairment loss;
- management's estimates in connection with the assessment of provisions for loss and contingent liabilities relating to legal proceedings may differ materially from the ultimate loss or damages incurred by the Company;
- potential political and social risks involving Great Panther's operations in a foreign jurisdiction;
- the potential for unexpected and excessive costs and expenses and the possibility of project delays;
- employee and contractor relations;
- relationships with, and claims by, local communities;

- the Company's ability to obtain and maintain all necessary permits, licenses and regulatory approvals in a timely manner on favourable terms, including the granting of the permits for the expansion of the GMC TSF in time without condition, which if not granted or conditioned, could result in an interruption of operations and the ability to maintain those permits, licences and regulatory approvals and the conditions required thereunder;
- changes in laws, regulations and government practices in the jurisdictions in which the Company operates;
- legal restrictions related to mining;
- the inability to operate the Topia Phase II TSF as planned, or to commence stacking at Topia Phase III when Phase II TSF is no longer available;
- diminishing quantities or grades of mineralization as properties are mined, operating or technical difficulties in mineral exploration and changes in project parameters as plans continue to be refined;
- acts of foreign governments;
- political risk;
- labour or social unrest;
- illegal mining, including the potential for safety and security risks related thereto;
- uncertainties related to title to the Company's mineral properties and the surface rights
  thereon, including the Company's ability to acquire, economically acquire, or maintain/renew
  the surface rights to certain of the Company's exploration and development projects, as well
  as the surface rights associated with the Company's operations and facilities;
- unanticipated operational difficulties due to adverse weather conditions, failure of plant or mine equipment and unanticipated events related to health, safety, and environmental matters;
- uncertainty of revenue, cash flow and profitability, the potential to achieve any particular level of recovery, the costs of such recovery, the rates of production and costs of production, where production decisions are not based on any feasibility studies of Mineral Reserves demonstrating economic and technical viability;
- cash flow may vary and the Company's business may not generate sufficient cash flow from operations to enable it to satisfy its debt and other obligations;
- an unfavourable decision by the MEM with respect to the proposed modification to the Coricancha closure plan;
- fines, penalties, regulatory actions or charges against the Company's Coricancha subsidiary arising from removal of the injunction;
- reclamation costs exceed the amounts estimated;
- failure of counterparties to perform their contractual obligations, including risk that Nyrstar
  is unable to fund its indemnity obligations under the Coricancha Agreements (as defined in
  Section 6.A.1 of this AIF), and the guarantors thereunder do not have the necessary financial
  resources to discharge their obligations under the guarantees;
- litigation risk, including the risk that the Company will not be successful in resolving its existing litigation or that it will become subject to further litigation in the future;
- certain of the Company's directors and officers may continue to be involved in a wide range
  of business activities through their direct and indirect participation in corporations,
  partnerships or joint arrangements, some of which are in the same business as the Company
  and situations may arise in connection with potential acquisitions and investments where the
  other interests of these directors and officers may conflict with the interests of the Company;
- deterioration of general economic conditions, including increased volatility and global financial conditions; and

• the Company's ability to operate as anticipated,

and other risks and uncertainties, including those described in respect of Great Panther in its 2020 MD&A, the Audited Financial Statements and material change reports filed with the Canadian Securities Administrators available at www.sedar.com and reports on Form 40-F and Form 6-K filed with the SEC and available at www.sec.gov.

This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements or information. Forward-looking statements or information are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements or information.

Readers are advised to carefully review and consider the risk factors identified in this AIF under the heading "Risk Factors" for a discussion of the factors that could cause the Company's actual results, performance and achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements. It is recommended that prospective investors consult the more complete discussion of the Company's business, financial condition and prospects that is included in Section 8 of this AIF.

The Company's forward-looking statements and information are based on the assumptions, beliefs, expectations and opinions of management as of the date of this AIF. The Company will update forward-looking statements and information if and when, and to the extent, required by applicable securities laws. Readers should not place undue reliance on forward-looking statements. The forward-looking statements and information contained herein are expressly qualified by this cautionary statement.

#### 1.E. SCIENTIFIC AND TECHNICAL INFORMATION

The scientific and technical information in this AIF relating to the Company's mineral projects has been reviewed and approved by Neil Hepworth, M.Sc., C. Eng. MIMMM, Chief Operating Officer of Great Panther, Nicholas Winer, FAusIMM, Vice President, Exploration of Great Panther, Fernando Cornejo, M. Eng., P. Eng., Vice President, Operations (Brazil) of Great Panther and Robert Brown, P. Eng., Geological Consultant of Great Panther, each of whom is a non-independent Qualified Person within the meaning of NI 43-101 (the "Great Panther Qualified Persons").

Scientific and technical disclosure in this AIF for our material properties is based on reports prepared in accordance with NI 43-101 (collectively, the "Technical Reports"). The Technical Reports have been filed on SEDAR at www.sedar.com and EDGAR at www.sec.gov. The technical information in this AIF has been updated with more current information where applicable, such updated information having been prepared by or under the supervision of, or reviewed by, the Great Panther Qualified Persons. Scientific and technical information relating to current and planned exploration programs set out in this AIF are prepared and/or designed and carried out under the supervision of, or were reviewed by, Nicholas Winer in the case of Brazil and Robert Brown in the case of Mexico and Peru. The current Technical Reports for the Company's properties are as follows:

a report related to Tucano entitled "Amended and Restated Technical Report on the 2020 Mineral Reserves and Mineral Resources of the Tucano Gold Mine, Amapá State, Brazil" dated February 2, 2021, with an effective date of September 30, 2020 prepared by Neil Hepworth, M.Sc., C. Eng. MIMMM, Nicholas Winer, FAuslMM, Fernando Cornejo, M. Eng., P. Eng., Carlos H. B. Pires, B.Sc. Hons., MAuslMM C.P., Master Geologist, Mina Tucano Ltda, and Reno Pressacco, M.Sc.(A) P.Geo and Tudorel Ciuculescu, B.Sc, M.Sc., P. Geo., of Roscoe Postle Associates Inc. ("Tucano Technical Report");

- a report related to the GMC entitled "NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico" dated December 22, 2020, with an effective date of July 31, 2020 prepared by Robert F. Brown, P. Eng., and Mohammad Nourpour, P. Geo. ("GMC Technical Report");
- a report related to Topia entitled "NI 43-101 Report on the Topia Mine Mineral Resource Estimates" dated February 28, 2019, with an effective date of July 31, 2018 prepared by Robert F. Brown, P. Eng., ("Topia Technical Report"); and
- a report related to Coricancha entitled "NI 43-101 Technical Report Summarizing the Preliminary Economic Assessment of the Coricancha Mine Complex" dated July 13, 2018, with an effective date of July 13, 2018 prepared by Daniel Saint Don, P.Eng. previously from Golder Associates Inc. ("Golder"), Jeffrey Woods, SME MMSA QP, previously from Golder and Ronald Turner, MAusIMM CP(Geo) from Golder ("Coricancha Technical Report").

Each of Messrs. Hepworth, Winer, Cornejo, Pires, Ciuculescu, Pressacco, Brown, Nourpour, Saint Don, Woods, and Turner is or was in relation to the Technical Reports a Qualified Person within the meaning of NI 43-101. A "Qualified Person" means an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining, with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice, has experience relevant to the subject matter of the mineral project, and is a member in good standing of a professional association within the meaning of NI 43-101.

Mineral Resource estimates in this AIF related to Tucano were prepared by or under the supervision of Mr. Ciuculescu of Roscoe Postle Associates Inc., solely in respect of the Mineral Resource estimate for TAP AB open pit and underground resources and Messrs. Winer and Pires of Great Panther for all other Mineral Resource estimates for Tucano. Mineral Reserve estimates in this AIF related to Tucano were prepared by or under the supervision of or reviewed for inclusion in this AIF by Mr. Hepworth of Great Panther. Mineral Resource estimates in this AIF related to the GMC were prepared by or under the supervision of Messrs. Brown and Nourpour. Mineral Resource estimates in this AIF related to Topia were prepared by or under the supervision of Mr. Brown. Mineral Resource estimates in this AIF related to Coricancha were prepared by or under the supervision of Mr. Turner of Golder.

While not material properties of the Company, the Company also discloses certain scientific and technical information for El Horcón and Santa Rosa, which could in the future form part of the GMC's operations. The information for these properties (as disclosed in Section 7 of the AIF) is contained in a report entitled "NI 43-101 Technical Report on the Guanajuato Mine Complex Claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón and Santa Rosa Projects", dated February 20, 2017, with an effective date of the information related to the El Horcón and Santa Rosa Projects of August 31, 2016 prepared by or under the supervision of Mr. Brown, a non-independent Qualified Person within the meaning of NI 43-101.

# 1.F. CANADIAN MINERAL PROPERTY STANDARDS AND RESERVE/ RESOURCE ESTIMATES

As a Canadian issuer, the Company is required to comply with reporting standards in Canada that require that it makes disclosure regarding its mineral properties, including any estimates of Mineral Reserves and Mineral Resources, in accordance with Canadian NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Unless otherwise indicated, all Mineral Resource

and Mineral Reserve estimates referenced in this AIF have been prepared in accordance with NI 43-101 and are classified in accordance with the CIM Definition Standards.

Unless other noted, capitalized terms "Mineral Resources", "Mineral Reserves", "Measured Mineral Resources", "Indicated Mineral Resources", "Inferred Mineral Resources", "Pre-feasibility Study", "Feasibility Study" and "Preliminary Economic Assessment" have the meanings ascribed to those terms in NI 43-101 which adopt the CIM Definition Standards.

# 1.G. CAUTIONARY NOTES TO U.S. INVESTORS REGARDING RESOURCE AND RESERVE ESTIMATES

The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the *United States Exchange Act of 1934* (the "U.S. Exchange Act"). These amendments became effective February 25, 2019 (the "SEC Modernization Rules"). The SEC Modernization Rules replaced the historical property disclosure requirements for mining registrants that were included in SEC Industry Guide 7 ("Guide 7"), which has been rescinded. As a "foreign private issuer" that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system (the "MJDS"), the Company is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101. If the Company ceases to be a foreign private issuer or loses its eligibility to file its annual report on Form 40-F pursuant to the MJDS, then the Company will be subject to the SEC Modernization Rules, which differ from the requirements of NI 43-101.

The SEC Modernization Rules include the adoption of terms describing Mineral Reserves and Mineral Resources that are "substantially similar" to the corresponding terms under the CIM Definition Standards. As a result of the adoption of the SEC Modernization Rules, SEC now recognizes estimates of Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources. In addition, the SEC has amended its definitions of Proven Mineral Reserves and Probable Mineral Reserves to be "substantially similar" to the corresponding CIM Definition Standards.

United States investors are cautioned that while the terms used in the SEC Modernization Rules are "substantially similar" to CIM Definition Standards, there are differences in the definitions under the SEC Modernization Rules and the CIM Definition Standards. Accordingly, there is no assurance any Mineral Reserves or Mineral Resources that the Company may report as Proven Mineral Reserves, Probable Mineral Reserves, Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources under NI 43-101 would be the same had the Company prepared the reserve or resource estimates under the standards adopted under the SEC Modernization Rules.

United States investors are also cautioned that while the SEC will now recognize Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources, investors should not assume that any part or all of the mineralization in these categories will ever be converted into a higher category of Mineral Resources or into Mineral Reserves. Mineralization described using these terms has a greater amount of uncertainty as to their existence and feasibility than mineralization that has been characterized as Reserves. Accordingly, investors are cautioned not to assume that any Measured Mineral Resources, Indicated Mineral Resources, or Inferred Mineral Resources reported by the Company are or will be economically or legally mineable.

United States investors are also cautioned not to assume that all or any part of the Inferred Mineral Resources exist. In accordance with Canadian securities laws, estimates of Inferred Mineral Resources cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101.

In addition, disclosure of "contained ounces" is permitted disclosure under Canadian securities laws; however, the SEC has historically only permitted issuers to report mineralization as in place tonnage and grade without reference to unit measures.

For the above reasons, information contained in this AIF containing descriptions of the Company's mineral deposits may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

# 1.H. GLOSSARY OF TERMS AND UNITS OF MEASURE

The following glossary, which is not exhaustive, should be used only as an adjunct to a thorough reading of the entire document of which it forms a part.

**2020 MD&A** Management's Discussion and Analysis of the Company for the year ended

December 31, 2020

AAS Atomic absorption spectroscopy

**Acquisition** The acquisition of Tucano by Great Panther completed on March 5, 2019 by

acquiring 100% of the issued and outstanding shares of Beadell pursuant to a scheme under the *Australian Corporations Act 2001* all as more particularly

described in Section 18 of this AIF

Adit A horizontal or close-to-horizontal tunnel, man-made for mining purposes

Ag Silver

**Ag eq oz** Silver equivalent ounces, reflecting the equivalent values of silver and all other

products produced by the Company, relative to the prevailing silver price

Andesite A fine-grained brown, green or greyish intermediate volcanic rock

Au Gold

**Beadell** Beadell Resources Limited

**Board** Board of Directors of Great Panther

**Breccia** A course-grained rock, composed of angular, broken rock fragments held

together by a mineral cement or a fine-grained matrix

BRL Brazilian Real

**Cfm** Cubic feet per minute

CIM Canadian Institute of Mining, Metallurgy and Petroleum

CIM Definition Standards

Definition Standards for Mineral Resources and Mineral Reserves adopted by

the CIM on May 10, 2014

**COG** Cut-off grade

CONAGUA Comisión Nacional del Agua, or National Water Commission, in Mexico

responsible for managing and preserving national waters and their inherent

good in order to achieve sustainable use

**COVID-19** a strain of novel coronavirus reported to originate in late 2019 and any variant

thereof

**cm** Centimetre

**Cu** Copper

cut and fill A mining method which removes mineralized material in horizontal slices and

the remaining void is filled with waste rock before proceeding to mine the next

slice of mineralized material

**EIA** Environmental Impact Assessment

**eq.** Equivalent values or quantities of products, expressed relative to the prevailing

silver or gold and co-product prices

**Epithermal** Hydrothermal deposits formed at low temperature and pressure

**Felsic** An igneous rock having abundant light-coloured materials

g/t Grams per metric tonne

**G&A** General and administrative

**Gpm** Gallons per minute

hectare, or

ha

A metric unit of land measure equal to 10,000 square metres or 2.471 acres.

**hydrothermal** Relating to hot fluids circulating in the earth's crust

IFRS International Financial Reporting Standards as issued by the International

Accounting Standards Board and interpretations of the International Financial

Reporting Interpretations Committee, collectively

JORC Joint Ore Reserves Committee of the Australasian Institute of Mining and

Metallurgy, Australian Institute of Geoscientists and Minerals Council of

Australia

km Kilometre

**LHD** Load-haul-dump loader

**LOM** Life of Mine

masl Metres above sea level

MEM Ministerio de Energía y Minas de Perú

mineral claim The portion of mining ground held under law by a claimant

mineralization Implication that the rocks contain metallic minerals and that these could be

related to ore

M&I Measured and Indicated

mm Millimetre

NI 43-101 National Instrument 43-101 Standards of Disclosure for Mineral Projects

NI 51-102 National Instrument 51-102 Continuous Disclosure Obligations

**NSR** Net smelter return

Nyrstar International B.V. and Nyrstar Netherlands (Holdings) B.V., together as

sellers, of Coricancha

**OEFA** Organismo de Evaluación y Fiscalización Ambiental, the Environmental

Evaluation and Oversight Agency, in Peru

Ore That part of a mineral deposit which could be economically and legally

extracted

OSINERGMIN Organismo Supervisor de la Inversión en Energía y Mineria, the Supervisory

Organism of Investment in Energy and Mines, in Peru

Oz Troy ounces

**Pb** Lead

PROFEPA Procuraduría Federal de Protección al Ambiente, or Federal Agency of

Environmental Protection, creates and enforces the Federal environmental laws of Mexico, with the aim of sustainable development. It has no relationship with the SEMARNAT, and maintains its own technical and operational autonomy.

**Psi** Pounds per square inch

**QA/QC** Quality Assurance/Quality Control

**Quartz** A common rock forming mineral consisting of silicon and oxygen

**Resuing** A method of stoping wherein mineralized material is extracted separately from

the waste rock on one side of the vein. This method is employed on narrow veins, and yields cleaner mineralized material than when waste and mineralized

material are broken together

**Rhyolite** A fine-grained volcanic (extrusive) rock of granitic composition

**ROM** Run-of-mine

SEC United States Securities and Exchange Commission

SEDAR System for Electronic Document Analysis and Retrieval, a mandatory document

filing and retrieval system for Canadian public companies

SEMARNAT Secretaría de Medio Ambiente y Recursos Naturales, or Ministry of

Environment and Natural Resources, the Mexican federal agency responsible for environmental protection, including permitting of surface work and some

mining programs

SGS A geochemical laboratory part of the SGS Mineral Services Group

**stockwork** A metalliferous deposit characterized by the impregnation of the mass of rock

with many small veins or nests irregularly grouped

Stoping The extraction of mineralized material or other minerals by creating

underground openings through the application of drill and blast techniques

**Tonne or t** A metric tonne, equal to 1,000 kilograms and approximately 2,205 lbs

**Tpd** Metric tonnes per day

t/m³ Metric tonnes per cubic metre

**TSF** Tailings storage facility

**Vein** A zone or belt of mineralized rock lying within boundaries clearly distinguished

from neighbouring rock. A mineralized zone has, more or less, a regular development in length, width and depth to give it a tabular form and is

commonly inclined at a considerable angle to the horizontal. The term "lode" is

commonly used synonymously for vein

**Zn** Zinc

# CORPORATE STRUCTURE

# 2.A. NAME, ADDRESS AND INCORPORATION

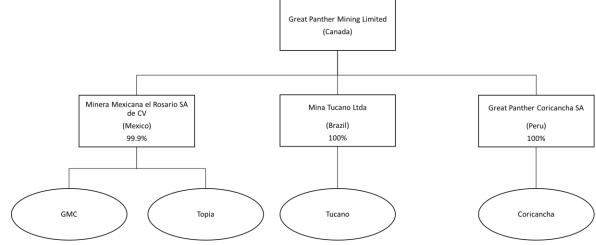
Great Panther Mining Limited was originally incorporated under the *Company Act* (British Columbia) in 1965 under the name Lodestar Mines Ltd. The Company's common shares were listed on the TSX Venture Exchange on June 18, 1980 and were upgraded to trading on the Toronto Stock Exchange ("TSX") on November 14, 2006 under the symbol GPR. The Company's common shares were listed on the NYSE American on February 8, 2011 under the trading symbol GPL, while the Company retained its listing on the TSX in Canada.

The Company was continued under the *Business Corporation Act* (Yukon) on March 22, 1996 and then further continued back to British Columbia under the *Business Corporations Act* (British Columbia) on July 9, 2004. The Company's most recent name change from Great Panther Silver Limited to Great Panther Mining Limited occurred concurrently with closing of the acquisition of Tucano on March 4, 2019.

Great Panther's principal and registered offices are located at 1330 – 200 Granville Street, Vancouver, British Columbia, V6C 1S4, Canada. The Company's telephone number is 604-608-1766, and the Company's website can be found at <a href="https://www.greatpanther.com">www.greatpanther.com</a>.

#### 2.B. INTERCORPORATE RELATIONSHIPS

The following companies are the significant subsidiaries of the Company as of March 4, 2021, each of which is 100% beneficially owned, directly or indirectly, by the Company and existing in the jurisdiction set forth in the table below.



Note:

<sup>1.</sup> In some jurisdictions in which we operate, laws require that a company operating mineral properties must have more than one shareholder. For those jurisdictions, a nominal interest may be held by an individual or other affiliated entity and this may not be represented on the charts.

# 3. GENERAL DEVELOPMENT OF THE BUSINESS

#### 3.A. GENERAL

Great Panther Mining Limited is an intermediate precious metals mining and exploration company listed on the TSX trading under the symbol GPR, and on the NYSE American trading under the symbol GPL.

The Company has three wholly-owned mining operations, including Tucano in Brazil and Topia and the GMC in Mexico. The GMC comprises Guanajuato, San Ignacio, and the Cata processing plant. The Company also owns several exploration properties, which are discussed below.

Tucano is an open pit gold mine approximately 200 km from Macapá, the state capital of Amapá in Brazil. It produces gold doré with ore processed through a primary crusher, SAG mill, ball mill and carbon-in-leach ("CIL") infrastructure, capable of treating both oxide and sulphide ore. Tucano has initiated a regional exploration strategy to evaluate the underexplored greenstone belt in which the mine sits and there remains potential to increase Mineral Reserves in both quantity and quality with additional surface and underground exploration within the mining license.

Topia is located in the Sierra Madre Mountains in the state of Durango in northwestern Mexico and produces metallic concentrates containing silver, gold, lead and zinc at its own processing facility.

The GMC produces silver and gold concentrate and is located in central Mexico, approximately 380 km northwest of Mexico City, and approximately 30 km from the Guanajuato International Airport.

Topia and the GMC are underground mines and the production process consists of conventional mining incorporating cut and fill, and resue methods. Extracted mineralized material is trucked to on-site conventional processing plants, which consist of zinc and lead-silver flotation circuits at Topia, and a pyrite-silver-gold flotation circuit at the GMC.

Great Panther also owns Coricancha, a gold-silver-copper-lead-zinc underground mine, located in the Peruvian province of Huarochirí, approximately 90 km east of Lima. Coricancha has been on care and maintenance since August 2013 and the Company is evaluating the conditions under which a restart of production can be implemented.

The Company's exploration properties include multiple near mine infill and step out targets around the existing mining corridor at Tucano, the GMC and Topia and regional targets across the approximately 2,000 square km land package in which Tucano is located.

Additional exploration properties include: El Horcón, Santa Rosa and Plomo in Mexico; and Argosy in Canada, all of which are wholly owned. El Horcón is located 100 km by road northwest of Guanajuato city, Santa Rosa is located approximately 15 km northeast of Guanajuato city, and the Plomo property is located in the state of Sonora, Mexico. The Argosy property is in the Red Lake Mining District in northwestern Ontario, Canada.

#### 3.B. KEY DEVELOPMENTS

# 3.B.1 Three Year History

The following table reflects the key developments of the Company for the years ended December 31, 2020, 2019 and 2018, respectively.

Year Key Developments

2020

- COVID-19 significantly impacted the world for much of the year and took a terrible toll on human life and well-being. This included the areas where Great Panther operates, and the effects were felt by local communities and members of the Company's workforce and their families. For more information, see Sections 4.J.2 and 8 of this AIF.
- Despite the disruptions caused by COVID-19, Great Panther achieved its consolidated guidance range of 146,000 158,000 Au Eq oz producing 150,051 Au Eq oz, inclusive of 133,031 Au oz and 1,118,098 Ag oz, a 2% increase over 2019. Tucano led the way producing 125,417 Au oz.
- Great Panther entered into a \$11.25 million gold doré prepayment agreement on January 6, 2020 with Samsung C&T U.K. Ltd., a wholly owned subsidiary of Samsung C&T Corporation, which completed on February 4, 2020. For further information, see Section 4.B of this AIF.
- Following the slope displacement of the UCS pit in October 2019 (described below), initial remedial unloading work at UCS was started in the first quarter of 2020 to remove free diggable material at the top of the slope. Continued remedial unloading work involving drilling and blasting commenced in the third quarter following protocols from independent consulting firm Knight Piésold & Co. ("Knight Piésold"), which was subject to favourable results from geotechnical data gathering, including information from five geotechnical core holes drilled commencing in April 2020. Mining at UCS commenced at full capacity in late October 2020 and remains a primary focus of mining through 2021. For a discussion of the status of mining of the UCS, the remediation work that has been completed and the risks associated with the UCS, see Sections 5.A.8.6 and Section 9 under the heading "Mining and Mineral Exploration Have Substantial Operational Risks" of this AIF.
- Great Panther announced in February 2020 plans for a \$6.6 million (55,000 m)
   2020 drill program for Tucano for completion in 2020 and comprising both near-mine and regional targets.
- Great Panther completed in March 2020 its inaugural Mineral Resource and Mineral Reserve estimate for Tucano, which used a more rigorous approach resulting in the reduction of Mineral Resources (excluding Mineral Reserves) by approximately 500,000 Au oz and Mineral Reserves by approximately 489,000 Au ounces. The estimate reflected operating experience since the Company's acquisition of Tucano in March 2019 and a better understanding of the mine's geology. For more information, see the Company's press release dated March 9, 2020.
- In connection with the announcement of the updated Tucano Mineral Resource and Mineral Reserve estimate, the Company announced a further refinement of the near mine program and other opportunities to increase the mine life including possible further evaluation and the enhancement of an existing prefeasibility study supporting the development of an underground mining operation below the Urucum North pit. A decision on further

- exploration or an updated technical study on the underground will follow the results of the current Phase 1 targeted drill program expected to be complete by end July 2021.
- Great Panther ceased depositing tailings on the Topia Phase II TSF in March 2020 following a recommendation from the Company's independent tailings management and geotechnical consultants. During the suspension of nonessential activities due to COVID-19, Great Panther continued monitoring the conditions on Phase II and installed additional geotechnical instrumentation. In addition, tests were carried out to determine the state of the tailings in Phase I. Extensive work has been carried out to identify and reduce the flow of water into the base of the TSF. Monitoring indicated that it was safe to return to stacking in Phase II, which is expected to provide sufficient capacity until the end of 2022. Deposition at Phase II was restarted on the basis of continued positive results of monitoring and an interim stacking plan for Phase II received from a third-party consultant with strict control on sequence and compaction level. The Company has also received the required permit for Phase III, which will be available for use after constructing retaining walls and erosion controls around the base of the facility.
- Great Panther also completed in March 2020 new Mineral Resource estimates for the GMC.
- Great Panther completed in May 2020 a bought deal financing for aggregate gross proceeds totalling \$16.1 million, pursuant to which the Company issued 40,250,000 common shares at a price of \$0.40 per share.
- Great Panther announced new management and Board changes in April 2020, which included a new Chief Executive Officer Rob Henderson and three new directors including David Garofalo as Chair and Messrs. Alan Hair and Joseph Gallucci to the Board.
- The Company's Mexican mines were transitioned to care and maintenance for just over two months in April and May 2020 as a result of the Mexican Federal Government ordered suspension of mining and processing that allowed for the implementation of protocols to reduce the spread of COVID-19.
- Great Panther reached an agreement with Nyrstar on June 27, 2020 to amend certain agreements in respect of the Company's remediation obligations in connection with Great Panther's 2017 acquisition of the Coricancha mine from Nyrstar. For more information, see Section 6A.1 of this AIF.
- Great Panther published in September its inaugural Sustainability Report for the year ended December 31, 2019 highlighting the progress, initiatives and commitments in the areas of health, safety, environmental, social and governance management.
- Great Panther voluntarily suspended operations at Topia in mid-November 2020 for a five-week period as a result of COVID-19.
- Great Panther completed in November an update to the GMC Mineral Resource estimate increasing Measured and Indicated Resources by 17% and more than doubling Inferred Mineral Resources.
- Great Panther completed in December 2020 an update to the Tucano Mineral Resource and Mineral Reserve estimate extending the LOM for an additional year. The consolidated Proven and Probable Mineral Reserves at Tucano are approximately 629,000 ounces of gold as of September 30, 2020, as detailed below in Section 5.A.7 of this AIF under the heading "Tucano – Mineral Reserves – Mineral Reserve Estimate as of September 30, 2020".

2019

- Overall metal production for 2019 was 147,000 Au eq oz, representing an increase of 182% over the prior year. The increase was due primarily to the acquisition of Tucano.
- The Company reported in January 2019 an update to the Mineral Resource at Topia, which increased the Measured and Indicated Mineral Resources by 28% compared to the previous estimate reported in 2014.
- On January 25, 2019, the Company provided an update to the Mineral Resource at the GMC, which reported an increase in Measured and Indicated Mineral Resources of 91%. During 2018, exploration at San Ignacio consisted of both surface and underground drilling totalling 7,085 m.
- The Company completed the acquisition of Tucano on March 5, 2019. For further information, see Section 18 of this AIF and Form 51-102F4 filed on SEDAR by the Company on May 17, 2019.
- All holders of Beadell's senior secured convertible debentures maturing on June 30, 2023, (the "Convertible Debentures") accepted on April 3, 2019, the Company's repurchase offer made under the terms of the indenture governing the Convertible Debentures upon a change of control. The repurchase was completed for an aggregate price of \$10.5 million, plus accrued interest.
- The Company announced the appointment on May 7, 2019, of Mr. Kevin Ross to its Board.
- On July 9, 2019, the Company entered into the ATM Agreement described below in Section 18 of this AIF.
- The Company closed a bought deal financing on August 8, 2019, for aggregate gross proceeds of \$17,250,000, pursuant to which the Company issued 23,000,000 common shares of the Company at the price of \$0.75 per share.
- The west wall of the UCS pit at Tucano underwent slope displacement on October 6, 2019, which required the pit to be closed to mining and significant effort and resources be made toward a remediation plan with the assistance of the independent consulting firm Knight Piésold. For a discussion of the status of mining of the UCS, the remediation work completed, and the risks associated with the UCS, see Sections 5.A.8.6 and Section 9 under the heading "Mining and Mineral Exploration Have Substantial Operational Risks" of this ALF.
- The Company announced on October 30, 2019 the departure of Mr. James Bannantine, President & CEO of the Company, and the assumption of Board Chair Jeffrey Mason of the additional role of Interim President & CEO until a permanent successor was in place in April 2020.
- The Company announced on October 31, 2019 the appointment of Neil Hepworth, Chartered Engineer, UK, as COO.
- The Company's wholly owned subsidiary, MMR, entered into a \$10 million concentrate prepayment agreement on December 31, 2019, with the IXM Group, a physical metals trader headquartered in Geneva, Switzerland, which agreement was concluded in December 2020.
- Based upon recommendations from an independent consulting firm, three additional instrumentation stations in the footprint of the Topia TSF were put in place in 2019 for the purposes of continuous monitoring.

2018

Overall metal production for 2018 was 4,170,966 Ag eq oz, representing an increase of 5% over the prior year. The increase in production was primarily due to the current year revision in the Ag eq oz conversion ratios due to higher gold to silver price ratio, and higher silver and lead recoveries at Topia. These

- factors were partly offset by lower silver and gold grades at both the GMC and Topia, and lower gold recovery at Topia.
- The Company reported the results of a PEA for Coricancha on May 31, 2018 and filed the Coricancha Technical Report on SEDAR on July 13, 2018.
   Following this, the Company initiated a 6,000 tonne trial stope and bulk sample program. For more information, see Section 6.A.10 of this AIF.
- On September 23, 2018, the Company announced that it entered into a Scheme Implementation Deed with Beadell, to acquire all of the issued ordinary shares of Beadell by means of a scheme under the *Australian Corporations Act 2001*. For further information, see Section 18 of this AIF.
- Late in the third quarter of 2018, in order to lower costs and mitigate the impact of lower metals prices, the Company undertook a restructuring at the GMC to reduce mining from Guanajuato and to increase output from San Ignacio. In addition, the Company undertook other cost reduction measures and started to see the impact of these measures in the fourth quarter of 2018. Further restructuring measures were taken at the start of 2019, which included an optimization strategy under which the entire production for the GMC was sourced from the lower cost San Ignacio operation for the first half of 2019, enabling a focused exploration program for Guanajuato aimed at growing higher margin resources.

#### 3.B.2 Developments Subsequent to the Year Ended December 31, 2020

The Company announced on January 29, 2021, an update to its exploration strategy and programs targeting result-driven exploration programs leading to resource replacement and near-mine growth, and longer-term organic growth through regional exploration. The programs for 2021 include: a 90,000 m drilling program across all of its operating mines and certain of its exploration projects with a planned expenditure of \$13.4 million, the majority of which (\$8.4 million) is focused on Tucano and includes a combination of open pit resource replacement and expansion drilling, Urucum underground drilling and regional and near target evaluation totalling 60,000 m. For more information, see the Company's press release on January 29, 2021.

The Company has undertaken the reclamation of certain legacy tailings facilities at Coricancha under a remediation plan approved by the MEM, the relevant regulatory body. In addition, as part of the purchase of Coricancha, the Company has an agreement with Nyrstar for the reimbursement of the cost of these reclamation activities. The Company is seeking approval of a modification to a remediation plan from the MEM in accordance with the recommendations of an independent consultant to preserve the stability of nearby areas. The Company has changed the scheduling of the reclamation work, pending a decision from the MEM regarding the proposal to modify the approved remediation plan. To protect itself from any pending or future fines, penalties, regulatory action or charges from government authorities and to request that the MEM issue a decision on the proposed modification of the remediation plan for legacy tailings, the Company initiated a Constitutional Case and successfully obtained an injunction to prevent fines and penalties until MEM issues its decision.

Subsequent to the year ended December 31, 2020, the Company was notified of a second instance decision in the Constitutional Case, which unfavourably dismisses the Company's constitutional challenge, but requests that the MEM issue a technical report evaluating the remediation plan within two months of the second instance decision. The Company expects that the related injunction will be cancelled in the near future. While the Company has appealed the Constitutional Case proceeding, it will not be possible to appeal the cancellation of the injunction. The cancellation of the injunction will expose the Company to potential fines, penalties, regulatory action or charges from government authorities. Separately, the

Company plans to develop alternatives to propose to MEM to allow for the full reclamation while preserving the stability of the surrounding areas.

For a discussion for a discussion of the risks associated with this matter and Coricancha more generally, see Section 8 of this AIF under the headings "Risk Factors - Risks Associated with the Coricancha Acquisition" and "Risk Factors - Political Risks and Government Regulations".

# 3.C. SIGNIFICANT ACQUISITIONS

The Company did not complete a significant acquisition in the year ended December 31, 2020, for which disclosure is required under Part 8 of NI 51-102. Information concerning the Company's acquisition of Tucano that occurred on March 4, 2019 is described in more detail under Section 18 under the heading entitled "Material Contracts".

# 4. DESCRIPTION OF THE BUSINESS

#### 4.A. PRINCIPAL MARKETS

Great Panther produces gold doré at Tucano in Brazil. The gold doré is refined and sold directly to refiners or metal traders. The Company also continued to produce metallic concentrates containing silver, gold, lead and zinc at its Mexican operations. These concentrates are then sold to metal traders or directly to smelters and refiners that extract the metals from the concentrates (See Section 4.B of this AIF under the heading "Product Marketing, Sales and Distribution"). In 2020, gold accounted for 89% of the Company's revenues, and silver accounted for 9%. The remaining 2% of the Company's revenues are from the production of lead and zinc at Topia.

Gold and silver are precious metals traded as commodities primarily on the London Bullion Market Association (the "LBMA") and Comex in New York (the "CME"). The LBMA is an international trade association, representing the London market for gold and silver bullion, which has a global client base. This includes the majority of the gold-holding central banks, private sector investors, mining companies, producers, refiners and fabricators. The on-going work of the LBMA covers a number of areas, among them refining standards, trading documentation and the development of good trading practices. The maintenance of the "Good Delivery List", including the accreditation of new refiners and the regular retesting of listed refiners, is the most important core activity of the LBMA.

The LBMA gold price auction takes place twice daily by ICE Benchmark Administration at 10:30 and 15:00 London time with the price set in US dollars per ounce. The price is displayed on the LBMA'S website with a 30-minute delay. The LBMA silver price auction is operated by CME and administered by Thomson Reuters. The price is set daily in US dollars per ounce at 12:00 noon London time and is displayed on the LBMA's website with a 15-minute delay. Reference prices for both gold and silver are also available in British Pounds and in Euros.

The gold and silver business is cyclical as smelting and refining charges rise and fall depending upon the demand for, and supply of, gold bullion and silver-gold concentrates in the market. In addition, the market prices of gold and silver have historically fluctuated widely, and are affected by numerous global factors beyond the control of the Company and the mining industry in general. A decline in such market prices may have an adverse effect on revenues from the sale of gold and silver.

Gold demand comprises four primary categories: jewelry, investment, central banks and other financial institutions, and technology. Jewelry has always been a dominant source of demand for gold and accounts for approximately half of world gold demand. Investment in gold by institutional and private investors

accounts for around one third of global demand and is made up of direct ownership of bars and coins, or indirect ownership via Exchange-Traded Funds and similar products. Gold is also one of the few assets that is universally permitted by the investment guidelines of the world's central banks due, in part, to the gold market being deep and liquid. Around 8% of the world demand for gold is for technical applications.

The electronics industry accounts for the majority of this, where gold's conductivity and resistance to corrosion make it the material of choice for manufacturers of high-specification components. In addition, the metal's excellent biocompatibility means that it continues to be used in dentistry. Beyond electronics and dentistry, gold is used across a variety of high-technology industries, in complex and difficult environments, including the space industry and in fuel cells. Gold's catalytic properties are also beginning to create demand both within the automotive sector, as the metal has now been proven to be a commercially viable alternative to other materials in catalytic converters, and within the chemical industry.

In 2020, total physical silver demand accounted for 991.8 million ounces per the Silver Institute, World Silver Survey 2020, and comprised the following end markets categories: industrial use (52%), coins and bars (19%), and silver jewelry (20%) and silverware (6%). Approximately 58% of the industrial use is for electrical and electronic components and 19% is accounted for by use in the manufacturing of photovoltaics (solar cells). Silver has many key, and in some cases unique, properties such as durability, malleability, ductility, reflectivity, electrical conductivity, and antibacterial properties, which makes it valuable in numerous industrial applications. The applications include circuit boards, electrical wiring, superconductors, brazing and soldering, mirror and window coatings, electroplating, chemical catalysts, pharmaceuticals, filtration systems, solar panels, batteries, televisions, household appliances and automobiles. The unique properties of silver also make it difficult to substitute the element in its industrial applications.

# 4.B. PRODUCT MARKETING, SALES AND DISTRIBUTION

#### 4.B.1 Overview

The principal customers for the Company's gold and metallic concentrates are international traders, smelters and refineries in Europe, Mexico, and Asia. For the year ended December 31, 2020, eight customers accounted for all of the Company's revenues. Tucano produces gold doré and accounted for \$223.7 million of revenue in 2020. Topia produces a lead concentrate and a zinc concentrate, and the GMC produces a silver-gold concentrate. Topia and GMC generated revenues of \$15.9 million and \$21.2 million in 2020, net of smelting and refining charges.

There is a global market for refined gold and metallic concentrates and the Company continues to identify and evaluate new buyers for its refined gold and metallic concentrates through an active marketing process. Great Panther's head office in Vancouver provides sales and marketing services to its mining operations in respect of the sale of refined gold and metallic concentrates produced by its operations. The Company's gold is typically sold once it has been refined to LBMA Good Delivery form.

For the Company's sale of refined gold, the delivery of gold doré is made via land and air to one of two refineries, and is then refined to LBMA Good Delivery form. Typically, the refinery then allocates the refined gold to the Company's end customer. The price for the refined gold is based on the prevailing market price of gold at the time of trading, and no adjustments to revenue are made subsequent to the initial recognition.

For the Company's sale of metallic concentrates, the smelters and international traders pay the Company for an agreed upon percentage of the contained gold and other metals contained in the Company's

concentrates, net of refining, smelting, and other applicable charges. Revenues reported by the Company are net of these charges. The pricing for the contained metals in the concentrate is typically the average of all the daily quoted market prices within a specific month or other agreed period of time.

The delivery of metal concentrates is typically made by truck to customers' warehouses. As concentrates can vary in terms of grade and quality from shipment to shipment, the sales are subject to a final settlement process to adjust for any variances. After the physical transfer of the metal concentrate, the Company has the right to request advance payments based on the provisional value of shipments calculated at spot prices for the contained metals. Such advances are typically 90% to 95% of the provisional value and are typically payable within 15 days from the date of the provisional invoice, depending on the specific contract. A final payment or adjustment is made on the date of final settlement, once all information regarding concentrate content is known, typically within five business days after the final weights, assays and prices are known and invoiced.

For the metallic concentrates, the sales and marketing generally involves an annual competitive tendering process and marketing and relationship development throughout the year. The tendering process culminates in the Company's Mexican subsidiary entering into contracts with metal traders or smelting and refining companies for generally a one-year term. The tendering process enables the Company to review and renegotiate the terms of its contracts annually to ensure that it receives the most competitive pricing and terms possible. In 2019, the Company entered into a two-year agreement with an international trader for 100% of concentrate production from the GMC.

#### 4.B.2 Gold Doré Prepayment Agreement

On February 4, 2020, the Company completed a \$11.25 million gold doré prepayment agreement (the "Advance") with Samsung C&T U.K. Ltd. ("Samsung"), a wholly owned subsidiary of Samsung C&T Corporation, headquartered in Seoul, South Korea and a part of the Samsung Group, in consideration of delivery and sale of approximately 3,000 ounces of gold contained in doré per month over a two-year period commencing January 2020 from Tucano. Gold deliveries are sold at a 0.65% discount to the benchmark price of gold at the time of delivery. The Advance is required to be repaid in equal instalments of \$0.8 million per month commencing December 2020 until January 2022 such that all amounts outstanding to Samsung will be repaid in full. The Advance bears interest at an annual rate of 3-month USD LIBOR plus 5% and is secured by a pledge of all equity interests in Great Panther's Brazilian subsidiary that owns Tucano. Great Panther has a full option for early re-payment of the Advance, subject to a 3% penalty applied to the outstanding balance. The agreement also provides Samsung a right of offer for concentrates produced from Coricancha in certain circumstances.

#### **Revenue Figures**

	Year ended December 31, 2020				Year ended December 31, 2019			
(in thousands)	Tucano	GMC	Topia	Total	Tucano	GMC	Topia	Total
Gold revenue	\$223,272	\$11,889	\$1,137	\$236,298	\$153,504	\$15,554	\$1,354	\$170,412
Silver revenue	487	10,816	12,036	23,339	93	9,162	14,089	23,345
Lead revenue	-	-	2,146	2,146	-	-	3,581	3,581
Zinc revenue	-	-	3,088	3,088	-	-	4,938	4,938
Ore processing revenue	-	-	34	34	-	-	102	102
Smelting and refining charges	(69)	(1,486)	(2,545)	(4,100)	(200)	(1,173)	(2,351)	(3,724)
Total revenue	\$223,690	\$21,219	\$15,896	\$260,805	\$153,397	\$23,543	\$21,713	\$198,653

# 4.C. SEASONALITY

The Company's Tucano operation is subject to seasonal fluctuations as a result of weather conditions. Specifically, Tucano's production is typically stronger in the second half of a calendar year (normally August until January) as the dry season enables higher rates of mining productivity and the mine plan is characterized by lower strip ratios and access to higher grades in the open pits. Accordingly, Tucano typically has more favourable operating results in the second half of the year. The climate in Mexico allows exploration, mining and milling operations to be carried out year-round. Therefore, revenue and cost of sales generally do not exhibit variations due to seasonality. The exceptions are periods of excessive drought, which may limit or defer processing of mineralized material and/or concentrate. The dry season in Mexico generally extends from October through April. The Company has not experienced a suspension of mining and processing activities due to drought in any of the last three fiscal years.

The climate in Peru at the location of Coricancha, which is currently on care and maintenance, also allows mining activities to be carried out year-round. There is a rainy season from January to March that has in the past caused flooding and disruptions to operations in the area where Coricancha is located.

#### 4.D. SPECIALIZED SKILL AND KNOWLEDGE

The Company's business requires specialized skills and knowledge in the areas of geology, mining, metallurgy, social and environmental studies, permitting, claim management and finance. The Company has a number of employees with extensive experience in mining, engineering, finance, geology, exploration and development, including but not limited to, Robert Henderson, President & Chief Executive Officer and non-independent director; Jim Zadra, Chief Financial Officer; Neil Hepworth, Chief Operating Officer; Fernando Cornejo, Vice President of Operations, Brazil; Brian Peer, Vice President, Operations Mexico & Peru; and Nicholas Winer, Vice President, Exploration.

#### 4.E. COMPETITIVE CONDITIONS

The Company's business is to mine and process mineralized material and sell gold doré and precious and base metals concentrates. Prices for its products are determined by world markets over which it has no

influence or control. The Company also competes with other mining companies, some of which have greater financial resources and technical facilities, for the acquisition of mineral interests, as well as for the recruitment and retention of qualified employees.

# 4.F. DOING BUSINESS IN BRAZIL, MEXICO AND PERU

# 4.F.1 Mining in Brazil

Brazil is a jurisdiction with a long history of mining. In Brazil, the National Mining Agency ("ANM") is the federal agency entitled to regulate mining activities in Brazil. ANM was created in 2017, through Law No. 13.575/2017, replacing the National Department of Mines ("DNPM"), and regulates the conduct of exploration, development and mining operations.

Mining operations in Brazil are regulated primarily by Decree No. 227 of February 28, 1967, the Brazilian Mining Code enacted by Decree No. 62,934 of July 2, 1968, and certain rulings, such as the Consolidation of DNPM Regulations issued by DNPM Ruling No. 155 on May 17, 2016, and more recently federal laws No. 13.540/2017 and No. 13.575/2017 and, more recently, Decree No. 9,406 of June 12, 2018, which updated DNPM Ruling 155/2016 and established the new regulation of the Brazilian Mining Code.

The ANM requires certain fee payments for exploration licences (known as the Annual Fee per Hectare), certain royalty payments to the federal government for the mining concessions (known as Financial Compensation for the Exploitation of Mineral Resources - "CFEM") and for royalty payments to be made to the landowner if the surface rights are not held by the holder of the mineral rights. Mining activities are subject to a statutory royalty, CFEM, on the revenue arising from the sale of mineral product. Federal Law No. 13,540/2017 increased the CFEM rate for gold from 1.0% to 1.5% on the gross revenue.

In Brazil, failure to demonstrate the existence of technical and economically viable mineral deposits covered by an exploration licence within the validity of such licence may lead to the licence being required to be returned to the federal government. The federal government may then grant the exploration licence to other parties that may conduct other mineral prospecting activities at said area. Nonetheless, mining activities are also subject to state and municipal laws, particularly on taxes and environment.

Exploration activities are authorised by Exploration Licences granted by the ANM. In general, such licences are valid for a three-year period. Licences are usually renewable upon request for an additional three years, at ANM's discretion. Exploitation activities are authorised by Mining Concessions, granted by the Ministry of Mines and Energy. Mining Concessions have no expiration date, being valid until the depletion of the mineral deposit.

The Brazilian state and federal governments from time to time implements changes to tax laws and regulations. Any such changes, as well as changes in the interpretation of such laws and regulations, may result in increases to the Company's overall tax burden, which would negatively affect its profitability. The Brazilian federal government has frequently implemented multiple changes to tax regimes. Potential changes include (among others) modifications to prevailing tax rates and the enactment of taxes, which may be temporary, the proceeds of which are earmarked for designated governmental purposes. Some of these changes may result in increased the Company's tax burden, which could materially adversely affect profitability and increase the prices of products and services, restrict its ability to do business in existing and target markets and cause its financial results to suffer. Moreover, some tax laws may be subject to controversial interpretation by tax authorities, including, but not limited to, the regulation applicable to corporate restructurings.

For a discussion of risks associated with the regulatory framework that Company is subject to, see Section 8 of this AIF under the heading "Risk Factors – Political and Government Risk".

# 4.F.2 Mining in Mexico

The mining industry in Mexico is controlled by the Secretaría de Economía – Dirección General de Minas which is located in, and administered from, Mexico City. Mining concessions in Mexico may only be obtained by Mexican nationals or Mexican companies incorporated under Mexican laws. The construction of processing plants requires further governmental approval.

In Mexico, surface land rights are distinct from the mining concessions.

The holder of a mining concession is granted the exclusive right to explore and develop a designated area. Mining concessions are granted for 50 years from the date of their registration with the Public Registry of Mining to the concession holder as a matter of law, if all regulations have been complied with. During the final five years of this period, the concession holder may apply for one additional 50-year period, which is automatically granted provided all other concession terms have been complied with. Mining rights in Mexico can be transferred by their private holders with no restrictions or requirements other than to register the transaction with the Public Registry of Mining.

In accordance with the Federal Duties Law, the holder of a mining concession is obligated to pay biannual duties in January and July of each year based upon the number of hectares covered by the concession area.

Concessionaires must perform work each year that must begin within 90 days of the concession being granted. Concessionaires must file proof of the work performed each May. Non-compliance with these requirements is cause for cancellation only after the Secretariat of Economy of Mexico communicates in writing to the concessionaire of any such default, granting the concessionaire a specified time frame in which to remedy the default.

If a concession holder does not carry out exploration and exploitation activities for two continuous years within the first 11 years of its concession title, it will be required to pay an additional charge equal to 50% of the two-year concession duty. The concession duty increases to 100% for continued inactivity after the 12<sup>th</sup> year. Payment of the additional concession duty is due 30 days after the end of the two-year period.

In Mexico, there are no limitations on the total amount of mining concessions or on the amount of land that may be held by an individual or a company. Excessive accumulation of concessions is regulated indirectly through the duties levied on the property and the production and exploration requirements as outlined above.

Mexican mining law requires the payment of a discovery premium related to National Mineral Reserves, Concessions in Marine Zones, and Allotments to the Council of Mineral Resources.

Environmental protection regulations in Mexico require permits for mine operations and exploration, for operating a processing plant, for the discharge and/or deposition, and for changes to grandfathered projects. There are four government departments that deal with and regulate such affairs.

Mining companies are subject to a special mining duty of 7.5% on profits derived from the sale of minerals, and an extraordinary mining duty of 0.5% on the gross value of sales of gold, silver and platinum.

On January 13, 2021, a bill proposing to replace the ordinary mining duty (surface fee up-to MXN\$165 per hectare of the concession) with a royalty payment of 5% or 8% of the gross sales of minerals (8% in the case of gold, silver and copper). This would be in addition to the special mining duty and extraordinary mining duty currently applicable. If this legislation is approved in its current form, additional costs may be imposed on our Mexican operations, the impacts of which could be significant. Also, as part of the 2021 tax reform, the right to credit the ordinary mining duty payments against the special mining duty payments was eliminated for 2022 onward, and reduced to 50% for 2021. This is expected to result in an

increase in the tax burden for Mexican operations since 73% of the special mining duty collected from all mining companies was paid through such credit mechanism.

In late 2020, the President of Mexico introduced a Federal Bill that if implemented, would repeal various articles of the Federal Labour Law, Social Security Law, Law of the National Workers' Housing Fund Institute, Federal Fiscal Code, Income Tax Law and the Value Added Tax Law. The intent of the Bill is to significantly limit the ability of operating companies to subcontract and outsource labour to contractors and to employ related service providers, likewise to limit the ability of operating companies to subcontract labour to insource companies. If this legislation is approved, fees payable to the Social Security based on the risk for activities will be increased since all employees and workers will be hired by the same company (operating company), profit sharing costs that did not apply to the operative companies due to either insource or outsourcing operations will apply, payroll taxes and benefits costs may be imposed on our Mexican operations, the impacts of which could be significant.

For a further discussion of risks associated with the regulatory framework that Company is subject to, see Section 8 of this AIF under the heading "Risk Factors – Political and Government Risk".

#### 4.F.3 Mining in Peru

In Peru, the General Mining Law allows mining companies to obtain clear and secure title to mining concessions. Surface land rights are distinct from mining concessions. The government retains ownership of all subsurface land and Mineral Resources, but the titleholder of the concessions retains ownership of extracted Mineral Resources. Peruvian law requires that all operators of mines in Peru have an agreement with the owners of the land surface above the mining rights or to establish an easement upon such surface for mining purposes. Mining concessions allow for both exploration and for exploitation.

Mining rights in Peru can be transferred by their private holders with no restrictions or requirements other than to register the transaction with the Public Mining Register. The sale of mineral products is also unrestricted, so there is no obligation to satisfy the internal market before exporting products.

Peru enacted environmental laws whereby the MEM and the Environmental Ministry have issued regulations mandating environmental standards for the mining industry. Under these standards, new mining development and production requires mining companies to file and obtain approval for an Environmental Impact Assessment, which incorporates technical, environmental and social matters, before being authorized to commence operations.

OEFA is the government agency that monitors environmental compliance. OEFA has the authority to carry out audits and levy fines on companies if they fail to comply with prescribed environmental standards and permits. OSINERGMIN is the government agency in charge of supervising the compliance of safety and technical regulations. In a similar way to OEFA, the OSINERGMIN may impose fines and sanctions in case such regulations are not complied with.

In addition, there is regulation for obtaining permits for the use and acquisition of explosives for civilian use, through SUCAMEC, the National Superintendency of Control of Security Services, Weapons, Ammunition, and Explosives for Civilian Use authority, a specialized technical institution attached to the Ministry of the Interior.

The following permits are generally needed for a project: Certificate for the Inexistence of Archaeological Remains Environmental Impact Assessment; Mine Closure Plan; Establishment of a Financial Guarantee for Closure; Beneficiation Concession; Mining Transportation Concession; Permanent Power Concession; Water Usage and Discharge Permits; Easements and Rights-of-way; District and Provincial Municipality Licenses and Construction and Operation Permits within its jurisdiction.

Companies incorporated in Peru are subject to income tax on their worldwide taxable income, while foreign companies that are located in Peru and non-resident entities are taxed on income from Peruvian sources only. The corporate income tax is 29.5%, in addition 8% of profit sharing to employees. In general terms, mining companies in Peru are subject to the general corporate income tax regime. If the taxpayer has elected to sign a Stability Agreement, an additional 2% premium is applied on the regular corporate income tax rate. The Company has not signed a Stability Agreement. Also, 50% of income tax paid by a mine to the Central Government is remitted as "Canon" by the Central Government back to the regional and local authorities of the area where the mine is located.

In Peru, a dividend tax rate of 5% is imposed on distributions of profits to non-residents and domiciled individuals by resident companies and by branches, permanent establishments, and agencies of foreign companies.

Peru has a royalty referred to as the Modified Mining Royalty ("Peruvian Royalty") that applies to operating income at marginal rates ranging from 1% to 12%, and is payable quarterly. Operating income is defined as revenues from the sale of Mineral Resources, less cost of goods sold, less operating expenses, based on Peruvian statutory reporting regulations, with minor adjustments for interest and exploration expenditures.

Under the Peruvian Royalty regime, an "operating income" to "mining operating revenue" measure (operating profit margin) is calculated each quarter and the royalty rate increases with the increase in operating margin. Although the Peruvian Royalty is based on operating income, a company must pay at least 1% of sales, regardless of its profitability.

In addition, a Special Mining Tax ("SMT") is a tax imposed in parallel with the Peruvian Royalty. The SMT is applied on operating mining income based on a progressive scale, with marginal rates ranging from 2% to 8.4%. The SMT is also payable on a quarterly basis.

For a discussion of risks associated with the regulatory framework that Company is subject to, see Section 8 of this AIF under the heading "Risk Factors – Political and Government Risk".

#### 4.G. ENVIRONMENTAL PROTECTION

The Company has taken a proactive approach to managing environmental risk. In Mexico, it is participating in a voluntary environmental audit of its GMC and Topia operations. The outcomes of these audits are multi-year environmental programs, working in cooperation with PROFEPA to ensure compliance with regulations governing the protection of the environment in Mexico.

In Brazil, all licences required by various government agencies covering the operation of Tucano and its mill, and processing plant have been obtained or applications for renewals have been filed and expected in the ordinary course. The complete environmental studies, permitting, and social or community impact was carried out by third-party consultant in 2011 for the Operating Licence issued by the State Secretariat of Environment in Amapá, SEMA to operate a SAG7 mill/CIL processing plant. The Company will be required to obtain further approvals with respect to construction of certain of its additional TSFs. For a discussion of these additional TSFs, see Section 5.A.12 of the AIF under the heading "Mining Properties – Tucano - Infrastructure, Permitting and Compliance Activities".

Groundwater and surface water monitoring is performed through field checking of daily monitoring activities and collection of samples for chemical analysis at Tucano's facilities. There are also monthly, quarterly, and half-yearly sample collections as required by environmental agencies, which are required to be sent to a certified external laboratory.

In Peru, the Company is required to remediate certain legacy tailings facilities at Coricancha under a remediation plan approved by the MEM, the relevant regulatory body. In addition, as part of the purchase of Coricancha, the Company has an agreement with Nyrstar for the reimbursement of the cost of reclamation or remediation activities associated with the legacy tailings facilities up to a maximum of \$20 million. The Company is seeking approval of a modification to a remediation plan from the MEM to remediate the tailings in situ in accordance with the recommendations of an independent consultant to preserve the stability of nearby areas. The Company has stopped reclamation activity, pending a decision from the MEM regarding the proposal to modify the approved remediation plan. To protect itself from any pending or future fines, penalties, regulatory action or charges from government authorities and to request that the MEM issue a decision on the proposed modification of the remediation plan for legacy tailings, the Company initiated a Constitutional Case and successfully obtained an injunction to prevent fines and penalties until MEM issues its decision. The Company was recently notified of a second instance decision in the Constitutional Case, which unfavourably dismisses the Company's constitutional challenge, but requests that the MEM issue a technical report evaluating the remediation plan within two months of the second instance decision. The Company expects that the related injunction will be cancelled in the near future. While the Company has appealed the Constitutional Case proceeding, it will not be possible to appeal the cancellation of the injunction. The cancellation of the injunction will expose the Company to potential fines, penalties, regulatory action or charges from government authorities. Separately, the Company plans to develop alternatives to propose to the MEM to allow for the full reclamation while preserving the stability of the surrounding areas. For more information on the impact of the Constitutional decision, see Section 3.B.2 of this AIF.

In addition to the Coricancha legacy tailings, material removal from old waste dumps is required by OSINERGMIN. In 2020, the waste that showed favourable economics was processed in the Coricancha process plant. Approximately 150,000 tons of waste remains to be moved to a purpose-built waste dump at Huamuyo Alto.

As at December 31, 2020, the Company has a provision of \$68.3 million on its Statement of Financial Position for the estimated present cost of reclamation and remediation expenditures associated with the future closure of its mineral properties, and plant and equipment, at the GMC, Topia, Tucano and Coricancha. The estimated expenditures are to commence near the end of each mine's useful life except as may be required by applicable law. For a discussion of risks associated with the estimate of reclamation liabilities, see Section 8 of the AIF under the heading "Risk Factors - Substantial Decommissioning and Reclamation Cost".

For additional discussion of environmental considerations, please refer to sections entitled "Infrastructure, Permitting and Compliance" in Sections 5 and 6 of this AIF.

# 4.H. EMPLOYEES

The following table sets out the Company's employees at December 31, 2020, 2019 and 2018, by legal entity.

Company	2020	2019	2018
Great Panther Mining Limited	23	21	19
Metálicos de Durango SA de CV <sup>1,2</sup>	153	152	189
Minera de Villa Seca SA de CV <sup>1,2</sup>	124	118	139
Great Panther Coricancha SA	46	105	84
GP Finance International Sàrl	0	1	1
Mina Tucano Ltda	441	424	
TOTAL	787	821	432

#### Note:

#### 4.I. COMMUNITY ENGAGEMENT AND SUSTAINABLE DEVELOPMENT

#### 4.I.1 Overview

Great Panther is committed to responsible mining and believes that sharing the value created by the Company's activities contributes to its host communities' social and economic development.

The Company's sustainable development approach is planned to ensure that programs are designed as catalysts for mutual and lasting socio-economic benefits. These initiatives are based on active collaboration with host communities and aim to contribute to healthy and sustainable societies. Great Panther believes that two-way engagement builds trust and fosters genuine partnerships with local stakeholders. Consequently, it relies on respectful, open, and frequent communication with the members of its neighbouring communities.

Stakeholder engagement and social investment programs implemented by the Company in Brazil, Mexico, and Peru also include partnerships with local governments and civil society organizations and are focused on three main areas: socio-economic development, public health and safety, and natural and cultural heritage. As described in its Social Investment Policy, the Company prioritizes social investment initiatives that contribute to improving the quality of life of the communities surrounding its operations and that continue to make positive impacts beyond its participation.

Great Panther's community relations teams implement comprehensive stakeholder engagement initiatives with the local communities to create and maintain mutually beneficial relationships by understanding the positive influence that mines and projects can have on regional development.

Specifically, at Tucano, as part of its operating licence requirements, the Company annually contributes capital to the Social and Environmental Compensation Funds of the local municipalities of Pedra Branca and Serra do Navio in the state of Amapá. An elected council with representatives of the communities, City Hall, City Council and the Company reviews and analyzes the community development to be executed under this agreement in their respective municipalities.

# 4.1.2 Sustainability Reporting

In 2020, Great Panther published its inaugural Sustainability Report, which was prepared following the Global Reporting Initiative ("GRI") Standards and the GRI Mining & Metals Sector Disclosures. The Sustainability Report outlines the Company's sustainability approach across various topics deemed material by its stakeholder groups and summarizes the 2019 sustainability performance. The Sustainability Report also underscores Great Panther's ongoing commitment to transparency with all

<sup>1.</sup> In 2005, the Company incorporated Metálicos de Durango SA de CV., and Minera de Villa Seca SA de CV., which are responsible for the day-to-day affairs and operations of Topia and the GMC, respectively, through service agreements with MMR.

<sup>2.</sup> For more information about potential labour reform that may adversely impact our Mexican operations, see Section 4.F.2 of this AIF.

stakeholders and is available for viewing on the Company's website (www.greatpanther.com). The Sustainability Report does not form part of this AIF.

# 4.J. HEALTH AND SAFETY

#### 4.J.1 Overview

Health and Safety is an issue that affects workers around the globe. Health and Safety risks are inherent to all mining operations, and the mining industry has developed best practices at international and national levels. Great Panther believes that all injuries and occupational diseases can be prevented and recognizes that everyone is entitled to work in a safe and healthy workplace. Potential safety hazards at mines include working near heavy equipment and working near rock faces either on surface or underground. Health and Safety also include the prevention of occupational diseases or injury resulting from exposure to harmful elements such as noise and dust. With the commitment to ensuring that employees and contractors can perform their work safely, the Company's vision is that every person goes home safely every day.

#### 4.J.1.a Safety Management and Training

All sites are responsible for producing a Safety Management Plan. This plan establishes clear accountability for safety and health performance, details the controls and practices for minimizing hazards, and ensures effective safety systems audits. There is also a requirement for regular reviews and updates of these plans, informed by employee feedback.

The Company invests significantly in onsite training at its mines to comply with national safety regulations and in response to employee consultations, which helps to identify specific issues that require further attention. Training focuses on creating an overarching 'safety culture,' including through the Abordagems system (safety approach) in Brazil, and the SafeStart program in Mexico, which targets personnel's values, attitudes and behaviour, and involves their family members.

In alignment with a Health and Safety Declaration developed for each of the mine sites, the Company monitors types and rates of injury to understand if its efforts effectively increase safety in the workforce.

# These indicators are:

- Incident rate number of accidents/person-hours worked x 200,000 worked hours
- Severity rate number of lost days/person-hours worked x 200,000 worked hours
- Occupational illness number of people that were officially recognized by local health authorities with an occupational illness
- Fatalities

#### 4.J.1.b Monitoring and Addressing Safety Risks

A good safety culture includes a process of constant improvement by which risks are continuously identified and responsibly managed. Complying with, and going beyond, safety regulations is essential for the Company's business. Great Panther's mine sites work closely with Ministries of Labour in all countries where it operates and carries out audits to identify risks and prevent accidents. The Company also conducts detailed risk analyses to identify the risks and hazards associated with all routine and specialized tasks. During this process, probability and severity of an injury are evaluated. This process results in a recommendation of the type of equipment for female and male workers that must be used and other measures to mitigate risks. Risk analyses are updated every one to two years or whenever a new task or change in the environment warrants it.

The Company also engages third parties to carry out specific work environment studies (noise, dust, vibration, temperature and lighting). The outcomes of these studies determine whether or not the current exposure is within the permissible limit of the norm.

The Company has introduced safety programs to promote and foster safety awareness and recognize safety champions within its operations, including a Safety Olympics program in Brazil. On February 22, 2018, Great Panther regretfully announced the passing away of Mr. Kenneth W. Major, who had served as Director of the Company since March 2011, including distinguished service as Chair of the then Safety, Health and Environment Committee, in addition to service on other committees of the Board. In Mr. Major's honour, the Company has established the Kenneth W. Major Award for Safety Excellence to annually recognize Great Panther employees and contractors who exemplify Mr. Major's value of safety in the workplace. Since its introduction, the Kenneth W. Major Award for Safety Excellence has been awarded to 19 individuals.

#### 4.J.1.c Emergency Preparedness

Great Panther has a corporate crisis plan and emergency response plans for different situations or contingencies at each operation that are reviewed and updated throughout the year. The emergency response plans focus on protecting its people, the environment and the Company's assets. During the year, Great Panther mine sites conduct emergency preparedness activities to test and refine procedures for a variety of incidents, from landslides to chemical spills. These activities include evacuation drills, emergency simulations, first aid and search and rescue training by the Company's emergency brigades.

#### 4.J.1.d Fatal Accident

Despite our constant focus and numerous initiatives around worker safety, Great Panther experienced a fatal accident at the GMC during the second quarter of 2020 as a result of a vehicle accident during care and maintenance activities. Great Panther personnel immediately followed mine rescue protocols, and authorities arrived at the mine to review the site of the accident. A full internal investigation was completed. The Company considers the health and safety of its workers and others in the communities in which it operates to be a top priority and provides safety training as discussed above and continuously updates safety procedures and practices.

#### 4.J.2 COVID-19

Great Panther has been closely monitoring the effects of the spread of COVID-19 with a focus on the jurisdictions in which the Company operates and its head office location in Canada. The rapid worldwide spread of COVID-19 has resulted in governments implementing restrictive measures to curb the spread of the virus. During this period of uncertainty, Great Panther's priority is to safeguard the health and safety of personnel and host communities, support and enforce government actions to slow the spread of COVID-19 and to assess and mitigate the risks to our business continuity. As of the date of this AIF, mining and processing operations at Tucano, the GMC and Topia are operating without any significant impacts related to COVID-19.

In response to the increased rate of spread of COVID-19 infection, including the high incidence of infection in areas where the Company operates, the Company has developed and implemented COVID-19 prevention, monitoring and response plans following the guidelines of the World Health Organization and the governments and regulatory agencies of each country in which it operates to ensure a safe work environment at its offices and sites. There is no assurance the Company's plans and protocols will be effective in stopping the spread of the COVID-19 virus and the Company may experience an increase in

COVID-19 infection amongst its employees and contractors even with adoption of enhanced safety protocols and safeguards.

On April 2, 2020, the Company commenced an orderly suspension of mining and processing activities at the GMC and Topia in compliance with the directive of the Mexican Federal Government announced on March 31, 2020, to mitigate the spread of COVID-19. The first directive required suspension of activities until April 30, 2020, and was subsequently extended to May 30, 2020. On June 3, 2020, the Company restarted mining operations in Mexico following a government order adding mining to the list of essential services. The restart followed a phased approach to accommodate new protocols in response to COVID-19. Some administrative and technical staff continue to work from home.

On November 16, 2020, the Company temporarily suspended operations in Topia due to the detection of COVID-19 among the workforce. On December 17, 2020, the Company restarted Topia operations.

The Company has prepared contingency plans if there is a full or partial shutdown at any of its operations and is prepared to act quickly to implement them. If authorities seek to restrict mining activities to mitigate the spread of COVID-19 or if the Company faces workforce shortages as a result of the spread, the Company will endeavour to do so in a manner to satisfy authorities and address workforce availability without executing a complete shutdown. The Company cannot provide assurance there will not be interruptions to its operations in the future.

At Tucano, these measures may involve the curtailment of only mining operations with the mill continuing to process stockpiled ore at reduced rates and assessing options for phased operating reductions should they be necessary.

As a result of the high incidence of case numbers in Brazil, Tucano had to make operational adjustments in 2020 to minimize the impact on production resulting from its reduced work force. There is no assurance that such operational adjustments will be successful in the future or that Tucano will not experience interruptions to its operations in the future as a result of COVID-19.

The Company has experienced workforce shortages, including a reduction in the availability of supervisory staff at its operations as a result of COVID-19, particularly in its Mexican operations. The Company has also experienced delays in the permitting process associated with its operations and exploration and development work programs.

For more information about COVID-19 and the effects on the Company's business, see Section 8 of this AIF under the heading "Risk Factors – COVID-19 and Other Pandemics".

# MINING PROPERTIES

Great Panther has three wholly-owned mining operations including the Tucano gold mine acquired in 2019, which produces gold doré and is located in Amapá State in northern Brazil, the Topia mine in the State of Durango, Mexico, which produces concentrates containing silver, gold, lead and zinc, and the GMC in the State of Guanajuato, Mexico. The GMC comprises the Guanajuato Mine, the San Ignacio Mine, and the Cata processing plant, which produces silver and gold concentrates.

#### 5.A. TUCANO

The scientific and technical information on Tucano in this Section 5.A of the AIF is based on the Tucano Technical Report described in Section 1.E. of the AIF. The conclusions, projections and estimates as well as certain other information included in this Section of the AIF are presented in summary form and subject to the qualifications, assumptions and exclusions set out in the Tucano Technical Report. Readers are

recommended to read the Tucano Technical Report in its entirety to fully understand the project. The Tucano Technical Report in available on SEDAR (sedar.com) or on EDGAR (sec.gov).

#### 5.A.1 Overview

Great Panther owns a 100% interest in Tucano through its wholly-owned subsidiary, Mina Tucano Ltda. Tucano consists of open pits which deliver ore to a 3.6 million tonnes per annum processing plant located at Tucano and has exploration licenses and mining concessions spread across approximately 2,000 square km. In 2020, Tucano produced 125,417 gold ounces.

## 5.A.2 Project Description, Location and Access

## 5.A.2.a Property Description

The property comprises 39 mineral rights, concessions and leases, totaling 197,283 ha. Great Panther, through its wholly-owned Brazilian subsidiaries, has 100% ownership of all tenements except for one tenement that is not part of the key tenement package, of which it holds a 49% interest. References to the "property" in this Section 5.A are to Tucano.

Exploitation activities are authorised by Mining Concessions, granted by the Ministry of Mines and Energy. Mining Concessions have no expiration date, being valid until the depletion of mineral deposit. The Tucano Mining Concession (851.676/1992) and Exploitation Application (850.865/1987) are centered within an approximately 140,000 ha block of key, contiguous exploration tenements held by Great Panther. This ground area spans a strike length of approximately 90 km of Paleoproterozoic greenstone terrain and is owned 100% by Great Panther.

Tucano also has a Mining Lease (858.079/2014) with Zamin Amapá Mineração S.A. for the exploration of gold within Zamin mineral rights. These mineral rights are held by Zamin for iron ore and border, to the south, the Tucano Mining Licence. In 2017, Zamin entered into receivership and Tucano is awaiting clarification of its rights.

The balance of Tucano mineral rights are Exploration Licences granted by the ANM that authorize exploration activities and have varying degrees of exploration work associated with them. In general, such licences are valid for a three-year period. Licences are usually renewable upon request for an additional three years, at ANM's discretion, and if justified by a partial exploration report. At the end of the second phase of exploration, a final exploration report must be submitted.

## 5.A.2.b Surface Rights

The surface rights for the Mining Concession and four other mineral rights concessions in the mining area have also been secured by agreement. These surface rights agreements are sufficient to cover the existing mining operations at Tucano.

# 5.A.2.c Location and Access

Tucano is located in Amapá State, Brazil, at latitude 0.85°N and longitude 52.90°W. The mine is approximately 200 km from Macapá, the state capital, and is accessible by the Brazilian federal highway BR-210 or by chartered aircraft. The access comprises:

- Sealed road for approximately 100 km, from the city of Macapá to Porto Grande.
- Unsealed road from Porto Grande to Pedra Branca do Amapari, approximately 75 km.
- Unsealed road from Pedra Branca do Amapari to the site, approximately 17 km.



# 5.A.2.d Royalties

Tucano is subject to both federal and state royalties and other royalty agreements in relation to mineral product sales. In summary these are:

- the Compensation for Exploitation of Mineral Resources ("CFEM");
- the Control, Monitoring, and Supervision of Research Activities, Mining, Exploration and Exploitation of Mineral Resources Fee ("TFRM");

- the Social and Community Development Funds; and
- a Commodities Royalty.

The CFEM is a federal royalty and is calculated over the amount of gross revenue obtained in the sale of mineral products. In respect to gold sales, Great Panther is liable to pay a royalty of 1.5% on gross revenue from production at Tucano.

The TFRM is a royalty levied by Amapá State. The TFRM is currently calculated based on the grams of gold produced multiplied by the state index rate of Brazilian real BRL 3.2437 which is then multiplied by a factor of 0.25. In prior years, the factor has ranged from 0.4 in 2017 to 0.1 in 2018 and 2019, respectively.

The Social and Community Development funds have resulted from various agreements with Amapá State and the municipalities of Pedra Branca do Amapari and Serra do Navio which are located near Tucano. Under the terms of the agreements, Great Panther will pay a maximum 1% royalty of the gross proceeds from gold sales from Tucano to support the socio-economic and community development of the municipalities of Pedra Branca do Amapari and Serra do Navio.

The Commodities Royalty is payable to the previous holders of 13 tenements acquired by Great Panther. These are tenements currently not being mined by Great Panther. The Commodities Royalty is levied at 0.75% of commodity sales revenue arising from those 13 tenements less transport and insurance expenses, and royalties payable. Mr. Winer, Vice President Exploration of Great Panther is a former partner of Mineracao Vale dos Reis and accordingly, if a Commodities Royalty becomes payable, Mr. Winer would be a recipient.

## 5.A.3 History

Anglo American Plc discovered a mineralized shear zone in 1994, undertook extensive exploration between 1995 and 2002, and through AngloGold, completed a feasibility study of the oxide Mineral Resources in October 2002.

In May 2003, Tucano was acquired by EBX Gold Ltd. ("EBX"). EBX carried out a feasibility study for the oxide mineral resources and a pre-feasibility study for mining the sulphide mineralization.

In January 2004, Tucano was acquired by Wheaton River Minerals Ltd. (which later merged with Goldcorp Inc. ("Goldcorp") in 2005). Mine construction began in July 2004, with the first gold poured in late 2005. Goldcorp sold Tucano to Peak Gold Limited ("Peak Gold") in April 2007. Peak Gold later merged with Metallica Resources Inc. and New Gold Inc. in June 2008.

The operation did not reach the predicted gold production due to issues related to the clayey nature of the saprolite mineralization. In response, metallurgical test work was conducted during 2007 to investigate the potential improvements of installing a wash-plant to remove fines and clays to improve heap percolation. Given that the results from the test work were inconclusive, and considering the relative amount of oxide resource available, the plans for an integrated wash-plant and oxide and sulphide milling circuit were put aside in favour of a milling and CIL circuit to treat predominantly sulphide, and remnant oxide material.

Until the closure of Tucano in 2009, mining operations extracted 8.8 Mt of ore from four areas, TAP AB (pits 1, 2, and 3), TAP C, TAP D, and Urucum. Total gold production from the heap leach operations was approximately 316,000 ounces of gold.

In 2010, Beadell, through Mina Tucano (then known as Beadell Brazil Ltda), a wholly-owned subsidiary, acquired Tucano and commenced construction of a CIL plant to augment the existing process infrastructure. Mining and stockpiling of ore commenced in 2011 and the CIL plant was commissioned in

November 2012. Beadell upgraded the plant from 2018 to 2019 including a ball mill, pre-leach thickener, leach tank and oxygen plant.

Great Panther acquired Tucano in March 2019 and holds a 100% interest.

## 5.A.4 Geological Setting, Mineralization and Deposit Types

The South American Precambrian Shield comprises approximately 50% of the bedrock in Brazil and consists of major Proterozoic deformation zones surrounding cratonic nuclei of Archean age. The three principal cratons are the Guyana Craton in the north, the Amazon (or Guapore) craton immediately south of the Amazon River, and the São Francisco Craton situated between the Amazon Craton and the coast. The cratons are mostly a granite gneiss complex including some highly metamorphosed supracrustal belts, of which greenstone belts represent a small portion. Remoteness and lack of outcrops due to deep weathering prevent detailed stratigraphic and structural mapping across most of the greenstone belts. However, stratigraphic and structural elements typical for greenstone belts worldwide are well recognized in most South American examples.

The mineralization at Tucano occurs in a series of deposits over a 7 km strike length associated with a north-south trending shear zone occurring coincident with a north-south line of topographic ridges. From south to north, these deposits have been named TAP A, B, C, and Urucum. TAP D is a separate structure in the west. Higher grades are associated with the more intensely hydrothermally altered rocks.

Deep weathering is present in most of the deposits with high grade mineralization extending to the surface where it is covered by a layer of colluvium several metres thick. Gold mineralization can be found in the fresh rock at depth, in the saprolite zone created by in-situ weathering of the underlying rocks, and in colluvial deposits that overlie the saprolite mineralization as a blanket, spreading out over the hill slopes.

Sulphide zones follow shear plane foliation, often crosscutting the Banded Iron Formation ("BIF") and other host meta-sediments and as bedding parallel lenses dipping either east or west along the limbs of the folded BIF units associated with calc-silicate units and hosted by metamorphic schists or sandwiched between and cut by feldspar quartz porphyritic dykes and sills. Outside the shears and faulted zones, host rocks are poor in sulphide and gold. The accumulation of auriferous massive and/or disseminated sulphides in zones of fractures and folds, and forming plunging mineralized shoots, often crossing lithological contacts, suggests an epigenetic event.

The gold mineralization at the Urucum and TAP AB deposits is observed to be related to elevated abundances of pyrrhotite that occurs in both stratiform and cross-cutting relationships with the host rocks. The primary host rock has been a BIF, with other host rocks containing lesser quantities of gold.

Digital interpretations of the distribution of the gold mineralization for the Urucum and TAP AB deposits were prepared using Seequent Limited's Leapfrog software package by consultants specialized in wireframe modelling. The mineralization wireframes were created using a nominal cut-off grade of 0.3 g/t Au for oxide material and 0.4 g/t Au for fresh material, across a minimum width of 3 m to align with the cut-off grade and minimum width criteria that are currently being employed by the mine staff for establishing the ore/waste dig packets at the Urucum and TAP AB deposits.

Gold zones occur as a series of semi-continuous vertical to moderately dipping ore horizons that individually have continuity over tens to hundreds of metres and collectively can exceed a thousand metres. There are repeated zones of such mineralization along a 7 km strike length.

### 5.A.5 Exploration

Great Panther recognizes the importance of the large, regional exploration tenement portfolio that it now controls. The portfolio covers a trend of approximately 90 km by 20 km covering an underexplored Proterozoic aged greenstone belt. The multiple gold deposits along the 7 km long Tucano sequence, demonstrate the gold potential within the Vila Nova Belt. Typically, Proterozoic or Archean greenstone belts with a significant proven deposit have a higher likelihood of additional deposits or mines. Most belts host a number of gold deposits, often of different size and styles of mineralization. When compared to other similar belts in the Guianas and West Africa, it is evident that the Vila Nova belt lacks the same level of exploration activity. While there is not always a direct correlation, between exploration and discovery, recent exploration activities carried out by Great Panther over the last 12 months, lead Great Panther to believe that the belt requires quality, focused exploration.

Regional programs announced in February 2020 included a re-evaluation of the historical data. The main product developed was an interpretation of the structural framework within the greenstone belt and definition of four deformation events and their relative timing. The combination of this interpretation with structural knowledge both in the mine and surrounding areas led to the identification of the key deformation events most likely associated with gold mineralization. These key structural events were mapped using the aerogeophysical data to define zones that potentially had higher probability to focus hydrothermal fluids. Combining this with interpreted lithology types allowed definition of corridors and targets with higher prospectivity, which are the base for the development of a focused exploration strategy and work program. This new strategy has identified four key pillars to exploration success on the Tucano tenement portfolio.

- 1. Tenement compliance; the administrative, legal and technical programs required to maintain in good standing the tenement portfolio;
- 2. Identification of corridors or targets within the belt that have elevated exploration potential;
- 3. Fast-track advanced exploration targets that are known or are developed out of the above; and
- 4. Develop quality geologic models to guide the near mine exploration, particularly mine extension and underground resource definition.

In 2020, exploration was focused on resource drilling with four diamond drills ("DD") and a reverse circulation ("RC") drill. In the first half of 2020, drilling was on the TAP AB deposits and in the second half of 2020 focus moved to Urucum North and Urucum East. In regional exploration two Final Exploration Reports fell due and work programs were focused on these two exploration licenses, Mutum and Saraminda. In both cases, programs of auger drilling have identified geochemically anomalous gold zones within the weathered zone. These have been followed up by RAB drilling and in December, two lines with five shallow diamond holes were drilled to evaluate the geology and mineralization potential at Mutum.

The 2021 exploration budget has been increased to \$8.4 million with the objective of defining new targets through regional soil sampling, fast tracking prioritized targets within a 20 km radius of the mine, replacing mined resources, and confirmation and extension drilling of the higher-grade underground resource. In 2021, over 500 km of regional multi-element soil geochemistry will be carried out over the highly prospective exploration corridors defined in the third quarter of 2020. In parallel, an evaluation program to prioritize targets in the regional exploration area, that could provide ore to the Tucano plant, will be conducted with a view to fast-tracking one or two key targets. Near-mine resource drilling will initially focus on TAP C, between TAP AB and Urucum, as part of a 24,000 m near-mine resource definition program. At Urucum diamond drilling will be conducted on shallower (200-400 m deep) zones of higher-grade ore beneath Urucum pits, where 8,000 m is planned for 2021.

## 5.A.6 Drilling

Auger, RAB, RC and DD methods have been employed at Tucano. Auger and RAB drilling are considered exploratory drilling methods used to evaluate early-stage exploration targets. The methods provide geochemical samples in the top 5 m to 30 m of the highly weathered lateritic profile to guide drill target definition. RC and DD drilling are deeper drilling methods and the preferred methods for obtaining gold grade information from known or high potential mineralization zones.

Drilling in 2020 initially focused on the TAP AB deposit with highlights presented in the Company's June 23, 2020 press release. During the second half of 2020, resource drilling was focused on the testing potential mineralization within the shallow, down plunge extension of mineralization to the north of the Urucum North pit with two diamond drills and an additional two drills on infill resource drilling, and along strike evaluation, of the Urucum East mineralized zone. The drilling intersected various mineralization intervals confirming and extending the Urucum East deposit but failed to detect a sub-parallel ore zone to the west. Positive drill results were received from Urucum North and these are to be modelled to determine if further drilling is warranted and to evaluate the potential impact on the current resource, pit shell. In total, 32,471m of drilling was carried out in 2020. All drilling results up to September 30, 2020 were included in the Mineral Resource and Mineral Reserve estimate for 2020 and included in the Tucano Technical Report.

## 5.A.7 Sampling Analysis and Data Verification

Great Panther abides by industry standards for the collection, analysis and quality assurance of the sampling processes, analysis procedures, and storage and use of the data. These are discussed in greater detail in the Tucano Technical Report. The company protocols ensure due care in the collection, logging, documentation and handling of samples whether from drilling or reconnaissance programs. (i.e., streams, soils, rock, auger and channel samples).

Sample preparation is carried out on site at Tucano where it has two, geographically separate, preparation facilities, one for mine grade control and the second exclusively for exploration samples, including those to be used in the long-term resource modelling. Sample preparation quality is monitored through the insertion of blank samples into the pulverization process while the laboratories are additionally monitored with the insertion of Reference Samples, duplicate field samples and duplicate lab preparation samples. Quality control samples represent approximately 10% of all samples analysed.

All mineralized samples that may be included in the Mineral Resource estimates and all multi-element geochemistry analyses are carried out by Certified laboratories in Belo Horizonte, Brazil either SGS or ALS.

Great Panther uses the Acquire database management system to maintain and manage all mineral resource and exploration data. Prior to data being accepted for upload into Acquire it passes through validation procedures. In the case of geochemistry data, all quality control samples must be within predefined industry standard quality assurance limits prior to being uploaded into the database. In the case of failures, samples are re-analysed, firstly using pulps retained by the laboratory or if required, duplicate samples generated during the preparation process and routinely stored on site.

## 5.A.8 Mineral Resources

The Mineral Resources for Tucano include contributions from four deposits as well as material contained within various stockpiles present throughout the property. The Mineral Resources from these four deposits are composed of mineralized material that is envisioned to be extracted by both open pit and underground mining methods. Gold mineralization is contained within oxidized lithologies as well as their fresh, un-weathered equivalents.

Updated grade-block models were prepared for the open pit component of the Urucum deposit, as well as the open pit and the underground component of the TAP AB deposit using drill hole, sample information, and topography that was current as of September 30, 2019. The underground component of the Mineral Resource estimate for the Urucum North deposit was prepared from a grade-block model that used the drill hole and sample information that was current as of November 2, 2015. Drilling completed since the 2015 was reviewed and in the qualified person's opinion does not materially impact the Mineral Resource estimate.

#### MINERAL RESOURCE ESTIMATE AS OF SEPTEMBER 30, 2020

Category	Tonnage (000)	Grade (g/t Au)	Contained Metal (000 oz Au)
Measured			
Open Pit	2,309	1.46	108
Underground	-	-	-
Surface Stockpile	2,491	0.53	42
Total Measured	4,800	0.97	150
Indicated			
Open Pit	8,793	1.60	453
Underground	2,649	4.11	350
Surface Stockpile	-	-	-
Total Indicated	11,442	2.18	803
Measured & Indicated			
Open Pit	11,102	1.57	561
Underground	2,649	4.11	350
Surface Stockpile	2,491	0.53	42
Total Measured & Indicated	16,242	1.83	953
Inferred			
Open Pit	647	2.48	52
Underground	5,350	2.80	483
Surface Stockpile		0	-
Total Inferred	5,997	2.77	534

#### Notes:

- 1. Mineral Resources were classified using CIM Definition Standards.
- Mineral Resources are inclusive of Mineral Reserves.
- The effective date of the Mineral Resource estimate is September 30, 2020.
- 4. Mineral Resources are estimated at various cut-off grades depending on mining method and mineralization style.
- 5. For open pit development at Urucum, Urucum East and TAP AB, Mineral Resource estimates use a long-term gold price of US\$1,750/oz and a US\$/Brazilian real exchange rate of 1:4.5 with cutoff grades of 0.3 g/t Au for oxide and 0.4 g/t Au for fresh rock.
- 6. Underground Mineral Resource estimates for TAP AB use a long-term gold price of US\$1,750/oz and a US\$/Brazilian real exchange rate of 1:4.5, with cutoff grade of 1.3g/t Au for fresh rock.
- 7. Since September 30, 2019, no additional drilling data is available for the Urucum underground and Duckhead so Mineral Resource estimates for 2020 remain unchanged from 2019. Estimates use a long-term gold price of US\$1,500/oz and a US\$/Brazilian real exchange rate of 1:3.8 with cutoff grades of 0.4 g/t Au for oxide and 0.55 g/t Au for fresh rock in the open pit and 2.1 g/t Au for oxide and 1.6 g/t Au for fresh for the underground.
- 8. A minimum mining width of 3 m was used for preparation of mineralization wireframes.
- 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 10. Inferred Mineral Resources have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It cannot be assumed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category.
- 11. Numbers may not add due to rounding.

## 5.A.9 Mineral Reserves

The Mineral Reserve estimate for Tucano conforms to the CIM Definition Standards as incorporated by reference into NI 43-101. To convert Mineral Resources to Mineral Reserves, the Qualified Person applied modifying factors of dilution and mineral extraction to only the Measured and Indicated categories of the Mineral Resource. Inferred Mineral Resources are not included in the Mineral Reserves. Tucano consists of both open pit and underground Mineral Resources for which Mineral Reserves have been independently estimated.

The Mineral Reserve estimate for Tucano is presented in the table below. The open pit estimate is based on the newly developed 2019 resource block models. This Mineral Reserve estimate includes open pit mining in Urucum, TAP AB, Urucum East, and Duckhead and underground mining in the Urucum deposit.

## MINERAL RESERVE ESTIMATE AS OF SEPTEMBER 30, 2020

Category	Tonnage	Grade	<b>Contained Metal</b>
	(000 t)	(g/t Au)	(000 oz Au)
Proven			
Open Pit	1,688	1.61	87
Underground	189	3.78	23
Surface Stockpiles	2,026	0.64	42
Probable			
Open Pit	3,880	1.70	212
Underground	1,976	4.17	265
Surface Stockpiles	-	-	-
Proven & Probable			
Open Pit	5,568	1.67	299
Underground	2,164	4.13	288
Surface Stockpiles	2,036	0.64	42
Total Proven & Probable	9,758	2.00	629

#### Notes:

- 1. Mineral Reserves were classified using the CIM Definition Standards.
- 2. Mineral Reserve estimation includes mine depletion through to September 30, 2020 and drills results through to July 31, 2020. The effective date of the Mineral Reserve estimate is September 30, 2020.
- 3. Open pit Mineral Reserves are estimated within designed pits above discard cut-off grades that vary from 0.43 g/t Au to 0.5, g/t Au for oxide ore and 0.58 g/t Au to 0.63 g/t Au for fresh ore. The cut-off grades are based on a gold price of US\$1,500/oz Au and operating costs sourced from the current operations and mining contracts at an US\$/Brazilian exchange rate of 1:4.5.
- 4. Mineral Reserves incorporate estimates of dilution and mineral losses.
- 5. Underground Mineral Reserves were estimated using an incremental cut-off grade of 2.4 g/t Au. The cut-off grades are based on a gold price of US\$1,250/oz Au and operating costs sourced from the operations and mining contracts at an US\$/Brazilian exchange rate of 1:3.8.
- 6. A minimum mining width of 20 m was used for open pit Mineral Reserves and 3 m was used for underground Mineral Reserves.
- 7. The Mineral Reserve estimate includes surface stockpiles.
- 8. Average metallurgical process recovery is 91.5%.
- 9. Numbers may not add due to rounding.

## 5.A.10 Mining Operations

#### 5.A.10.a Open Pit Mining

The Mine is a mature open pit mining operation in a steady state of mining production. The operations are sufficiently established to provide the basis of much of the technical and economic inputs required for the Tucano Technical Report.

Individual pit shell selection was made based on a gold price of US\$1,750/oz Au for UCS, US\$1,500/oz for Urucum North, TAP AB 1, Duckhead and Urucum East; and US\$1,600/oz for TAP AB 3. These pit shells selection was conducted using the July 31, 2020 surfaces. All pit shells are reported with the base price (US\$1,500/oz).

The mine planning block models used for the mine design are based on 3-dimensional ("3D") resource block models for the Tucano deposit and is based on the resource model regularized to the minimum practical size dig block (i.e., selective mining unit), that can be selectively excavated by mining equipment currently employed on site. Each block in the regularized model contains the quantities of diluted

mineralized tonnes and grades including the tonnages of mining dilution and ore loss, where ore loss (%) = 100% - mining recovery (%).

Mining dilution comprises internal dilution inherited during the model regularization and external (contact) dilution resulting from geological/geometric contacts with waste rock.

Geotechnical and pit design parameters are based on data, information, and results from previous geotechnical studies and incorporate the pre-split drilling and controlled blasting. There is a risk that the failure to attain the design pit slopes could result in pit wall instability and the loss of ore at the pit bottom.

Several geotechnical assessments have been conducted on Tucano. The pit slope design parameters used in Tucano are based on the geotechnical recommendations from third party consultants as more particularly described in the Tucano Technical Report.

## Pit Slope Design Parameters - Tucano

Material	Bench Face Angle (°)	Bench Height (m)	Berm Width (m)	Inter-Ramp Angle (°)
Oxide	70	4	3	41.9
Fresh	75	24	10	55.6

All pits have been designed with eight m operating bench heights. To maximize ore selectivity and minimize dilution, it is expected that ore will be mined on four m benches. The catch-berms in fresh rock are stacked at 24 m intervals (Urucum) and 20 m intervals (other pits).

### 5.A.10.b UCS Pit

The west wall of the UCS pit underwent slope displacement on October 6, 2019. The pit was closed to mining while Great Panther worked toward a remediation plan with the assistance of independent consulting firm Knight Piésold. The pit remains in Mineral Reserves.

Knight Piésold carried out geotechnical drilling and installed piezometers to record water pressures. Using the drilling data, KP modelled the failure mechanism. Failure was slip along an existing structure when the toe of the slope was blasted. A high phreatic level was seen as the main contributing factor that allowed the slip to initiate. There was movement toward the pit, but not a massive slope collapse. Mining of free diggable material commenced in July, 2020 and was suspended in September, 2020 while Knight Piésold completed its analyses. Mining of UCS restarted at 161 masl in late October, 2020 based on the results of geotechnical drilling and analyses performed to that point and the independent consultant provided recommendations regarding slope angles and mining from 161 masl to 111 masl. Draining the pit and monitoring of water levels in piezometer holes is being carried out as mining progresses, and any mining below 111 masl will be evaluated on the basis of whether further drainage is required using horizontal drain holes in order to continue mining safely. If further drainage is required, there is a risk that there may be interruptions of several days, every month or so, if Tucano is required to continue with horizontal drainage.

Mining is expected to be complete in the first quarter of 2022 presuming no disruption in mining activity.

#### 5.A.10.c LOM Production Schedule

A pit production schedule was generated with the objective of meeting a target ore processing rate of approximately 10,000 tpd at an average 93% annual plant availability. ROM quantities and plant feed estimates are based on Proven and Probable Mineral Reserves.

The ultimate pit designs plus stockpiles contain sufficient ROM quantities to support a 10,000 tpd processing rate through to mid-2023, but mining constraints reduce the rate of ore production so that the actual life of mine is to the end-2023. The open pit Mineral Reserves are included in six pits, with the three largest pits, UCS, Tap AB 1 and TAP AB 3 containing over 80% of the total open pit Mineral Reserves. Oxide ore contributes 57% of the total open pit ore mined. The LOM average strip ratio is 13.2:1. The waste rock dumps are located as close as practical to the open pits to minimize haul distances and haul truck cycle time for each pit phase, considering the pit waste disposal requirements, access road and facility layout, and geotechnical parameters.

The plant feed comprises the ROM ore from the pit and from the stockpiles. The pit ROM production is projected to be a direct feed to the crusher, complemented with the ROM from the stockpiles re-handled on as needed basis.

The contract-operated mining is carried out using conventional open pit methods, consisting of the following activities:

- Drilling performed by conventional production drills.
- Blasting using emulsion explosives and a downhole delay initiation system.
- Loading and hauling operations performed with hydraulic shovel, front-end loader, and rigid frame and articulated haulage trucks.

Open pit mining is currently being undertaken by a mine contractor U&M, one of the largest mining contractors in Brazil. The mining operations are based on the use of hydraulic excavators and a haul truck fleet engaged in conventional open pit mining techniques. Excavated material is loaded to trucks and hauled to either the ROM, ore stockpiles, or the waste dump.

The Company's personnel monitor the mining contractor and provide engineering support including survey and grade control. The open pit is scheduled to operate 365 days per year, 24 hours per day and the U&M work schedule utilizes four crews working eight-hour shifts.

Equipment productivity and utilization factors and equipment operating hour estimates are based on seasonal conditions (dry, transitional, or wet season during the calendar year), rock type, and various mining conditions including different bench mining width and ramp width.

The mine manpower at the end of December 2020 is 1,471 employees. This includes Tucano and the contractor's workforce. The ongoing pit operations will require this level of manpower for most of the next two years.

Tucano is expected to produce 110,000 to 120,000 ounces of gold in 2021. For more information, see the "Guidance and Outlook" section of the 2020 MD&A.

## 5.A.10.d Operating and Capital Costs

Operating costs from 2018 through 2020 are shown below.

	Mine	Mine	Plant	G&A	Total	
	\$/t mined	\$/t ore	\$/t ore	\$/t ore	\$/t ore	Exchange Rate <sup>1</sup>
2018	3.77	22.22	14.38	3.59	41.15	3.651
2019	3.27	24.09	18.77	3.64	47.29	3.944
2020	2.81	21.31	13.35	2.52	37.17	5.160

#### Note:

The Company presents operating cost forecasts for its Tucano operations annually. For more information, see the "Guidance and Outlook" section of the 2020 MD&A.

Tucano is an operating open pit gold mine and the open pit capital costs reflect those required to maintain the operations during the LOM plan as set forth below.

Area	Unit	Total	2021	2022
Tailings Dam Expansions	US\$ 000	7,796	4,512	3,284
Grinding Expert System	US\$ 000	228	228	-
Geotechnical radar	US\$ 000	327	327	-
New Crusher	US\$ 000	144	144	-
Plant Improvements	US\$ 000	433	433	-
Environmental improvements	US\$ 000	343	173	170
Power Line	US\$ 000	626	346	280
Dispatch System	US\$ 000	390	390	-
Others	US\$ 000	984	984	-
Pumps	US\$ 000	260	260	-
Grizzly	US\$ 000	154	154	-
Total Open Pit Capital Cost	US\$ 000	11,685	7,951	3,734

Forecasts of operating, capital costs and production are forward-looking statements subject to assumptions, risk and uncertainties which could vary materially from that which is presented. For more information, see "Cautionary Note Regarding Forward-Looking Statements in Section 1.D. of this AIF" and "Risk Factors" in Section 8 of this AIF and the "Guidance and Outlook" section of the 2020 MD&A.

# 5.A.10.d.i. Underground Mining

The underground mine project is located below the Urucum North open pit. Access would be via a portal located at the north end of the Urucum North pit. The mine layout is based on the following criteria:

- Twin declines accessing the north and south parts of the orebody;
- Portal situated on the north side of the Urucum North open pit;
- North and south exhaust ventilation raises;
- 20 m sublevel interval;
- Stopes accessed by a footwall drive and crosscuts on every sublevel;
- Decline development initiates in Year 1; and
- Mine plan targets Measured, Indicated, and Inferred Mineral Resources down to 500 mRL (750 m below sea level).

Annual average exchange rates from the US Federal Reserve.

Geotechnical data from an infill drill program below the Urucum North Pit indicates that the ground conditions at the Urucum North are suitable for open stoping mining methods. Furthermore, stopes measuring 50 m in length and 20 m in height will be feasible. It will be possible to mine multiple stopes simultaneously in the same ore block. As the ore lodes are steeply dipping and relatively narrow, they are suitable for longitudinal longhole open stoping.

The base of weathering is relatively shallow. It occurs less than 50 m over the orebody and less than 30 m over the country-rock. Consequently, it will have minimal effect on the underground mine. Weathering will, however, be a factor for establishing the portal location and the upper sections of ventilation raises. Furthermore, weathering may be present along major faults and on the contacts of pegmatite dykes.

Up-hole retreat will be used in the upper levels of the northern part of the mine. This method permits ore production to commence early in the LOM schedule because mining proceeds in a top-down sequence. Moreover, it can achieve high rates of production as backfill is not required in the mining cycle. A disadvantage of the method, however, is that it requires leaving rib pillars for supporting the sidewalls, which results in an 86% ore recovery.

Conventional Avoca stoping will be used for mining the remainder of the orebody. It permits high ore recovery as it does not require leaving pillars along strike. A pastefill plant will not be needed as the method uses rockfill for backfilling. The Tucano site has an abundance of stockpiled waste from open pit mining available as a source of rockfill.

Sill pillars will be left between ore blocks to permit simultaneous production in multiple mining elevations. These pillars will be partially recovered (estimated at 65% recovery) towards the end of the mine life using Up-hole retreat. As additional information about the resource is acquired, it should be possible to reposition some of the sill pillars in low-grade zones.

The mine design uses a 20 m sublevel interval. This sublevel interval enables accurate drilling of longholes, which will help minimize dilution. The ore drives will be 5 m high; consequently, the typical height of an Up-hole Retreat stope or Avoca bench will be 15 m. A minimum mining width of 2.0 m has been assumed. With assumed skin dilution of 0.5 m from each of the footwall and hanging wall, the actual minimum stope width will be 3.0 m.

The design of the declines allows the mobile equipment to access each of the production levels. Footwall drives and crosscuts on the sublevels provide access to the stopes. The cross-sectional dimensions of the declines and crosscuts will be 5.0 m high x 5.0 m wide, which is adequate for accommodating Volvo AD35 articulated trucks. The ore drives will have a cross-section of 5.0 m high x 4.0 m wide, which is enough for 10-tonne-capacity LHDs as well as the proposed production drill. The trucks will not enter the ore drives.

The following assumptions, based on industry benchmarks, were used to determine the production and development rates and schedules:

- Decline and crosscut advance of 140 m/month.
- Ore drive advance of 60 m/month.
- Production rate from stoping of 10,000 t/month for both Up-Hole retreat and Conventional Avoca.
- Backfilling rate of 12,000 m<sup>3</sup> per month per stope for Conventional Avoca.

The schedule is based on operating three development jumbos and two LHDs for both the north and south declines. The annual ore production tonnages vary depending on the number of production fronts that are available in any given year.

## 5.A.11 Mineral Processing

The existing Tucano gold processing plant was designed by Ausenco. After approximately four years of operation, an expansion was planned as part of the original feasibility study to install a 3 MW ball mill. This new secondary grinding mill, alongside the 7 MW single stage SAG mill, was installed in order to maintain 3.4 Mtpa throughput capacity treating 90% of the much harder sulphide ore type.

The plant flowsheet was modified in 2018 to deal with the harder sulphide ore type and the key features of these flowsheet changes are as follows:

- An additional 6 MW ball mill to increase original Ausenco design capacity to 3.6 Mtpa and potentially obtain a finer product size of 80% < 75 μm at a higher proportion of sulphide ore to increase cyanide leach gold recovery and kinetics. This was completed in September 2018.
- A pre-leach thickener to allow effective operation of the hydrocyclones which in turn provides higher leach feed pulp % solids. The change in philosophy from the originally proposed tailings thickener to a pre-leach thickener is explained further below. This was completed in September 2018.
- Additional leach residence time by adding one additional pre-leach tank to allow for the higher proposed plant capacity. This was completed November 2018.
- In November 2018, an oxygen plant was added to the CIL as proposed by Ausenco. An additional Liquid Oxygen plant was added in April 2019.

At a plant throughput of 450 tonnes per hour and a slurry density of 45% solids, a total volume of 17,200 m³ is required to provide a leach residence time of 24 hours. The previous CIL provides 15,400 m³; therefore, one additional leach tank, 15 m x 15 m was required. The new tank was located ahead of the existing CIL tanks and used for pre-leaching. This allows a major proportion of gold to go into solution before the resultant pregnant solution comes into contact with the carbon, this speeds up adsorption kinetics.

As outlined above, the commissioning of the new oxygen plant was completed in April 2019, which resulted in a consistent increase of gold recoveries to an average of 92.2% from May 2019 to September 2020.

#### **5.A.12** Infrastructure, Permitting and Compliance Activities

Tucano is currently operating and has all of the required infrastructure to carry on operations in the normal course. Additional surface infrastructure will be required to support underground operation.

Tucano has built a new East Tailings Dam at elevation 137 m which has a total capacity of 5.7M m³ or 2 years storage capacity (i.e. January 2023). The East Dam will increase its capacity by a subsequent lift to El. 145m that provides an additional 3.8M m³ storage capacity or 1.2 years (i.e. April 2024). After the East Dam El. 145 m achieves designed capacity, Tucano plans to extend the tailings storage capacity by commissioning two new dams, East-NW Extension, and West Pond Phase 2 (WPP2), which together will provide tailings storage until 2026-2027, subject to receipt of applicable permits.

Tucano is in possession of all licences required for the operation of the mine, mill, processing plant, and constructed TSFs (including the East Dam to RL 137m) in compliance with Brazilian regulations.

Continuous monitoring programs are carried out at Tucano, which confirm that there are no material concerns pertaining to non-compliance.

### 5.B. GMC

The scientific and technical information on the GMC in this Section 5.B. of the AIF is based on the GMC Technical Report described in Section 1.E. of the AIF. The conclusions, projections and estimates as well as certain other information included in this Section of the AIF are presented in summary form and subject to the qualifications, assumptions and exclusions set out in the GMC Technical Report. Readers are recommended to read the GMC Technical Report in its entirety to fully understand the project. The GMC Technical Report in available on SEDAR (sedar.com) or on EDGAR (sec.gov).

#### 5.B.1 The GMC

On October 25, 2005, the Company signed a formal purchase agreement with the Sociedad Cooperativa Minero Metalúrgica Santa Fe de Guanajuato (the "Cooperative") to purchase 100% of the ownership rights in a group of producing and non-producing silver-gold mines in the Guanajuato Mining District. The total purchase price was \$7.3 million, which included 1,107 hectares in two main properties (the Guanajuato and San Ignacio claims), the Cata processing plant (which has a nameplate capacity of 1,200 tpd), workshops and administration facilities, complete mining infrastructure, mining equipment, and certain surface rights. The final payment under this purchase agreement was made in November 2006.

In May 2006, the Company purchased 3.88 hectares of real estate adjacent to the plant at the GMC for a total of \$0.7 million from the Cooperative. The decision to buy the extra land was made in order to facilitate any future expansion of the processing plant facilities and to buffer the processing plant site from any possible development nearby.

In December 2007, the Company purchased an additional 0.28 hectares of land immediately adjacent to the plant and below the tailings dam at the GMC from the Cooperative for a total of \$0.3 million. The land was primarily purchased to buffer the area from any possible development.

In August 2012, the Company signed a definitive agreement for the purchase of a 100% interest in certain surface rights to a total of 19.4 hectares at San Ignacio, for the construction of a mine portal and ancillary surface facilities.

## 5.B.2 Property Description, Location, and Access

Central Mexico has a dry climate with an annual precipitation of about 600 mm per year generally falling between June and October. The annual mean temperature is 25°C, but winters can be cool with lows approaching 0°C. Exploration and mining work can be conducted year-round, uninterrupted by weather.

The GMC is located on the Central Plateau of Mexico in the Sierra Guanajuato, approximately 380 km by road northwest of Mexico City. The terrain is moderately rugged, with elevations on the property ranging from 1,600 masl to 2,200 masl. Hillsides are deeply incised by drainage and slopes are moderately to extremely steep. Vegetation consists of grasses, small trees, shrubs, and cacti. Larger trees grow in the valley bottoms where there is more water.

## **Guanajuato Mine**

The property is accessible via city streets in the city of Guanajuato, in Guanajuato State, Mexico. Guanajuato has a population of approximately 184,000 and is located within 50 km, by road, of an

international airport at León, Mexico. The mine is easily accessible from major population centres in central Mexico via a system of modern roads.

## San Ignacio Mine

The mine is located approximately 8 km northwest of the city of Guanajuato. Access to the property is provided via a 35-minute drive from the outskirts of the city of Guanajuato (approximately 22 km), mostly by paved road through the towns of Santa Ana and Cristo del Rey. The Company has negotiated surface rights sufficient for mining operations.

The area where Guanajuato and San Ignacio are located is characterized by rolling hills with small-incised drainages, which generally provide windows through thin soil cover to good bedrock exposures.

Mineral feed from both Guanajuato and San Ignacio is blended and processed at the Cata processing plant which is located at Guanajuato.

## 5.B.2.a Guanajuato Mine

Guanajuato is an underground silver-gold mine situated along the north-eastern side of Guanajuato. The mine consists of a number of mineralization zones along an approximately 4.2 km strike length, which is mined from two operating shafts and two ramps. The location of Guanajuato falls within the second largest (historically) producing silver district in Mexico and the deposits on the Veta Madre trend, the principal host structure, have been mined since the 16th century.

Claim boundaries have been legally surveyed. The 19 mineral claims comprise 680 hectares in a contiguous claim block and expire between 2024 and 2057. The TSF and waste rock dump are contained within the property boundaries in areas where the Company holds surface rights at Guanajuato. There are no known environmental liabilities associated with the mineral claims, other than the provision recognized in the Company's Annual Financial Statement for the estimated present value of future reclamation and remediation. This value comprises the provision associated with the Cata plant, TSF area and related infrastructure of the GMC, as well as the provision for Guanajuato.

## 5.B.2.b San Ignacio Mine

San Ignacio lies within La Luz mining camp of the Guanajuato Mining District, located in the southern part of the Mesa Central physiographic province. The Mesa Central is an elevated plateau located in central Mexico. The mineralization on the property consists of epithermal silver-gold veins.

Surface rights owned by the Company are limited to blocks of ground around the old San Ignacio shaft and an additional block over the present underground development (new roads, mine rock dumps, and surface infrastructure). The nine mineral claims comprise 398 hectares and expire between 2031 and 2041. The Company has acquired surface rights sufficient for mining operations. There are no known environmental liabilities associated with the mineral claims, other than the provision recognized in the Annual Financial Statements for the estimated present value of future reclamation and remediation associated with the future retirement of San Ignacio.

### 5.B.3 History

Exploration in the Guanajuato area dates back to 1548 when silver mineralization was first discovered in the La Luz area by Spanish colonists. Two years later an outcrop of the Veta Madre was found near the current site of the Rayas Mine. Mining took place on a relatively small scale until the early 1700s when the application of explosives for tunneling resulted in a significant increase in production capacity. In the

latter portion of the 18th century, Antonio Obregón y Alcocer financed the discovery and development of the Valenciana Mine. This mine became one of the premier silver mines in the world, at the time accounting for a third of global annual silver production. The Spanish controlled mining in the district until 1816 when mining ceased and all production facilities were destroyed during the Mexican War of Independence. The Valenciana Mine was reopened in 1868 with British capital. The British interests operated the mines for ten years but did not result in much success, losing a considerable amount of money. Operations at that time were hampered by a lack of rail facilities and the necessity of hauling heavy equipment from the coast by mule. Mining production declined during the early 1900s due to low prices. At that time, American interests acquired and reopened many of the mines. Old ore dumps and tailings were reprocessed to extract gold and silver; however, the onset of the Civil War in 1910 severely curtailed mining activity in the country, resulting in a decades-long slump in production.

By the mid-1930s, demands for higher pay and better working conditions resulted in the mines being turned over to the newly formed Cooperative in 1939. The Cooperative operated several mines in the district throughout the latter half of the 20th century and into the early 2000s.

The Company acquired the GMC from the Cooperative in 2005. At the time of the purchase, the GMC suffered from lack of investment and working capital, and had not run at full capacity since 1991. The Company resumed production in 2006.

## 5.B.4 Geological Setting and Mineralization

The GMC is in the Guanajuato Mining District, which is in the southern part of the Mesa Central physiographic province. The Mesa Central is an elevated plateau of Cenozoic volcanic and volcanoclastic rocks located in central Mexico. It is bounded to the north and east by the Sierra Madre Oriental, to the west by the Sierra Madre Occidental, and to the south by the Trans-Mexican Volcanic Belt.

Rocks within the Mesa Central consist of a Paleocene to Pliocene sequence of dacite-rhyolite, andesite, and basalt, with related intrusive bodies and intercalated local basin fill deposits of coarse sandstones and conglomerates. This Cenozoic volcanic-sedimentary sequence overlies a package of deformed and weakly metamorphosed Mesozoic submarine mafic volcanic and turbidite rocks.

Within the Mesa Central, the GMC is situated within the Sierra de Guanajuato, a northwest-trending anticlinal structure approximately 100 km long and 20 km wide. The strata within the belt are transected by northwest, north, east-to-west, and northeast-trending regional scale faults. It is predominantly the northwest-trending structures that control the position of mineralization. Normal fault movement along northeast-trending faults resulted in the downward displacement of certain blocks and the preservation of strata that was eroded in other areas. The northwest faults and structural intersections along these faults are therefore important locators of mineral camps within the belt.

Cretaceous volcanic rocks of La Luz Basalt underlie San Ignacio. These rocks are part of a volcanic-sedimentary complex that has various tectonic interpretations, but in general preserves a tectonic history probably related to northeastward tectonic thrust emplacement. By contrast, much of the area to the south-east (e.g., in and around Guanajuato) is underlain by a series of Tertiary volcanic rocks that lie unconformably on La Luz Basalt. The lower Guanajuato conglomerate is widespread and is of mid-Eocene to early Oligocene. Later, volcanic rocks were deposited unconformably on the Guanajuato conglomerate in a caldera setting at the intersection of regional northeast and northwest trending mid-Oligocene extensional fracture systems.

Three main northwest-trending precious metal-bearing vein systems occur in the district: the Sierra, Veta Madre, and La Luz systems.

## 5.B.4.a Guanajuato Mine

The "Veta Madre" quartz-adularia vein / breccia system is closely associated with the Veta Madre fault and an associated diorite dyke (thickness varying from discontinuous lenses at Guanajuatito to a 50-100m thick body in the Cata, Los Pozos, and Santa Margarita areas), oriented 325-degrees with a 45-degree southwest dip. The Veta Madre forms along the dyke contacts, and in the footwall Esperanza Formation. A series of mineralizing events is thought to have taken place during the Oligocene, a period of intense felsic volcanic activity in the area, and comprised three stages termed pre-ore, ore, and post-ore. Pre-ore mineralization consists of trace silver and gold with accessory quartz and adularia. Mineralized material comprises an early silver-rich phase associated with adularia, as well as a later low-silver variant, which is typified by calcite and quartz. The post-ore mineralization is also precious metal-poor, with accessory calcite, dolomite, and fluorite.

The primary mineralization of economic importance is silver and gold, with silver the more important of the two. Base metals do not normally occur in economic concentrations. Average silver grades of the ore are typically in the 100 g/t Ag to 500 g/t Ag range but locally can be over 1,000 g/t Ag. Gold grades are generally in the 0.5 g/t Au to 2 g/t Au range, except for the Santa Margarita vein where average grades are in the range of 5 g/t Au to 7 g/t Au. Within the mine, drill core and channel samples are not normally analysed for base metals so average grades for Cu, Pb or Zn have not been obtained.

At the Guanajuatito zone the main mineralization occurs in the deformed siltstone and shale of the Esperanza Formation contiguous with the Veta Madre Fault. Six zones were modeled at Guanajuatito, with the Veta Madre and the closely associated footwall FW zone being dominant below the 80 level. At the Cata zone, Veta Madre mineralization occurs along the base of the diorite dyke with the Esperanza Formation, and as seven separately modelled zones within the diorite. A number of these zones are shallow dipping structural splays. The Los Pozos area zones, between Cata and Rayas shafts, are comprised of five vein stockwork to breccia systems (Veta Madre) at the base of the diorite dyke and into the Esperanza Formation, as well as on the upper diorite dyke contact with the Guanajuato Formation conglomerates. The Santa Margarita zones form a complex structural set of three bodies within the diorite dyke and at its upper contact with the Guanajuato Formation conglomerates or basal andesite. These are above the Veta Madre breccia which is at the diorite contact with the footwall Esperanza Formation. The San Cayetano zone occurs deep in the Veta Madre south of the Rayas shaft, and tends to be narrow and often in the upper portion of the Veta Madre. The Promontorio area zones occurs in the hanging-wall Guanajuato Formation conglomerates immediately above the Veta Madre structure at the contact of the Guanajuato Formation and the diorite dyke. At Valenciana there are parallel mineralized structures (Veta Madre) at the Esperanza Formation – diorite contact and into the Esperanza Formation.

The best mineralization is often found related to bends in the Veta Madre orientation such as at San Vicente in the Rayas area, and at Cata and Santa Margarita. These structural bends may be due to changes in rock type competencies, and varying thickness of the diorite dyke.

The vertical extent of the deposits at Guanajuato spans over 700 m (2,200 m to 1,500 m elevations and open to depth). Mineralization occurring above 2,100 m elevation was termed "upper ore", between 2,100 m and 1,700 m "lower ore", and below the 1,700 m elevation "deep ore". Fluid inclusion microscope work from over 850 samples gathered through the mine and in deep drilling from the Santa Margarita area, indicated boiling zones from the 2,100 m to 1500 m (deepest drilling at the GMC) elevations. Structural observations of up to eight stages of crosscutting brecciation, and the variable range of Ag:Au ratios indicate that the mineralization along the Veta Madre is associated with multi-phase structural activity and fluid flow.

## 5.B.4.b San Ignacio Mine

San Ignacio is underlain by a package of basalt and andesite volcanic rocks belonging to the lower Cretaceous La Luz andesite. The basalt generally has subtle to well-developed pillow structures that are locally flattened. In a few localities, inter-pillow hyaloclastite is present and is characterized by a fine breccia composed of devitrified glass shards in a fine groundmass. Primary layering and way up indicators are generally difficult to determine from the small outcrops typical of the property, but the San Ignacio stratigraphy is not overturned.

San Ignacio contains structures of the La Luz vein system comprising numerous mineralized fractures in a northwesterly-trending orientation and extending for a known strike length of approximately eight km. Historically productive veins on the property include the Veta Melladito and Veta Plateros. Veins identified in the recent Great Panther drilling are the Melladito, Melladito BO, Intermediate, Intermediate 2, Nombre de Dios, Nombre de Dios 1.5, Nombre de Dios 2, Nombre de Dios 2S, Nombre de Dios 3, Melladito South, 700, Purisima, Purisima HW, Purisima Int., Purisima Bo, and Santo Nino. Mineralization is contained within tabular veins, vein stockwork, and breccias. The 16 veins with structural continuity inferred from surface mapping and diamond drilling from surface, and now with extensive underground development, have been defined up to 2,200 m along strike and 150 m down dip. Six of the veins are very steeply dipping and ten are shallowly dipping and are likely off-shoots of the other veins. The veins are accompanied by hydrothermal alteration, consisting of argillic, phyllic, silicic, and propylitic facies.

The primary economic components are silver and gold with approximately equal contributions of each. Economic mineralization consists of fine-grained disseminations of acanthite and pyrargyrite (silver minerals), electrum (gold-silver mineral), with accessory pyrite, and very minor sphalerite and chalcopyrite. Mineral textures in this zone are typically fracture filling, drusy, and colloform masses.

Average silver grades of the eight veins range from 58 g/t to 237 g/t Ag, while average gold grades range from 1.65 g/t to 3.84 g/t Au.

## 5.B.4.c Deposit Types

The mineral deposits in the Guanajuato area are classic fissure-hosted low-sulphidation epithermal gold-silver-bearing quartz veins and stockwork. Mineralization consists of fine-grained disseminations of acanthite, electrum, aguilarite, and naumannite with accessory pyrite, and relatively minor sphalerite, galena, and chalcopyrite. Gangue minerals include quartz, calcite, adularia, and sericite. The veins are accompanied by hydrothermal alteration consisting of argillic, phyllic, silicic, and propylitic facies. Mineral textures in this zone are typically fracture-filling, drusy, and coliform masses.

Epithermal systems form near surface, usually in association with hot springs, and at depths of several hundred's metres below the paleosurface. Hydrothermal processes are driven by remnant heat from volcanic activity, which in the case of Guanajuato occurred in the middle to late Tertiary. Circulating thermal waters, rising through fissures, eventually reach the "boiling level" where the hydrostatic pressure is low enough to allow boiling to occur. This can impart a limit to the vertical extent of the mineralization as the boiling and deposition of minerals is confined to a relatively narrow band of thermal and hydrostatic conditions. In many cases, however, repeated healing and reopening of host structures can occur, which causes cyclical vertical movement of the boiling zone, resulting in mineralization that spans a much broader range of elevations. This appears to have occurred at the Guanajuato Mine.

Epithermal type precious metal deposits in the La Luz vein system and specifically in San Ignacio are strongly vertically controlled and pinch to cm scale at surface, associated with weak shear zones, minor argillic alteration, and weakly anomalous precious metal values. The mineralized vertical interval typically is 100 m to 150 m; however, it can range from 50 m to well beyond 250 m.

## 5.B.5 Exploration

## 5.B.5.a Guanajuato Mine

Exploration work conducted by Great Panther has consisted almost exclusively of diamond drilling, primarily from underground. In late 2018 with the imminent closure of Guanajuato, the old stopes program was re-initiated using geological staff from Guanajuato being seconded into the Exploration group. This program of geological mapping and sampling was carried out on all accessible levels from November 2018 to July 2020 and will continue as further historical levels are checked and rehabilitated.

Underground exploration sampling since the last technical report (effective date October 31, 2019) until July 31, 2020 totals 10,252 samples. The sampling was done as part of a comprehensive review of historical data, and re-mapping and re-sampling of accessible historical areas to develop zones of interest for targeting by core drilling.

## 5.B.5.b San Ignacio Mine

Great Panther has conducted geological and structural mapping, including sampling of outcrops and from exposures in historical underground workings. Subsequently, the Company completed underground development, geological mapping, sampling and selective mining.

Great Panther completed detailed surface mapping and outcrop rock chip sampling, including mapping and sampling all accessible underground workings pre-2014. Further detailed geological structural mapping was completed in 2015 and was ongoing through 2018.

During 2018 and 2019, exploration efforts were focused on both surface and underground drilling at San Ignacio. Mining is on-going in the northern extent of the project along the Nombre de Dios veins, and an exploration/development ramp is being driven south into the old San Pedro mine area, where the Purisima vein system merges with the Melladito vein system. In 2019 surface exploration efforts were focused on both the Nombre de Dios vein extension north, and on the Melladito and Purisima veins orientation in the old San Pedro Mine area. In 2020, surface drilling has exclusively focused on the old San Pedro mine to old San Ignacio shaft area, along the Purisima vein trend.

## 5.B.6 Drilling

## 5.B.6.a Guanajuato Mine

Diamond drilling at Guanajuato is conducted under two general modes of operation: one by the exploration staff (exploration drilling) and the other by the mine staff (production and local expansion drilling). Production drilling is predominantly concerned with definition and extension of the known zones, to guide development and mining and is generally carried out to provide additional confirmation of vein location and geometry as the veins tend to regularly pinch and swell.

Exploration drilling is conducted further from the active mining area with the goal of expanding the Mineral Resource base. Drilling results from both programs along with underground drift samples are used in the estimation of Mineral Resources.

Since the start of 2019 exploration staff have made a concerted effort compiling historical data, geological mapping, sampling and drilling to find extensions of various orebodies and new targets for exploration. Drilling in 2020 has been focused in the Promontorio, Los Pozos, Santa Margarita, and Valenciana areas.

Exploration drilling is carried out with the use of three underground contract drills. The three contract drills are focused on upgrading mineral resource definition, and in drilling new targets. Upgrading of resources is being carried out at the Los Pozos, Valenciana, and Promontorio zones.

The management, monitoring, surveying, and logging of the current 2010 to 2019 series of UGG prefix exploration holes and production drill holes was carried out under the supervision of the mine geological staff.

Up to mid-2016 all sample and geological data was entered into a DataShed© database via the LogChief software. The GMC geological staff now use an in-house software that loads data directly into Microsoft SQL. The contents of the SQL databases are copied daily to a master SQL database in the Great Panther head office in Vancouver with a backup made every evening.

Assay data files are sent directly from the Cata laboratory into a specific site on the Cata server. Database management personnel take the assays from this site and merge them with the sampling information in the SQL database. The Cata laboratory was managed by SGS until December 31, 2018, and presently by in-house personnel.

## 5.B.6.b San Ignacio Mine

Great Panther has completed 491 diamond drill holes at San Ignacio. Drilling commenced in October 2010 and the last hole into the database was completed on July 31, 2020. From the total, 292 holes were drilled from surface and 199 from underground.

Drill holes were usually oriented to intersect the veins at a high angle. A total of 54 additional drill holes have been completed at San Ignacio since the previous Mineral Resource Estimate.

The drilling and development programs since 2019 provided the geological information to support a reinterpretation of the mineralized zones. This included the delineation of night veins in the northern portion of the property between grid line 100N and 1150N where 326 of the 491 holes were completed, and seven veins in the southern part of the property (San Pedro area) between 100N and 1100S where 165 holes were completed. The nine northern veins demonstrating structural continuity were identified from diamond drill hole intersections, underground mapping and sampling, and to some extent surface mapping. These veins have a demonstrated a strike length of up to 1,000 m and a dip length of up to 350 m.

Overall, the core recovery of mineralized zones was excellent averaging 92%. There are no factors related to drilling or sampling that could materially influence the accuracy and reliability of the results.

Procedures related to sample and geological data integrity are consistent with those described for the Guanajuato Mine.

## 5.B.7 Sample Preparation, Analyses and Security

### 5.B.7.a Guanajuato Mine

The drill core samples were prepared by technicians working under the direction of the mine and exploration geologists. The exploration diamond drill core is of HQ and NQ diameter while the production holes drilled prior to July 2011 generally have an AQ diameter. During July 2011, a BQ diameter rig (Diamec) was added to the production drilling capacity. Until the end of 2018, most of the analytical work was carried out at an on-site laboratory managed for Great Panther by SGS which is located within the confines of the Cata facility. The laboratory is equipped to perform Aqua Regia digest, fire assay, gravimetric and AAS. The laboratory reverted to Company management at the beginning of 2019, and

therefore lost its accreditation that was gained under the SGS. The Company has adopted appropriate quality assurance and quality control procedures to compensate. These include sending samples to SGS for assay.

Both the Geology Department core shed and the Cata laboratory are located within the Cata facility which is fenced and guarded around the clock. The site security is consistent with common practical industry standards.

## 5.B.7.b San Ignacio Mine

All sampling and analytical work was conducted by employees, contractors, or designates of Great Panther.

Sample preparation prior to dispatch to the analytical laboratories consisted of splitting the sample in half by cutting the core using a rock saw. Quality control measures included the insertion of quarter-core duplicates, standard reference materials, and blanks into the sample stream.

Chain of custody was established upon sample collection with the use of unique sample ID, documentation of samples per shipment to the lab, and sign-off forms for receipt of samples by the laboratory.

Prior to dispatch, the samples were stored within the core storage and logging facility located at the Company's Cata processing plant site.

Until the end of 2018, most of the analytical work was carried out at a laboratory managed for Great Panther by SGS which is located within the confines of the Cata facility. The laboratory is equipped to perform Aqua Regia digest, fire assay, gravimetric and AAS. The laboratory reverted to Company management at the beginning of 2019, and therefore lost its accreditation that was gained under the SGS. The Company has adopted appropriate quality assurance and quality control procedures to compensate. These include sending samples to SGS for assay.

## 5.B.8 Mineral Resource Estimates

## 5.B.8.a Guanajuato Mine

The Guanajuato Mine Mineral Resource Estimate has an effective date of July 31, 2020 and updates the previous resource estimate to reflect depletion due to mining and resource definition resulting from successful exploration activities.

#### MINERAL RESOURCE ESTIMATE AS OF JULY 31, 2020 - GUANAJUATO

Classification	Tonnes	Grade Ag (g/t)	Contained Ag (oz)	Grade Au (g/t)	Contained Au (oz)	Grade Ag eq (g/t)	Contained Ag eq (oz)	Grade Au eq (g/t)	Contained Au eq (oz)
Measured	286,139	253	2,328,051	1.63	14,995	400	3,677,663	4.44	40,863
Indicated	147,814	241	1,144,963	1.65	7,816	390	1,851,448	4.33	20,572
Total M&I	433,953	249	3,473,014	1.64	22,811	396	5,529,111	4.40	61,435
Inferred	460,174	220	3,258,101	2.07	30,689	407	6,020,031	4.52	66,889

#### Notes:

- 1. Totals may not agree due to rounding.
- Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz).
- 3. A minimum mining width of 0.50 m and a vein bulk density of 2.64 t/m3 were used in the estimates.
- 4. Mineral Resources are estimated using cut-offs based on the full operating costs per mining area of US\$115/t for Cata, US\$115/t for Santa Margarita/San Cayetano, US\$89/t for Los Pozos, US\$100/t for Guanajuato, US\$125/t for Promontorio, and US\$102/t for Valenciana.
- 5. Block model grades converted to US\$ value using plant recoveries of 85.5% Ag, 83.9% Au, and net smelter terms negotiated for concentrates.
- 6. Ag eq oz were calculated using 90:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2020.
- 7. Metal prices US\$17.64/oz silver, and US\$1,694 gold (based on CIBC 2021 forecast).
- 8. Estimates have an effective date of July 31, 2020.
- 9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 10. Inferred Mineral Resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category.

## 5.B.8.b San Ignacio Mine

The San Ignacio Mine Mineral Resource Estimate has an effective date of July 31, 2020 and updates the previous resource estimate to reflect depletion due to mining and resource definition resulting from successful exploration activities.

Updated drilling and interpretation of zones in 2020 has resulted in the addition of Purisima HW, Purisima Int., 700, and Santo Nino zones.

## MINERAL RESOURCE ESTIMATE AS OF JULY 31, 2020 - SAN IGNACIO

Classification	Tonnes	Grade Ag (g/t)	Contained Ag (oz)	Grade Au (g/t)	Contained Au (oz)	Grade Ag eq (g/t)	Contained Ag eq (oz)	Grade Au eq (g/t)	Contained Au eq (oz)
Measured	314,802	142	1,435,252	2.64	26,746	384	3,842,386	4.27	42,693
Indicated	73,096	144	338,246	2.19	5,135	349	800,416	3.87	8,894
Total M&I	387,898	142	1,773,498	2.56	31,881	377	4,642,801	4.19	51,587
Inferred	992,835	169	5,406,142	2.33	74,530	384	12,089,792	4.27	134,331

#### Notes:

- 1. Totals may not agree due to rounding.
- 2. Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz).
- 3. A minimum mining width of 0.50 m and a vein bulk density of 2.68 t/m³ were used in the estimates.
- 4. Mineral Resources are estimated at a full cost cut-off net smelter return (NSR) of US\$100/t using metal prices of US\$17.64/oz Ag and US\$1,694/oz Au (based on CIBC 2021 forecast) and metallurgical recoveries of 85.5% for Ag and 83.9% for Au.
- 5. Ag eq oz were calculated using 90:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2020.
- Estimates have an effective date of July 31, 2020.
- 7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 8. Inferred Mineral Resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category.

The Mineral Resource Estimates for Guanajuato and San Ignacio were completed using MicroMine 3D geological software, and the inverse distance cubed estimation technique was utilized in the estimation of grade to each of the blocks in the block models. An NSR calculator was used to convert block grades into NSR (USD/tonne) values (considering mill recoveries, smelter terms, and designated metal prices). Only blocks with NSR values over the designated full operational cost cut-off were used in the Mineral Resource Estimates.

5.B.8.c Consolidated Mineral Resource Estimate for the GMC

## CONSOLIDATED MINERAL RESOURCE ESTIMATE AS OF JULY 31, 2020 – THE GMC

Classification	Tonnes	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Ag eq (g/t)	Ag eq (oz)	Au eq (g/t)	Au eq (oz)
Total Measured	600,941	195	3,763,303	2.16	41,741	389	7,520,049	4.32	83,556
Total Indicated	220,910	209	1,483,209	1.83	12,951	373	2,651,863	4.15	29,465
Total M&I	821,851	199	5,246,512	2.07	54,693	385	10,171,912	4.28	113,021
Total Inferred	1,453,008	185	8,664,244	2.25	105,219	388	18,109,823	4.31	201,220

#### Notes:

- 1. This consolidated Mineral Resource estimate for GMC includes the estimates of the San Ignacio and Guanajuato mines.
- 2. Totals may not agree due to rounding.
- 3. Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz).
- 4. A minimum mining width of 0.50 metres (m) was used in the estimates.
- 5. For San Ignacio, a vein bulk density of 2.68 t/m³ was used and for Guanajuato, a vein bulk density of 2.64 t/m³ was used in the estimates.
- 6. For San Ignacio, Mineral Resources are estimated at a full cost cut-off net smelter return (NSR) of US\$100/t using metal prices of US\$17.64/oz Ag and US\$1,694/oz Au (based on CIBC 2021 forecast) and metallurgical recoveries of 85.5% for Ag and 83.9% for Au.
- 7. For Guanajuato, Mineral Resources are estimated using cut-offs based on the full operating costs per mining area of US\$115/t for Cata, US\$115/t for Santa Margarita/San Cayetano, US\$89/t for Los Pozos, US\$100/t for Guanajuato, US\$125/t for Promontorio, and US\$102/t for Valenciana.
- 8. For Guanajuato, metal prices US\$17.64/oz silver, and US\$1,694 gold (based on CIBC 2021 forecast).
- 9. For Guanajuato, block model grades converted to US\$ value using plant recoveries of 85.5% Ag, 83.9% Au, and net smelter terms negotiated for concentrates.
- 10. Ag eq oz were calculated using 90:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2020.
- 11. Estimates have an effective date of July 31, 2020.
- 12. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 13. Inferred Mineral Resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category.

#### 5.B.9 Mineral Reserve Estimates

There are no Mineral Reserve estimates for the GMC. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

The Company made production decisions to enter production at the GMC at both Guanajuato, in 2006, and San Ignacio in 2013. The Company did not base these production decisions on any feasibility study of Mineral Reserves demonstrating economic and technical viability of the mines. Thus, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the mines at the GMC or the costs of such recovery. As the GMC does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs will be achieved, each of which risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flow to fund operations from the GMC and ultimately the profitability of these operations.

## 5.B.10 Mining Operations

## 5.B.10.a Guanajuato Mine

Guanajuato consists of a series of interconnected, previously independent, mines including Promontorio, Santa Margarita, Rayas, Los Pozos, Cata, Valenciana and Guanajuatito.

Mining at Guanajuato predominantly comprises cut and fill stoping, with some pillar recovery in historic workings, and a few zones where mineralized extensions are discovered and mined over a period of a few months. Mining is generally more selective using jacklegs. However, where possible, mechanized cut and fill is utilized.

Two main shafts serve access to the active mine areas, while several other old shafts provide ventilation support. The Rayas shaft is used for transportation of personnel and supplies, while the Cata shaft, located just above the processing plant is used to transport the mineralized material for milling. These are currently de-energized and access of men and materials and egress of ore is via the Rayas ramps, San Vicente and Guanajuatito that provide the access at each end of the mine network, including for mobile equipment.

Rock integrity at Guanajuato is considered favorable, but occasionally roof support, in form of rock bolting, and very occasionally wire mesh, is required.

Mining is conducted by contractors, primarily sourced from nearby communities, utilizing equipment owned by the Company and the contractors. Mine contractors and equipment are alternated between the mines, including San Ignacio, to accommodate the mining sequencing.

Guanajuato was placed on a care and maintenance basis from January 2019 to July 2019 to allow for a focused exploration program.

#### 5.B.10.b San Ignacio Mine

Mining at San Ignacio started in the third quarter of 2013 and commercial production was declared in the second quarter of 2014.

The mining method is mechanized cut and fill, with fill provided by waste development. Jacklegs are used in stopes for vertical to 70 degree production holes, and if necessary the hanging wall can be blasted to create a 2.0 m wide stope. Forced air ventilation uses electric fans, and sump pumps operate at 50-60 gpm removing mine water. The two electric air compressors deliver 1,000 cfm at 100 psi. The mine's electric power is supplied by the Mexican national grid.

Mineralized material is trucked to the Cata processing plant using highway rated trucks with 20 tonne payload.

#### 5.B.10.c Production Summary

The following table reflects a summary of the production at the GMC since 2006.

Year	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2006	86,111	105,480	988
2007	203,968	521,225	3,794
2008	155,079	848,083	5,488
2009	138,517	1,019,751	6,748
2010	144,112	1,019,856	6,619

Year	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2011	169,213	959,490	7,515
2012	174,022	1,004,331	10,350
2013	221,545	1,079,980	15,063
2014	267,812	1,239,009	15,906
2015	309,944	1,708,061	21,126
2016	320,043	1,473,229	21,626
2017	316,810	1,386,964	21,501
2018	301,014	1,096,757	19,073
2019	187,610	590,781	11,588
2020(2)	151,001	520,903	6,779
Total	3,146,801	14,573,903	174,164

#### Notes:

- 1. 2006-2015 reported figures reflect tonnes milled, 2016-2020 reported figures reflect tonnes mined which has a small discrepancy to tonnes milled.
- 2. The operations at the GMC were suspended from April 2, 2020 through June 3, 2020 on account of the directive of the Mexican Federal Government to mitigate the spread of COVID-19.

The Company presents production forecasts for its Mexican operations on a consolidated basis annually. For more information, see the Guidance and Outlook section of the 2020 MD&A.

Readers are cautioned that there are no current estimates of Mineral Reserves for any of the Company's Mexican mines. The Company made decisions to enter into production at Guanajuato and San Ignacio without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the mines, and anticipates making future production decisions without the benefit of these feasibility studies.

As a result, there may be increased uncertainty and risks of achieving any particular level of recovery of minerals from the Company's mines or the costs of such recovery. With the exception of Tucano, the Company's mines do not have established Mineral Reserves and the Company faces higher risks that anticipated rates of production and production costs, such as those provided above, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenue and cash flow to fund operations from and ultimately achieve or maintain profitable operations.

## 5.B.11 Recovery Methods

Mineralized material from both Guanajuato and San Ignacio is blended and processed at the Cata processing plant at Guanajuato.

The three-stage crushing plant is designed to produce ball mill feed that is less than 3/8 inch in size. Runof-mine material is passed through a grizzly, into the 1,000 tonne coarse material bin. Oversize is broken manually or with a backhoe-mounted rock-hammer. The coarse material is approximately minus 18 inch material. From the coarse bin the material is taken by an apron feeder and over a vibrating grizzly to the Pettibone (24 inches by 36 inches) primary jaw crusher. The jaw crusher has a closed setting of four inches. A second 500 tonne capacity coarse material bin is available, complete with a smaller crusher to enable separate handling of material if desired.

The flotation section was greatly improved with the installation of five automated Outotec cells in 2012, which replaced the old sections of rougher cells. The flotation products of these cells are sent, according to their quality, to cleaning cells or recirculated with scavenger products and cleaner tails for regrinding. After the cleaning step, the concentrate is sent to the concentrate thickener section and filtered to remove excess water, leaving final average moisture content of 11%. Final product concentrate is transported by highway trucks to the point of sale according to existing contracts.

In addition, a small mill for regrinding was installed in April 2012. The middling products (i.e. cleaning cell tails together with the scavenger products) are reground to liberate the valuable sulfides before being recirculated to the head of the flotation circuit.

Over the last eight years, other improvements include: (i) installation of a new electrical substation; (ii) total change of electrical cables; (iii) new tailings pumping system to the tailings dam (fully instrumented); and (iv) the implementation of a single pump station to replace the old system with five pumping stations to reduce electrical consumption.

## **5.B.12** Infrastructure, Permitting and Compliance Activities

#### 5.B.12.a Overview

The GMC also includes ancillary infrastructure for senior management, technical services, assay laboratory, warehousing, finance, and other administrative services, and are located adjacent to the Cata processing plant. There are other smaller mine buildings located at San Vicente and San Ignacio.

The GMC enjoys proximity to urban development, including power and road infrastructure. Medical facilities are available at a short distance.

## 5.B.12.b TSF Permitting and Capacity

In February 2016, the Company was advised by the national water authority, CONAGUA, that the Company is required to make applications for permits associated with the occupation and construction of the TSF at the GMC. Subsequently, the Company filed its applications and CONAGUA officials carried out an inspection of the TSF and requested further technical information, which the Company submitted in December 2017. In December 2017, the Company also filed with the Mexican environmental permitting authority, SEMARNAT, an amendment to the environmental impact statement reflecting the proposed normal TSF construction activities.

Approval for the expansion of the TSF at the GMC (lifts 18 and 19) by SEMARNAT has been obtained, subject to also receiving approval by the national water authority, CONAGUA which is pending. In parallel, the Company has completed its review to identify technical alternatives to extend its tailings storage capacity utilizing existing permits and has begun modifying the tailings discharge using cyclones to extend the tailings capacity until June 30, 2021. This will allow more time for receipt of the pending expansion approval from CONAGUA; however, if the expansion approval of the TSF has not been received in a timely manner and prior to June 30, 2021, the Company may need to cease milling operations at the GMC until receipt of the approval from CONAGUA.

The Company believes its existing current tailings footprint can be maintained and can support operations at the GMC until May 2023, subject to receipt of further approvals associated with the expansion of the lifts 18 and 19 of the GMC TSF.

If the permits for expansion of the GMC TSF is not received in a timely manner or conditioned, before June 30, 2021, or it is received but subject to unfavourable conditions, the Company may need to cease milling operations at the GMC until receipt of the CONAGUA expansion approval or the satisfaction of such conditions.

For a discussion of risks associated with the GMC TSF capacity and permitting matters, see Section 8 of the AIF under the heading "Risk Factors – "The Risks Associated with Obtaining and Complying with Tailings and Other Permits".

### 5.B.12.c Wastewater Discharge

In June 2016, the Company filed a request for authorization to discharge wastewater in San Ignacio. The authority conducted a technical visit in November 2016. In April 2018, the authority requested additional information, which the Company promptly submitted. In the fourth quarter of 2019, the Company received the authorization to legally discharge wastewater from San Ignacio.

## 5.B.12.d Voluntary Environmental Audit

In 2016, the Company entered a voluntary environmental audit program in cooperation with PROFEPA, the compliance arm of the SEMARNAT environmental authority. Following the audit, and identification of improvement areas, a mitigation plan was devised to resolve all outstanding improvements over the next few years. This voluntary program was chosen as a proactive measure to correct any deficiencies during which the Company would enjoy a cooperative relationship with the authority, while limiting its exposure to any new citations and penalties.

## **5.B.13** Exploration and Development

At San Ignacio, exploration efforts will continue in 2021 and include 5,000 m of fill-in surface drilling planned along the Purisima veins south of the development of the San Pedro ramp, deeper in the Purisima/Purisima alto vein system and continue testing for Au-Ag mineralization along 1.1km of Purisima vein north from the old San Ignacio shaft.

At Guanajuato, a concerted effort of sampling and geological mapping in accessible parts of the historical mining areas is near completion and will be followed by a planned 10,000m of underground drilling in 2021 on the most prospective areas, including along the north side of Valenciana, between Valenciana and Cata, and in the Pozos, Promontorio, and Guanajuatito areas.

The consolidated GMC drill programs have a planned expenditure of \$2.0 million.

## 5.C. TOPIA

The scientific and technical information on Topia in this Section 5.C. of the AIF is based on the Topia Technical Report described in Section 1.E. of the AIF. The conclusions, projections and estimates as well as certain other information included in this Section of the AIF are presented in summary form and subject to the qualifications, assumptions and exclusions set out in the Topia Technical Report. Readers are recommended to read the Topia Technical Report in its entirety to fully understand the project. The Topia Technical Report in available on SEDAR (www.sedar.com) or on EDGAR (www.sec.gov).

## 5.C.1 Topia Mine

Effective February 18, 2004, the Company entered into an option agreement, which granted it the right and option, for a term of one year, to purchase 100% of the ownership rights in and to all the fixed assets, machinery, equipment (including the mill, buildings, offices, houses and quarters for the workers) and Topia Mining Concessions located in the Municipality of Topia, state of Durango, Mexico from Compañía Minera de Canelas y Topia, as optionor, by making cash payments totalling \$1.7 million. The Company completed the cash payments on exercise of the option in February 2005. In addition to the payments to the optionor, the Company agreed to assume debt encumbering the property totalling \$0.8 million upon signing of the purchase agreement. The debt owing was secured by Topia's assets. The balance of the debt was repayable out of production from concentrate sales as a 10% NSR royalty. After the debt was repaid, there was no further royalty. The remaining debt balance was fully paid and there are no outstanding conditions to retain title to the property.

The Company has mineral rights covering the operating mines and associated properties. The Company has surface rights for the land on which the plant sits and agreements for the properties covering the operating mines and tailings facilities.

## **5.C.2** Project Description, Location and Access

Great Panther holds a 100% interest in Topia through its wholly owned Mexican subsidiary, MMR.

Topia is situated in the Sierra Madre, around the town of Topia, Durango State, Mexico, approximately 235 km northwest of the city of Durango. Ground access is provided via 350 km of paved and gravel road, travelling north from the city of Durango, via Highway 23 to Santiago Papasquiaro, and then west to Topia. Total travel time by road is approximately eight hours. Small aircraft flights from Culiacán and Durango service the town of Topia daily.

The property encompasses 53 contiguous concessions that total approximately 6,686 hectares. The Topia mill and office complex is located at approximately 25° 12′ 54″ N latitude and 106° 34′ 20″ W longitude.

The Topia area lies within the Sierra Madre Occidental ("SMO"), in a remote region of rugged terrain. Hillsides are quite steep with elevations ranging from 600 masl up to over 2,000 masl.

The climate is generally dry for most of the year, with a wet season from June to September, during which time 200 mm to 500 mm of rain may fall. The annual mean temperature is 17°C, but winters can be cool with frosts and light snow, particularly at higher elevations. Exploration and mining work can be conducted year-round.

Vegetation consists of thickly inter-grown bush, comprising mesquite, prickly pear, nopal and agave, giving way to pine and oak forest at higher elevations.

Land use in the area is predominantly mining, forestry and agriculture.

#### 5.C.3 History

Mining in the region predates European colonization and was first reported in the Topia area in 1538. The first mineral concessions were granted at Topia in the early 1600s.

Production from Topia during the period spanning the latter portion of the 19th century until the Mexican Revolution in 1910 was reportedly between \$10 million and \$20 million. This is estimated to have been the equivalent of between 15 million and 30 million ounces of silver.

Compañía Minera Peñoles SA ("Peñoles") acquired the mines in the district in 1944 and completed the construction of a flotation plant in 1951. Peñoles operated at Topia from 1951 to 1990 when the operations were sold to Compañía Minera de Canelas y Topia which carried on operations privately until 1999 when the mine was shut down due to low metal prices. Production for the period 1952 to 1999 totalled 17.6 million ounces of silver and 18,500 ounces of gold.

Following Great Panther's acquisition of Topia in 2004, Great Panther refurbished and recommissioned the mill during the second half of 2005 and gradually increased the throughput at the plant. At the end of 2005, the mine was put back into production, after having been on care and maintenance for the prior six years. Since 2005, the Company has undertaken the rehabilitation of many of the mines in order to re-access the Argentina, La Dura, Don Benito, El Rosario, San Gregorio, San Miguel, San Jorge, La Prieta, Cantarranas, Animas, Oliva, Las Higueras, San Pablo, Oxi, Oxidada and Recompensa veins and resample parts of the veins as part of a due diligence on sampling carried out by Peñoles. This resampling, combined with the sampling carried out by Peñoles, forms a partial basis for the current Mineral Resource estimate.

Since 2006, underground exploration and production channel samples have been collected by Great Panther from all stopes and development drifts. This work included new development along the San Gregorio, El Rosario, Cantarranas, Don Benito, Las Higueras, San Pablo, Oxi, Oxidada, La Prieta and Recompensa veins. Exploration diamond drilling programs have targeted the various vein structures.

## 5.C.4 Geological Setting, Mineralization and Deposit Types

The Topia district lies within the SMO, a north-northwest-trending belt of Cenozoic-age rocks extending from the US border southwards to approximately 21°N latitude. The belt measures roughly 1,200 km long by 200 km to 300 km wide. Rocks within the SMO comprise Eocene to Miocene age flows and tuffs of basaltic to rhyolitic composition with related intrusive bodies. The property is underlain by a km thick package of Cretaceous and Tertiary andesite lavas and pyroclastic rocks which are, in turn, overlain by younger rhyolitic flows and pyroclastics. The volcanic sequence is transected by numerous faults, some of which host the mineralized veins in the district. There are two sets of faults: one striking 320° to 340° and dipping northeast and the other striking 50° to 70° and dipping steeply southeast to vertically. The northeast-trending faults are the principal host structures for precious and base metal mineralization.

The mineral deposits at Topia are adularia-sericite-type, silver-rich, polymetallic epithermal veins. Silver-gold-lead-zinc mineralization is found in fissure-filling veins along sub-parallel faults. Mineralization within the veins consists mainly of massive galena, sphalerite, and tetrahedrite in a gangue of quartz, barite, and calcite. The vein constituents often include adularia and sericite, and the wider fault zones contain significant proportions of clay as both gouge and alteration products.

Ore minerals occur as cavity-filling masses, comprising millimetre-scaled crystals of galena and sphalerite. No definitive metal zoning has been discerned, but the lower parts of the mines are reported to contain higher gold content than at higher elevations.

The veins range in thickness from a few cm to three m. They are very continuous along strike, with the main veins extending more than four km. The Madre vein has been mined for 3.5 km and the Cantarranas vein for 2.4 km. Many of the other veins have been mined intermittently over similar strike lengths. Vertically, the veins grade downward to barren coarse-grained quartz-rich filling and upwards to barren cherty quartz-calcite-barite vein filling. The main host rock is andesite of the Lower Volcanic Series, which is usually competent, making for generally good ground conditions within the mine. In wider sections, with greater clay content and/or zones of structural complexity, ground conditions are less favourable.

## 5.C.5 Exploration

Exploration work carried out at Topia by Great Panther has comprised diamond drilling, chip sampling, mapping, and underground development. The underground drilling from 2006 to 2014 was focused on short term production and local expansion of the mineralized veins in all mining areas at Topia. Typically, these include interpretation of fault offsets, gaining a better understanding of multiple splays from the primary veins, and a better understanding of grade/width of veins before exploitation. Underground drilling re-commenced in 2018 and is ongoing as of the date of this AIF.

#### 5.C.6 Drilling

Great Panther has been diamond drilling at Topia since 2004. Drill programs were planned and supervised by personnel employed by the Company, its subsidiaries, and/or contractors. The surface drilling programs conducted from 2004 to 2012 and in 2017 were carried out under contract. Underground drill programs were carried out by Topia drillers. Core logging and collar surveys were carried out by Great

Panther personnel. All surface holes are NQ-size, although some surface holes were collared as HQ (6.35 cm diameter) and reduced to NQ. Underground drill holes are A size core.

Core logs, sample intervals, and surveys are entered into a Microsoft SQL database using a proprietary logger. The database is managed and validated by Great Panther mine staff, with the assistance of exploration personnel based in Vancouver.

The core logging and sampling is carried out within a fenced compound at the mill site. Access to the core is restricted to Great Panther employees or contractors. The core shack and sampling facility are adequately equipped and secure. Core recovery in those sections reviewed by the Topia Qualified Person was appropriate, and the sampling was done correctly.

## 5.C.7 Sampling, Analysis and Data Verification

Sampling comprises both diamond drill and channel samples. Drill holes provide a reliable indication of the vein locations but drifting and raising on vein was required to fully evaluate the quantity and grade of the Mineral Resources.

The channel sampling was conducted either across the back or at waist height across the drift face using a hammer and moil. The protocol for sample lengths was that they were to be no longer than two m. Sample spacing was in the order of 1.5 m to 2.5 m in the more densely sampled areas. The veins tend to be very steeply dipping to vertical, and so these samples are reasonably close to representing the true width of the structure.

The channel samples were processed and assayed at the Topia laboratory. Samples were dried, crushed in two stages, riffle split and pulverized. A sample was taken from the pulp and weighed, while the rest was kept in storage. Samples were analyzed for gold and silver by fire assay and gravimetric finish, or for base metals by atomic absorption.

Diamond drill core samples were marked on the core by geologists. Samples did not cross lithological limits and their lengths were constrained to within a minimum of 10 cm and a maximum of two m. Mineralized structures and the material adjacent to them were always sampled. For sets of veins with less than five m separation, the material between veins was sampled entirely. Samples were taken using a diamond saw to split the core. The samples were prepared at the Topia laboratory.

The total database encompasses three components: diamond drilling, production channel sampling, and the historical development channel sampling completed by the former owner, Peñoles. All three datasets were variably used in the modeling of the various veins and vein splays. Peñoles data in certain mines were minimal.

In the opinion of the Qualified Person at the time, the sampling at Topia was conducted in an appropriate fashion using techniques that are commonly used in the industry. The samples were properly located and oriented and were representative of the mineralization. Assaying is being conducted using conventional methods, in facilities that are properly configured and managed. Performance of the laboratory is being monitored by both internal QA/QC protocols and comparison with an external laboratory.

All phases of the sampling, transport and assaying were carried out under the supervision of Great Panther authorized personnel or authorized contractors. The Topia lab and core handling facility are enclosed within the mill compound, which was constantly supervised and reasonably secure. The sample preparation, analysis, and security procedures at Topia were adequate and consistent with common industry standards.

#### 5.C.8 Mineral Resource Estimates

The estimate of Mineral Resources was last completed for Topia with an effective date of July 31, 2018 (refer to the corresponding Topia Technical Report).

## MINERAL RESOURCE ESTIMATE AS OF JULY 31, 2018 - TOPIA

Classification	Tonnes	Grade Ag (g/t)	Grade Au (g/t)	Grade Pb (%)	Grade Zn (%)
Measured	310,600	474	1.36	4.02	4.20
Indicated	165,300	436	1.34	3.57	3.79
Total M&I	475,900	461	1.35	3.87	4.06
Inferred	400,400	434	1.34	2.86	2.97

#### Notes:

- 1. Mineral Resources are classified in accordance with the CIM Definition Standards.
- 2. Area-Specific Bulk Densities as follows: Argentina 3.06t/m³; 1522 3.26t/m³; Durangueno 3.12t/m³; El Rosario 3.00t/m³; Hormiguera 2.56t/m³; La Prieta 2.85t/m³; Recompensa 3.30t/m³; Animas 3.02t/m³; San Miguel 2.56t/m³.
- 3. NSR cut-offs include 1522 Mine \$193/t, Argentina Mine \$172/t, Durangueno Mine \$144/t, Recompensa Mine \$151/t, Hormiguera Mine \$152/t, El Rosario Mine \$173/t, La Prieta \$235/t, Animas \$149/t, and San Miguel \$248/t.
- 4. A minimum mining width of 0.30 m was used.
- 5. Mineral Resources are estimated using metal prices of: \$1,225/oz Au, \$15.50/oz Ag, \$1.00/lb Pb, and \$1.15/lb Zn.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- 7. Totals may not agree due to rounding.

The resources were estimated from seven area-specific block models. A set of 52 wireframes representing the mineralized zones (veins) served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID³) gold, silver, lead and zinc grade interpolations. Each block residing at least partly within one of the 52 wireframes received a grade estimate.

### 5.C.9 Mineral Reserve Estimates

There are no Mineral Reserve estimates for Topia. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability.

## 5.C.10 Mining Operations

Topia consists of several mines, which comprise Argentina, 15-22, San Miguel, 9 North, San Juan, Recompensa, Hormiguera, El Rosario, La Prieta, El 80, and Durangueno.

Mining at Topia generally consists of development along very narrow veins. Mining is selective using jacklegs, however, where possible, mechanized cut and fill is deployed. All mines are accessed via adits and ramps, although internal passes are constructed to access the upper and lower ore zones. Rock integrity at the mines at Topia is considered favorable, but on rare occasions roof support, in the form of rock bolting, and occasionally wire mesh, is required.

Mining is conducted by contractors and in-house miners sourced from nearby communities and outside cities, and utilizes equipment owned mostly by the Company. Mine contractors and equipment are alternated between the mines to accommodate the variations in production plans.

For the narrower veins at Topia, mining is conducted by overhand cut and fill stoping with resuing to selectively mine the mineralized material separate from the waste to minimize dilution. Drilling is performed with jackleg drills and mineralized material is hand mucked in the stope and dropped down timber crib muck passes which are developed upwards as the stoping advances. Mineralized material is hand sorted at the face so that only the higher-grade material is removed from the stope. Worker access and ventilation is provided in timber crib man-ways adjacent to the muck passes. The level interval for the stopes is typically 40 m.

The use of ground support in the small tunnels and narrow stopes is infrequent as the small headings require little support.

From the muck passes the mineralized material is pulled via manual chutes, loaded into small rail cars and hand trammed to a stockpile at the portal. At the surface ore stockpile, the mineralized material may again be hand sorted to remove waste material. The mineralized material is then picked up by front end loader and loaded into highway-style 10 tonnes to 20 tonnes capacity dump trucks to be hauled to the mill.

Along the Argentina and Don Benito veins, in the Argentina and 15-22 Mines respectively, there are significant areas with vein widths ranging from 0.5 to 1.0 m. In these wider areas, mechanized cut and fill mining is applied with resuing to control ore dilution with waste. Mobile equipment used includes small 2 cubic yard LHDs for development and 1 cubic yard and 0.5 cubic yard LHDs for mucking in the stopes. Development access is provided via decline. Ground support consists of rock bolts and mesh as required.

Sublevels are 40 m apart in the mechanized cut and fill areas. Waste is either generated from material beside the vein, which is blasted separately from the mineralized material, or elsewhere from waste development within the mine to remain as backfill.

Lifts in the mechanized cut and fill stope are taken with horizontal holes (breasting) instead of drilling uppers (which is more productive) since it generates a ragged back leading to problems with ground support.

Mineralized material is hauled from the mechanized cut and fill stopes by LHD and then loaded into a truck for haulage to the mill.

## **5.C.11 Processing and Recovery Operations**

The mill employs conventional crushing, grinding, and flotation to produce lead and zinc sulfide concentrates. The operation normally runs seven days a week, 24 hours per day, with a weekly maintenance shift. The conventional wet tailings handling system was transitioned to dry stack by construction of a filtration facility that commenced operation in 2017.

## 5.C.12 Infrastructure, Permitting and Compliance Activities

## 5.C.12.a Overview

Topia is a relatively small town of approximately 3,500 people. However, a good portion of the population has worked in mining and there is a good local source of labour. The town is serviced by road, chartered air service, power grid, telephone, and a high-speed microwave communication system. There are restaurants, hostels, and medical services; however, there are no banks or automated banking machines. Great Panther uses a microwave point-to-point service for telephone and internet, and also maintains fixed telephone lines for redundancy. Water is available from numerous springs, streams and adits.

The surface and underground infrastructure at Topia includes the following:

- Extensive underground workings;
- Multiple adits from surface as well as raises, drifts, cross-cuts, sub-levels and ramps;
- Mine ventilation, dewatering and compressed air facilities;
- Conventional and mechanized underground mining equipment;
- Mine, geology, processing and administrative offices;

- A flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells and concentrate dewatering circuit;
- A tailings filtration and dry stack storage facility; and
- Connection to the national grid for the supply of electric power.

There are no known environmental liabilities associated with the mineral claims, other than the provision recognized in the Annual Financial Statements for the estimated present value of future reclamation and remediation associated with the future retirement of Topia.

## 5.C.12.b Topia TSF

All permits are in place for Topia, the latest being the permit issued by SEMARNAT in December 2017 for use of the Phase II TSF for deposition of filtered tailings. Phase II is a dry stack operation using filter cake with an underdrainage system to assist in removing water from Phase I. The deposition includes stacking and compaction of the material.

Phase I of the TSF was closed and contoured during 2018. Based upon recommendations from an independent consulting firm, three additional instrumentation stations in the footprint of the TSF were put in place in 2019 for the purposes of continuous monitoring.

An independent consulting firm will continue to perform an annual review of Phase I, as well as conduct geotechnical reviews and provide design considerations for Phase II.

On March 9, 2020, the Company announced it had temporarily ceased tailings deposition at its Topia Phase II TSF following receipt of a report on the TSF from the independent tailings management and geotechnical consultants engaged by the Company to evaluate the TSF. The report recommended that stacking of tailings of the Phase II area of the TSF be discontinued based on evidence of mass movement underlying Phase I and Phase II of the TSF. Mining and processing activities continued uninterrupted with tailings being deposited at alternative temporary locations until processing activities were halted by the government enforced shutdown due to COVID-19.

During the suspension of non-essential activities due to COVID-19, Great Panther continued monitoring the conditions on Phase II and installed additional geotechnical instrumentation, including several new piezometers and inclinometers, as recognisance work was permitted. In addition, tests were carried out to determine the state of the tailings in Phase I. Extensive work has been carried out to identify and reduce the flow of water into the base of the TSF. The completion of the geological reconnaissance program during the suspension of operations allowed time to implement remedial measures, including the drilling of several dewatering and depressurization wells in and around Phases I and II. Monitoring indicated that it was safe to return stacking in Phase II, which is expected to provide sufficient capacity until the end of 2022. Deposition at Phase II recommenced in August 2020 on the basis of continued positive results of monitoring and an interim stacking plan for Phase II received from a third-party consultant with strict control on sequence and compaction level. The Company has also received the required permit for Phase III, which will be available for use after constructing retaining walls and erosion controls around the base of the facility.

The Company has implemented precautionary measures to mitigate the risk of movement of the TSF material, including notification and relocation of certain inhabitants who moved back to live below the TSF after having previously been relocated away from the TSF. The company has drilled a series of dewatering wells regionally in the location of Phase I and II and 6 depressurization wells in Phase I, as part of the recommending remediation. The Company also repaired all drainage systems in the regional area by concrete lining and repaired the catchment sumps below Phase II in effort to limit water infiltration

into the TSF's. The final installation of pumps occurred in February 2021. Movement to date and with the return to Phase II deposition has been within in the established Trigger Response Action Plan ("TARP") parameters. Currently the area is in the "green" category of TARP. Phase III is on top of the old Peñoles TSF and the stacking of filtered tails would also form part of the remediation work required for this TSF. The Company received operation and construction permit from SEMARNAT in the third quarter of 2020. Remediation work including foundation and drainage control will proceed in Q1, 2021 and be completed by July 2021. Phase II and Phase III TSFs have combined dry stacking capacity for several years. There is no assurance that there will not be further movement underlying Phase I and Phase II of the TSF or that the continued remediating and monitoring techniques will be effective. For a discussion of risks associated with the Topia TSF, see Section 8 of this AIF under the headings "Risk Factors - Mining and Mineral Exploration Have Substantial Operational Risks" and "Risk Factors - Risks Associated with Continued use of Topia Tailings and Expansion".

## 5.C.12.c Voluntary Environmental Audit

Reviews by the regulatory authorities dating back to 2015, coupled with permitting work undertaken by the Company in connection with the expansion of the Topia TSF, have led to a broader review by the PROFEPA and by the Company of the permitting status for all of Topia operations, environmental compliance (including the historical tailings dating back to periods prior to Great Panther's ownership) and a clarification of land titles. Devised as a cooperative management strategy, Topia was accepted into a voluntary environmental audit program supported by PROFEPA which commenced during the second quarter of 2017. The Company is working on a compliance program authorized by PROFEPA to address the audit findings. This compliance program includes remediation, and technical reviews as defined by the audit. Progress updates will be submitted to PROFEPA for further review. The Company anticipates that it will be able to achieve full compliance.

### 5.C.13 Production

#### 5.C.13.a Production

The Company has established a LOM estimate for Topia of 3.0 years as at December 31, 2020 for the purposes of amortizing the mineral, properties, plant and equipment. This LOM estimate does not take into account any additional Mineral Resources which may be discovered through recent and future exploration drilling. The Company re-evaluates its LOM estimate on an annual basis. The Company will commence reclamation and remediation at Topia shortly before the end of its mine life and carries a provision of \$6.6 million to cover these costs. The estimate of asset retirement costs is calculated using current cost estimates which are then inflated to the future expected cash flow and then discounted to a current value using a risk-free rate of interest consistent with the expected cash flow timing, all as more particularly described in the Audited Financial Statements.

The provision is based on a closure cost estimate discounted to present value. If no further Mineral Resources are defined, reclamation and remediation at Topia are anticipated to commence in 2024 and continue through to 2047. However, the timing and amount of reclamation and remediation is subject to future changes in the LOM estimate. For example, the addition of Mineral Resources through recent and future exploration drilling could extend the LOM estimate.

For the year ended December 31, 2020, 1.1 million Ag eq oz were produced at Topia.

Readers are cautioned that there are no current estimates of Mineral Reserves for any of the Company's Mexican mines. The Company made decisions to enter into production at Topia without having completed

final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the mines, and anticipates making future production decisions without the benefit of these feasibility studies.

As a result, there may be increased uncertainty and risks of achieving any particular level of recovery of minerals from the Company's mines or the costs of such recovery. With the exception of Tucano, the Company's mines do not have established Mineral Reserves and the Company faces higher risks that anticipated rates of production and production costs, such as those provided above, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenue and cash flow to fund operations from and ultimately achieve or maintain profitable operations.

Below is a summary of the historical production of Topia.

**Production – Topia Mine** 

Year	Tonnage (Tonnes) <sup>1</sup>	Silver (Oz)	Gold (Oz)	Lead (Tonnes)	Zinc (Tonnes)
2006	22,445	208,004	406	627	742
2007	33,605	279,441	643	735	847
2008	35,318	366,199	812	876	1,074
2009	30,045	437,079	403	871	1,057
2010	38,281	515,101	597	1,092	1,358
2011	46,968	535,881	500	941	1,315
2012	56,098	555,710	573	962	1,477
2013	62,063	631,235	651	1,116	1,673
2014	67,387	667,636	555	1,154	1,675
2015	65,387	677,967	614	1,198	1,850
2016	55,836	574,031	612	1,033	1,496
2017	53,745	595,721	999	1,291	1,757
2018	73,605	761,107	1,087	1,958	2,361
2019	79,257	938,581	1,344	1,960	2,576
2020	57,391	597,194	835	1,233	1,714
Total	777,431	8,340,887	10,631	17,047	22,972

Note:

The Company presents production forecasts for its Mexican operations on a consolidated basis annually. For more information, see the Guidance and Outlook section of the 2020 MD&A.

## 5.C.14 Exploration and Development

Development plans for Topia during 2021 are limited to ongoing underground mine development and exploration drilling in the normal course of operations. The Company plans to spend \$1.0 million in 2021 on a surface drilling program of 5,000 m focused on defining new Mineral Resources in six areas along the strike and down-dip extents of present mining efforts.

<sup>1.</sup> Includes purchased ore tonnes milled. Excludes custom milled tonnes.

Includes purchased ore tonnes milled. Excludes custom milled tonnes.

# 6. ADVANCED-STAGE PROJECTS

## 6.A. CORICANCHA

#### 6.A.1 Coricancha

Coricancha is a polymetallic mine that includes a 600 tonne per day flotation and gold BIOX® bio-leach plant along with supporting mining infrastructure. Coricancha has been on care and maintenance since August 2013 when it was closed due to falling commodity prices. The Coricancha property comprises more than 3,700 hectares in the prolific Central Polymetallic Belt and production at the mine dates to 1906. Gold-silver-lead-zinc-copper mineralization (approximately 80% gold-silver by value) occurs as massive sulphide veins that have been mined underground by cut and fill methods.

The Company's Peruvian subsidiary, Great Panther Silver Peru S.A.C. ("GP Peru"), completed the acquisition (the "Coricancha Acquisition") of all of the issued and outstanding shares of Nyrstar Coricancha S.A. from Nyrstar International B.V. and Nyrstar Netherlands (Holdings) B.V., as sellers (together "Nyrstar") on June 30, 2017 (the "Completion"). Nyrstar Coricancha S.A. was the 100% owner of Coricancha, gold-silver-lead-zinc-copper mine and mill complex in Peru at Completion.

The Coricancha Acquisition was completed pursuant to a Share Purchase Agreement originally dated December 19, 2016, among the Company, GP Peru, Nyrstar, and Nyrstar Coricancha SA (the "Original SPA"). The Original SPA was amended and restated on June 9, 2017 (the "Amended and Restated SPA") and further amended by agreement dated June 28, 2017 (the "Second Amendment Agreement") and further subsequently amended pursuant to an amending letter agreement dated June 27, 2020 (the "Amending Agreement" and collectively, with the Original SPA, the Amended and Restated SPA and the Second Amendment herein referred to as the "SPA").

The legal name of Nyrstar Coricancha S.A. was changed to Great Panther Coricancha S.A. ("GP Coricancha") after to the Coricancha Acquisition. In this AIF, Nyrstar Coricancha S.A. is also referred to as GP Coricancha.

#### 6.A.1.a The SPA

The parties entered into the Amended and Restated SPA in order to incorporate certain amendments to facilitate the reorganization of Nyrstar's investments in Peru in connection with its planned divestitures. The amendments in the Amended and Restated SPA did not materially impact the terms of the acquisition under the Original SPA. The parties entered into the Second Amendment Agreement in order to defer payment of the initial \$0.1 million portion (the "Completion Price") of the Purchase Price (defined in 6.A.1.c below) from Completion to a date no later than five business days following the receipt of a final cost certificate from the Peruvian tax authority that related to the cost base of Nyrstar's shares in GP Coricancha. The Second Amendment Agreement also included corresponding agreements relating to certain tax matters. The Amending Agreement was concluded to amend and restate the Mine Closure Agreement (defined and described below) and to make certain agreements with respect to the Cancha tailings reclamation obligation and extend a right of Nyrstar to purchase Coricancha tendered concentrates for two- and one-half-year period following the initial five-year period from Completion, subject to certain rights of first offer in favour of Samsung.

A copy of the Original SPA was filed on SEDAR on January 13, 2017. A copy of each of the Amended and Restated Share Purchase Agreement and the First Amendment Agreement were filed on SEDAR on July 10, 2017. A copy of the Amending Agreement and the Amended and Restated Mine Closure Agreement (which is a schedule to the Amending Agreement) are being filed concurrently with this AIF. Readers are

advised to refer to the filed agreements for a complete description of the terms of the Acquisition. The forms of the Mine Closure Agreement, Earn-Out Agreement and Nyrstar Parent Guarantee, each as discussed below, are each included as exhibits to the Original SPA and Amended and Restated SPA. The summary of material terms of each of the agreements provided in this AIF is qualified by reference to the entirety of the SPA.

Reference to the "Amending Agreements" shall be to the Letter Agreement and the Amended and Restated Mine Closure Agreement. Reference to the Coricancha Agreements shall be to each of the acquisition agreements, as amended from time to time including, collectively, the Original SPA, the Amended and Restated SPA, the Second Amendment, the Mine Closure Agreement, the Earn-Out Agreement, the Nyrstar Parent Guarantee, the Letter Agreement and the Amended and Restated Mine Closure Agreement.

Capitalized terms used in the discussion below that are not defined have the meaning prescribed to them in the SPA and related exhibits.

## 6.A.1.b Closing of the Coricancha Acquisition

The Coricancha Acquisition was completed by Nyrstar transferring all of the issued and outstanding shares of Nyrstar Coricancha S.A. to GP Peru. Concurrently, the following agreements were executed in accordance with the SPA and came into effect on Completion:

- An earn-out agreement between the Company, GP Peru, Nyrstar, and Nyrstar Coricancha S.A., in the form attached to the SPA (the "Earn-Out Agreement");
- A mine closure agreement between Nyrstar and Nyrstar Coricancha S.A., in the form attached to the SPA (the "Mine Closure Agreement"); and
- A guarantee of Nyrstar NV, the ultimate parent of Nyrstar, in favour of GP Peru and the Company, in the form attached to the SPA (the "Nyrstar Parent Guarantee").

Nyrstar and the Company also executed a transition services agreement on closing in order to facilitate the transition of management and ownership of Nyrstar Coricancha S.A. to the Company and GP Peru. The transition services agreement was in effect for several months following Completion.

#### 6.A.1.c Acquisition Consideration

Under the terms of the SPA, GP Peru acquired Nyrstar Coricancha SA from Nyrstar for a purchase price (the "Purchase Price") comprising:

- the Completion Price of \$0.1 million, which was paid subsequent to Completion in September 2017: and
- up to \$10.0 million in earn-out consideration to be paid under the Earn-Out Agreement, as described further below.

## 6.A.1.d Earn-Out Agreement

Under the Earn-Out Agreement, GP Coricancha will pay Earn-Out Consideration to Nyrstar that will equal 15% of the free cash flow generated by Coricancha during the five-year period after which Coricancha is cumulative free cash flow positive from completion, to a maximum of \$10.0 million. Specific material terms of the Earn-Out Agreement include the following:

- the Earn-Out Consideration will be determined as being equal to 15% of the Free Cash Flow of the Company during the Earn-Out Period, calculated and paid at the end of each relevant fiscal year of the Company during the Earn-Out Period;
- Free Cash Flow will be determined as the net income or loss of Coricancha, with adjustment for certain amounts specified in the Earn-Out Agreement related to depreciation and amortization, non-cash expenses and losses, deferred income tax and sustaining capital expenditures, each as determined in accordance with IFRS;
- the Earn-Out Period will begin on the Trigger Date (as defined below) and will expire on the earlier
  of:
  - the date that is five years from the Trigger Date; and
  - the date on which the Cumulative Free Cash Flow generated from Coricancha since the Trigger Date has equaled an amount such that the Earn-Out Consideration to be paid by the Company to Nyrstar under the Earn-Out Agreement will equal \$10.0 million;
- the Trigger Date will be the date on which the aggregate cumulative Free Cash Flow generated by Coricancha from the Date of Commencement of Commercial Production has equaled or exceeded the amount of the Start-Up Expenditures, as defined in the Earn-Out Agreement, incurred by the Company from the date of Completion of the Acquisition to the Date of Commencement of Commercial Production; and
- the Date of Commencement of Commercial Production will be the date after Completion which
  is the first day of the first three-month period (whether calendar months or otherwise) during
  which period the average rate of production at Coricancha is at least 400 tonnes per day (with
  production calculated on the basis of mined material processed through the plant).

The Company will guarantee to Nyrstar the payment by GP Coricancha of the Earn-Out Consideration under the Earn-Out Agreement. To date, no consideration has been paid under the terms of the Earn-Out Agreement.

## 6.A.1.e Reclamation Agreements

The SPA includes agreements between the Company, GP Peru, GP Coricancha and Nyrstar regarding legacy environmental matters relating to Coricancha. These agreements became effective on Completion and relate to the reclamation of tailings facilities at Coricancha and the funding of the corresponding reclamation costs. These terms include the following material provisions:

- GP Peru will cause GP Coricancha to reclaim the Cancha 1 and Cancha 2 TSF (being part of Coricancha), in accordance with the mine closure plan approved by MEM (the "Cancha Tailings Reclamation Plan");
- GP Peru will cause GP Coricancha to reclaim the Triana TSF (being part of Coricancha), in accordance with the mine tailings abandonment plan approved by MEM (the "Triana Reclamation Plan");
- Nyrstar will fund the payment of the Reclamation Costs associated with undertaking the reclamation work required to complete the Cancha Tailings Reclamation Plan and the Triana Reclamation Plan, to a maximum of \$20 million; and
- Nyrstar will advance funds to GP Coricancha to fund the Reclamation Costs on a quarterly basis in accordance with agreed upon mechanics set forth in the SPA.

In addition, Nyrstar has agreed to settle all outstanding fines or sanctions relating to Coricancha, to a maximum of \$4.0 million (subject to certain exclusions to which the maximum will not apply).

To date, the Company has completed some of the reclamation work under the Cancha Tailings Reclamation Plan and the Triana Reclamation Plan, and Nyrstar has funded these works in accordance with the SPA.

The Amending Agreements provide that GP Coricancha will use commercially reasonable efforts to seek an amendment to a closure plan for certain legacy tailings facilities that Nyrstar is obligated to fund. The objective of the amendment is to seek a technically superior closure plan for approval by the MEM with potentially lower costs. Further, the Amending Agreements provide that GP Coricancha will defer movement of the Cancha tailings in accordance with the Coricancha Mine Closure Plan, as it may be amended from time to time by the Company, until the earlier of June 30, 2022 or such date as the Company provides notice to Nyrstar of its determination to permanently close Coricancha under the Mine Closure Agreement, as amended, subject to compliance by the Company with Applicable Law and with any direction or order of any Governmental Body that may apply to their reclamation and provided that such deferral will not result in any fines, penalties or other sanctions being imposed on the Company. For a discussion of recent updates in this area, see Section 3B.2 of this AIF under the heading "Developments Subsequent to the Year Ended December 31, 2020".

#### 6.A.1.f Mine Closure Agreement

The Mine Closure Agreement relates to the mine closure bond required to be maintained by GP Coricancha for Coricancha (the "Mine Closure Bond") in order to comply with the mine closure bond requirements imposed by MEM. Under the Mine Closure Agreement, Nyrstar agreed to maintain the required Mine Closure Bond up to an amount of \$9.7 million for a three-year period following Completion (the "Mine Closure Period") which period concluded on June 30, 2020.

Under the Amending Agreements, Nyrstar agreed to extend its requirement to continue to post a mine closure bond as security for closure costs at Coricancha beyond the original June 30, 2020 expiry date. The Amending Agreements provide that Nyrstar will maintain a \$7.0 million bond until June 30, 2021 and \$6.5 million for the following year (as in effect at the relevant time, the "Closing Contribution"), effectively deferring Great Panther's funding requirements for these amounts until June 30, 2022. Great Panther has provided 80% collateral in the form of a deposit to cover the additional \$2.7 million bond requirement as of June 30, 2020. In June 2017, the bond closure amount required by the MEM was increased by \$1.2 million, which Great Panther funded. The total bond amount required by the MEM was \$10.9 million as of June 30, 2020 and remains unchanged as of the date of this AIF.

GP Coricancha will be responsible for any portion of the Mine Closure Bond required by MEM that is in excess of Nyrstar's required bond. In accordance with these obligations, Nyrstar is responsible, at its expense, for providing security for the initial Closing Contribution of the Mine Closure Bond and GP Coricancha is responsible, at its expense, for providing security for any excess amount.

In the event that GP Coricancha makes a final, irrevocable decision to permanently close Coricancha during the Mine Closure Period (expiry date June 30, 2022), the following will apply:

- Nyrstar will pay to GP Coricancha the amount of Closing Contribution in full and final release of its obligations under the Mine Closure Bond;
- GP Coricancha will take all steps necessary to establish a new Mine Closure Bond in the amount of Closing Contribution;
- Nyrstar will terminate its original Mine Closure Bond in the amount of Closing Contribution;

- GP Coricancha will proceed with the mine closure plan for Coricancha secured by the Closing Contribution paid to Coricancha by Nyrstar;
- if the costs of closing Coricancha are less than the Closing Contribution paid by Nyrstar, GP Coricancha will return to Nyrstar the difference; and
- if the costs of closing Coricancha are greater than the Closing Contribution paid by Nyrstar, Coricancha will be responsible for any excess closure costs.

In the event that GP Coricancha does not make a final, irrevocable decision to permanently close Coricancha during the Mine Closure Period, GP Coricancha will make arrangements for the release of the obligations of Nyrstar under its portion of the Mine Closure Bond, which arrangements will be in effect upon expiry of the Mine Closure Period, and GP Coricancha will be required to post the full amount of the required amount of the remediation bond with Peruvian government authorities. Nyrstar will then have no further responsibility or liability in connection with the Mine Closure Bond. Nyrstar will however, retain obligation to fund the payment of the Reclamation Costs associated with undertaking the reclamation work required to complete the Cancha Tailings Reclamation Plan and the Triana Reclamation Plan, to a maximum of \$20 million.

In addition, Great Panther has agreed to pay interest on the bond amounts Nyrstar has agreed to continue to fund at an annual rate of 3-month USD LIBOR plus 5%, and to defer any relocation of the legacy tailings until an agreement on a modified closure plan is achieved or there is a legal requirement to move the tailings. The Amending Agreements also provide Nyrstar with certain offer rights for Coricancha concentrates, which are secondary to those of a third party.

#### 6.A.1.q Parent Company Guarantee of Nyrstar NV

Trafigura Group Pte. Ltd. ("Trafigura") acquired the operating businesses and assets of Nyrstar NV in a restructuring of Nyrstar NV completed effective July 31, 2019. Trafigura completed this acquisition through its 98% ownership of NN2 Newco Limited ("NN2") as the new parent entity to the Nyrstar entities. In order to reflect the restructuring, NN2 assumed the Parent Company Guarantee, as guarantor, with effect as of July 31, 2019 and Nyrstar NV was released as guarantor. Under the Nyrstar Parent Guarantee, NN2 has guaranteed to the Company, GP Peru and GP Coricancha, as beneficiaries, the punctual payment and performance by Nyrstar of the obligations of Nyrstar under:

- Clause 2 of the Mine Closure Agreement relating to the obligations of Nyrstar to post the Mine Closure Bond and advance the Closure Contribution, in each case to a maximum of \$7 million (before June 30, 2021) or \$6.5 million (from July 1, 2021 to June 30, 2022);
- Clause 5(h) of the SPA relating to tax indemnification matters; and
- Clause 6 of the SPA relating to the obligations of Nyrstar to fund the Reclamation Costs for Coricancha.

The obligations of NN2 are limited to the following maximum guaranteed amounts:

- \$7 million (before June 30, 2021) or \$6.5 million (from July 1, 2021 to June 30, 2022) with respect to the guaranteed obligations under clause 2 of the Mine Closure Agreement; and
- \$20.0 million with respect to the guaranteed obligations under clause 6 of the SPA relating to Reclamation Costs, of which \$1.8 million has been reimbursed to Great Panther by Nyrstar.

The guaranteed obligations with respect to the tax indemnification under clause 5(h) of the SPA will not be subject to the foregoing maximum guaranteed amounts and will be subject to the indemnification provisions of the SPA with respect to these obligations.

## 6.A.2 Current Technical Report

The scientific and technical information on Coricancha in Sections 6.A.2 through 6.A.12 of the AIF are based on the Coricancha Technical Report. The conclusions, projections and estimates as well as certain other information included in this Section of the AIF are presented in summary form and subject to the qualifications, assumptions and exclusions set out in the Coricancha Technical Report. Readers are recommended to read the Coricancha Technical Report in its entirety to fully understand the project. The Coricancha Technical Report in available on SEDAR (www.sedar.com) or on EDGAR (www.sec.gov).

## 6.A.3 Project Description, Location and Access

Coricancha is located in the central Andes of Perú in the District of San Mateo, Huarochirí Province, Department of Lima. The mine has been on care and maintenance since August 2013.

The plant and main site office are located adjacent to the Central Highway, 90km east of the city of Lima, next to the Rímac River in an area known as Tamboraque, and adjacent to the confluence of the Rímac River and its tributary, the Aruri River. The plant is located at 3,000 masl, and the mine accesses are located between 3,140 masl and 3,980 masl.

The mine includes 127 mining concessions, one mining transport concession, and one processing concession. All mining concessions are for metallic substances.

By agreement entered into with Biomin Technologies SA ("Biomin", now owned by Outotec) dated February 5, 1995, Coricancha was granted the right to use BIOX® technology. There are no other agreements or encumbrances known that would affect the current mine.

A 1% NSR royalty in favour of Global Resource Fund is payable on production from most of the mining licences, and a royalty of \$1/ounce exists for gold processed using BIOX® technology.

Legacy tailings are stored at Cancha 1 and 2<sup>1</sup> at the Coricancha site – Tamboraque, and at Chinchan Tailings Storage – Phase I.

The property is subject to the following environmental liabilities:

- Coricancha has an approved mining closure plan for mining and processing components, including tailings storage areas Cancha 1 and 2. The closure plan was updated three times to: (i) include Chinchan Tailing Storages Phase I and II; (ii) modify the tailings removal of Cancha 1 and 2 and transfer to Chinchan Tailings Storage; and (iii) modify the waste rock dump closure schedule. Coricancha, in the third Closure Plan Amendment (2014), has assumed a total commitment of \$10.9 million of closure warranty on behalf of MEM. A process is underway to modify the closure plan as it relates to the handling of some of the remaining tailings. This is described above in more detail and in Section 3.B.2 of this AIF.
- Coricancha has declared 14 surface waste rock storage sites in its 2010 mining closure plan. Four
  of them have been reported to have mineralization of potential economic interest. There are an
  additional four waste dumps that are considered marginal in that the recovered metal content
  does not cover processing costs, but dealing with them in the plant is cheaper than storage and

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<sup>1</sup> Cancha 1 and 2 may also have been referred to as Deposito 1 and 2 in past disclosures regarding Coricancha by other owners.

treatment on surface. In addition, there are six waste dumps that do not have potential for processing, total remaining waste is 150,000t. Nevertheless, the 1996 Estudio Impacto Ambiental declared that all waste rock from mine activities would be stored in the underground mine upon final closure. The Company is reviewing alternate solutions to address this issue. As an alternative, the Company is considering relocating the 150,000t of waste onto Huamuyo alto dump instead of storing them underground.

 Other closure liabilities including the plant, roads, infrastructure, legacy waste dumps and tailings storage, mine openings, and mine water management exist. Some of these require further definition and permitting updates.

The estimated present value of reclamation and remediation costs associated with the future retirement of Coricancha is recognized as a provision on the Company's Statement of Financial Position. This value comprises the provision associated with the mine, the plant, and tailings storage facilities of Coricancha. The cost of removal of Cancha 1 & 2 tailings to store at Chinchan and to restore Triana is the responsibility of Nyrstar to a maximum of \$20 million (remaining funds are \$18.2 million). Separately, the Company plans to develop alternatives to propose to MEM to allow for the full reclamation while preserving the stability of the surrounding areas.

A number of permits are in place. The following permits would be necessary if the Company decides to advance Coricancha into production:

- The Chinchan TSFs have limited capacity. The Company must develop a balance between the
  actual allowed and available capacity of Chinchan Phase I and Chinchan Phase II TSFs and the
  amount of tailings that must be transferred from Cancha 1 and 2, including any future tailings
  generated from future mining/processing.
- Any exploration activities require an Environmental Certificate. The Company can request an
  environmental impact declaration, or Declaracion Impacto Ambiental ("DIA") or Estudio Impacto
  Ambiental semi detailed ("EIA-sd") depending on the extent of work and the potential
  environmental impact. A DIA could be approved in seven working days, if the permits are for 20
  sites or less and if no archeological site is encountered, while an EIA-sd can take an additional 55
  working days.
- A future mining plan would likely require new waste dump facilities, which themselves would need to be permitted some time during the life of the operations. These details are presently under study.

#### 6.A.4 History

Coricancha is part of the Viso-Aruri mining district located in the San Mateo District, Department of Lima, Province of Huarochirí, in the central Andes of Peru. Coricancha has been exploited almost continuously since the colonial times. The historical Coricancha mine production for the 60 years prior to 1996 is reported to have ranged from 2,600 to 5,000 tonnes per month.

In late 1995, Coricancha underwent a considerable expansion of process plant capacity from 200 tpd to 600 tpd and the installation of a modern BIOX® plant. After completion of the expansion in 1997, the reported monthly production increased slightly over historic levels, but was not sustainable. The mine was shut down in September 2000 as the owner of Coricancha for the past 45 years, Minera Lizandro Proaño, was forced into bankruptcy due to low metal prices, labour shortages, and operational difficulties in the mine and concentrator.

At the beginning of 2001, Wiese Sudameris Leasing SA, a Peruvian bank which was the major secured creditor, took control of the assets and properties from the bankrupt Minera Lizandro Proaño. Later that year, it entered into an agreement with Peruvian contractor Larizbeascoa & Zapata SAC, to redesign the Coricancha operation.

After the mine reopened in 2002, the monthly production tonnage increased dramatically to 12,500 tpm. The monthly production then decreased to just over 8,000 tpm during the seven months of operation before being shut down in October 2002 by the government due to environmental issues associated with the Mayoc TSF. In November 2002, the Coricancha mine and mill were shut down and put-on care and maintenance. A water treatment plant to neutralize the mine water has been in continuous operation.

Gold Hawk Resources Inc., acquired Coricancha in early 2007 and commenced development work, then restarted operations in June of 2007 at a production rate of 600 tpd until operations were suspended again in May of 2008 due to surface ground movement observed on the natural hillside above the nearby TSF.

Nyrstar acquired Coricancha in November 2009, and recommenced operations in late 2010 following construction of a new TSF at the Chinchan location and the addition of a copper circuit. Operations at the plant were temporarily reduced to 30% of capacity in the first half of 2011, due to an increased moisture level and compaction problem at the newly commissioned Chinchan TSF resulting from heavy rainfall. During 2012, milling operations temporarily ceased due to concerns about the storage and planned movement of legacy tailings to the new Chinchan facility. At the end of 2012, as part of cost cutting measures, Nyrstar ceased mining mineralized material from Coricancha's underground deposits and focused on treating historical tailings before moving the waste material to the tailings pond. In August 2013, operations were halted due to the sustained lower precious metal prices, and Coricancha was placed on care and maintenance.

Exploration by the previous owners was very limited and focused on underground drifting and raising on vein structures. A limited, short-hole diamond drilling program was conducted in 2002.

The first formal documented exploration program was conducted by Nyrstar in 2010 and consisted of field mapping, ground magnetic and induced polarization surveys and diamond drilling.

There have been seven independent Mineral Resource and Mineral Reserve estimates prepared for the Coricancha property since 1995. Previous resource estimates (2007, 2009, 2011, and 2013) were prepared using industry standard best practices for exploration and Mineral Resource estimation (i.e., CIM 2003 and CIM Definition Standards) and reported in accordance with internationally recognized guidelines for disclosure of Mineral Resources and Mineral Reserves (i.e., NI 43-101, or JORC). All previous estimates are considered as historical.

## 6.A.5 Geological Setting, Mineralization and Deposit Types

The regional geology of the Viso-Aruri mining district comprises a package of andesitic volcanic rocks and local basal sedimentary units intruded by monzonite stocks. The Jumasha Formation is found at the base of the Viso-Aruri volcanic sequence and is characterized by tightly folded beds of grey limestone. The limestone outcrops in the Rímac River valley, near the town of San Miguel de Viso.

The approximately 1,500 m thick Rímac Formation overlies the Jumasha limestones and consists of Tertiary-age andesitic volcanics, characterized by alternating layers of massive and porphyritic, grey to greenish-grey-purple andesite. The volcanic beds are approximately 10 m to 40 m thick and are roughly sub-horizontal, dipping slightly to the SW at 15°.

There are two occurrences of intrusive rocks in the area which are thought to have been the source of the polymetallic mineralization, although this has not been confirmed. The first is a small, altered, intrusive stock that has been mapped near the village of Viso on the south side of the mountain (Coricancha is on the north side). The other occurrence consists of the NE-NNE trending, sub-vertical intrusive dikes cutting the volcanic rocks.

The area has been exposed to tremendous structural compression, which has produced a strong regional scale fracturing pattern and allowed the emplacement of the polymetallic mineralization within quartz (Qtz) sulphide veins as fracture filling. Some of the identified features include the NW-SE Pariachaca-Matucana fault, the NS and NNE trending San Pablo and Huamuyo faults, and the NNE-SSE mineralized fracture zones.

The Coricancha property is almost entirely underlain by the Rímac Formation andesitic volcanics. The base of the sequence consists of brecciated volcanics overlain by andesitic flows, agglomerate and tuff towards the top of the Cerro Huamanjune at approximately 4,500 masl elevation.

Mineralization at Coricancha is that of an anastomosing polymetallic quartz vein system where most of the secondary and tertiary veins branch off either from the main vein or the secondary veins, respectively. The overall system trends towards the NE at approximately 15°, and the veins are primarily sub-vertical to steeply NW dipping. It is thought that the anastomosed vein system is part of a larger tectonic shear zone with associated secondary and tertiary tensional veins.

The three main veins on the Coricancha property include the Wellington, Constancia, and Animas veins. These veins define three structurally dislocated blocks from which a series of secondary and tertiary tensional veins split off. The veins are extensive and are known to extend over 4 km along strike and more than 1.5 km down dip.

Typically, the veins show Qtz-clay-pyrite argillic alteration, which extends up to 2.0 m into the footwall and hanging wall of the veins. The alteration does not contain any significant economic mineralization of note.

Coricancha is a polymetallic hydrothermal, brittle low sulphidation deposit hosted in the andesitic rocks of the Rímac Formation. The veins exhibit pinch-swell type behavior typical of hydrothermal systems found within compressional and extensional structural environments. Vein widths reach upwards of 2.0 m, with a mean width of approximately 0.6 m. The veins are known to split into two or more branches separated by waste rock materials.

The mineralization observed at Coricancha typically comprises the following: Pyrite (iron sulphide); Sphalerite (Zn sulphide); Galena (Pb sulphide); Chalcopyrite (Cu-Fe sulphide); Arsenopyrite (Fe-arsenic sulphide); Tennantite (Cu-As sulfosalt); Tetrahedrite (Cu-Fe-Zn-Ag antimony sulfosalt); Native Au; Native Ag; and Quartz.

## 6.A.6 Exploration

Prior to Nyrstar's acquisition of Coricancha, exploration was primarily conducted by mining of veins, horizontal tunnels, and vertical raises, but no systematic formal exploration activities were completed. The first formal documented exploration program was conducted by Nyrstar in 2010 and consisted of field mapping, ground magnetic and induced polarization ("IP") surveys and diamond drilling.

#### 6.A.7 Drilling

Prior to 2010 and Nyrstar's acquisition of Coricancha, no systematic drilling was performed on-site. However, some historical drilling was completed, primarily as short holes. Unfortunately, limited or no

records exist related to this drilling. None of the pre-2010 drilling has been included in the geological database or geological model due to the lack of information and inability to confirm this data.

Since 2010, several drilling programs have been completed with the primary focus of verifying the lateral and depth continuity of the main veins including, Wellington, Constancia, Animas and Colquipallana. Nyrstar conducted three independent drilling campaigns in 2010, 2011 and 2013. Drilling programs were also completed in 2015 and 2016 in conjunction with Great Panther. From 2010 to 2016, a total of 83 diamond drill holes, totaling 28,197 m of NQ sized core (47.6 mm core diameter) have been drilled within the Coricancha property boundaries. Drill holes were either drilled from surface or underground depending on the target and accessibility.

The results of the drilling programs at Coricancha verify the continuity of the vein system, both laterally and at-depth. The mineralization is shown to extend beyond the previously known limits and has opened up the targets both along strike and at depth.

## 6.A.8 Sampling, Analysis and Data Verification

The Coricancha core facility is a secure (gated and guarded) facility, with staff and security onsite. The core logging area was arranged to provide areas for logging, core splitting and sampling. Core is stored on covered core racks whilst awaiting logging and sampling; once sampled, the remaining unsampled core was carefully reorganized in the core box and the lids were returned to the boxes before they were transported to the secure core storage facility.

Drill core sampling is conducted in such a manner to ensure that all mineralized intervals are captured and sent to the lab for analysis. Sample intervals are defined such that they do not cross lithological boundaries, with a minimum sample length of 0.35 m and a maximum sample length of 1.5 m.

Core cutting and sample packaging was performed by the Company's core technicians under the supervision of its geologists. The sealed plastic sample bags were placed in large neoprene rice bags, sealed using zip ties, and labelled clearly to identify the final shipping destination. The full rice bags were stored in a secured and closed room within the core logging facility until a shipment batch was ready for transport. Only designated personnel have access to the storage room. Only employees of the geology area are involved with the sample preparation and sample delivery at the laboratory.

Nyrstar and Great Panther implemented a comprehensive analytical QA/QC program for the drilling and sampling programs, which included the insertion of blind certified reference material (CRM) standards, duplicates, and blanks to evaluate analytical precision, accuracy and potential contamination during the sample preparation and analytical process.

Underground chip samples (channel) are collected for grade control and for Mineral Resource estimation purposes. The sample length is defined according to the lithological breaks and vein continuity. Samples are collected from a 5 cm deep by 20 cm wide channel cut perpendicular to the vein direction. The material is typically chipped out of the channel in small fragments and collected into a maximum 2 kilogram (kg) sample. To ensure representative grade continuity, samples are collected at a distance interval of every 10 m along the target vein.

Each 2 kg sample is sealed in a plastic sample bag with a sample tag and the number recorded in indelible ink on the outside of the bag. Sample bags are placed in rice bags and sealed with zip ties. QA/QC samples were inserted at prescribed intervals into the sample sequence and included with the sample shipment.

For both core and channel samples, a sample shipment form is prepared for each sample batch prior to shipping to SGS in Lima, detailing the included sample numbers per batch. At the laboratory, the sample list is verified against the received samples to confirm the shipment.

During the 2010 and 2011 drilling programs, Nyrstar sent samples to ALS and to SGS in Callao (Lima). As of 2013, all samples were sent to the SGS laboratory in Lima. The SGS laboratory is internationally accredited to ISO/IEC 17025 standard.

The data from drilling, logging and surface/underground sampling programs were reviewed and interpreted independently by Great Panther's senior geologist and by the Golder Qualified Person. Drill hole lithology and assay data was used to confirm the target intercepts and to reconcile against the surface and underground sampling.

It is the Coricancha Qualified Persons' opinion that the Nyrstar and Great Panther drilling, core logging and sampling programs were carried out according to appropriate professional methodologies and procedures, including those presented in the CIM Exploration Best Practice Guidelines (August 2000 edition).

#### 6.A.9 Mineral Resource Estimates

The Mineral Resource Estimate for Coricancha has an effective date of December 20, 2017.

# MINERAL RESOURCE ESTIMATE AS OF DECEMBER 20, 2017 - CORICANCHA

Measured								
Mine	Tonnes	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Ag eq g/t	Ag eq oz (million)
Constancia	270,336	6.2	219	2.36	3.44	0.43	1,064	9.24
Wellington	92,328	6.1	184	1.69	3.95	0.51	1,028	3.05
Escondida	15,362	0.9	279	0.28	1.35	3.20	832	0.41
Constancia East	16,315	6.0	143	1.97	2.16	0.11	836	0.44
San Jose	6,922	5.8	212	4.49	2.94	0.30	1,078	0.24
Colquipallana	2,944	3.4	220	3.67	5.26	0.21	995	0.09
Total Measured	404,205	5.9	210	2.16	3.43	0.54	1,037	13.49

Indicated								
Mine	Tonnes	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Ag eq g/t	Ag eq oz (million)
Constancia	218,545	6.0	188	2.09	3.08	0.34	968	6.80
Wellington	77,080	6.0	186	1.68	3.66	0.52	1,004	2.49
Escondida	21,406	1.0	238	0.24	1.08	2.84	733	0.50
Constancia East	18,636	5.8	137	1.93	1.95	0.11	798	0.48
San Jose	7,673	5.7	217	4.76	2.93	0.30	1,084	0.27
Colquipallana	5,215	3.4	207	3.31	5.14	0.19	953	0.16
Total Indicated	348,554	5.6	189	1.95	3.05	0.52	955	10.71

Inferred								
Mine	Tonnes	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Ag eq g/t	Ag eq oz (million)
Constancia	532,422	5.3	215	1.71	3.29	0.40	950	16.25
Wellington	238,811	5.4	219	1.06	3.95	0.78	1,014	7.78
Escondida	96,926	2.2	208	0.26	2.24	1.90	751	2.34
Constancia East	49,234	5.7	125	1.66	1.57	0.21	760	1.20
San Jose	14,174	5.7	213	4.34	2.78	0.28	1,049	0.48
Colquipallana	11,592	3.7	117	2.98	3.15	0.15	743	0.28
Total Inferred	943,160	5.0	209	1.45	3.25	0.64	934	28.36

#### Notes:

- 1. Cut-offs are based on an estimated \$140 (NSR) \$/tonne.
- 2. Metal prices used to calculate NSR: \$1,300 per ounce (oz) Au, \$17.00/oz Ag, \$1.15 per pound (lb) Pb, \$1.50/lb Zn, and \$3.00/lb Cu
- 3. Block model grades converted to USD value using plant recoveries of 92.1% Ag, 80.2% Au, 77.3% Pb, 82.6% Zn, 52.7% Cu.
- 4. Rock Density for Constancia: 3.3 t/m³, Wellington, Constancia East, Escondida, San Jose: 3.2 t/m³, Colquipallana: 2.9 t/m³.
- 5. Totals may not agree due to rounding.
- 6. Grades in metric units.
- 7. All currencies USD.
- 8. Ageq oz million is calculated from gpt data
- 9. AgEq g/t = Ag g/t + (Pb grade x ((Pb price per lb/Ag price per oz) x 0.0685714 lbs per Troy Ounce x 10000 g per %)) + (Zn grade x ((Zn price per lb/Ag price per oz) x 0.0685714 lbs per Troy Ounce x 10000 g per %)) + (Au grade x ((Au price per oz)) + (Cu grade x ((Cu price per lb/Ag price per oz)) x 0.0685714 lbs per Troy Ounce x 10000 g per %)) + (Au grade x ((Au price per oz)) + (Au price per oz))

The Mineral Resource Estimate was completed using MicroMine 3D geological software, and the inverse distance cubed estimation technique was utilized in the estimation of grade to each of the blocks in the block models.

The Company's QA/QC program includes the regular insertion of blanks, duplicates, and standards into the sample shipments; diligent monitoring of assay results; and necessary remedial actions. Sample assaying was completed at the independent SGS in Lima, Peru. The gold was analyzed by fusion with 30 g fire assay and atomic absorption spectroscopy (AAS) finish, with the resulting values reported in parts per million (code FAA313). The remaining 52 elements were analyzed by mass spectrometry of inductively coupled plasma (ICPMS) and the resulting values were reported in parts per million (code IMC12B). Any gold results that exceeded the limit of detection were re-analyzed by fire assay with a gravimetric finish (code FAG303). Any silver results that exceeded the limit of detection (>10g/t) were re-analyzed by fire assay with a gravimetric finish (code FAG313). Any other metals that exceeded the limit of detection were re-analyzed by ICP-AAS (code AAS11B).

There are no Mineral Reserve estimates for Coricancha. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability.

## 6.A.10 Mining Operations

Historical mining methods at Coricancha include cut and fill, shrinkage stoping and variations of resue mining techniques. The latter method is highly selective and applied to maximize grade and minimize dilution in narrow vein mines. Mining methods will be the subject of future studies and will consider similar narrow vein methods of extraction.

In May 2018, the Company completed a PEA to evaluate the restart of Coricancha and completed a bulk sample program in 2019 to further test assumptions in the PEA (the "Bulk Sample Program" or "BSP") and continues to evaluate the conditions for a restart of Coricancha. The Company does not currently plan to complete a feasibility study in connection with any production decision due to (i) the existing processing plant facility, (ii) the ability to continue on to development and production based on low initial capital costs, and (iii) the Company's knowledge of the mine and mineral resource base.

The PEA and BSP are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the results and conclusions of the PEA and BSP will be realized. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability.

In the fourth quarter of 2019, the Company undertook a limited mining and processing campaign of approximately 25,000 tonnes. These activities were temporarily suspended following the Peruvian government-mandated restrictions associated with the National State of Emergency announced on March

16, 2020, in response to the COVID-19 virus, which was lifted on May 24, 2020. Subsequently, the Company resumed the processing campaign and continued with its evaluation activities.

## **6.A.11** Processing and Recovery Operations

The current mineral processing flow sheet at Coricancha includes base metal sulfide flotation to produce Pb, Zn, Cu and arsenopyrite concentrates. Also, differential flotation is used to separate the Au bearing arsenopyrite (AsPy) from pyrite (Py) with subsequent processing by BIOX® and CIL cyanidation for the recovery of Au and Ag. The most recent series of metallurgical test work was completed in 2009 by SGS Lakefield. The goal of the testing program was to optimize the process flow sheet, grind size and reagent scheme. Implementation of the SGS recommendations was completed before restarting plant operations in 2010. Operating data show that the changes were successful in improving the metal recovery, improving base metal concentrate grades, and increasing Au production.

Review of the most recent Coricancha operating data indicate that the metallurgical performance of the processing plant is very stable with metal recoveries and concentrate grades being very consistent. Owing to the presence of AsPy, arsenic (As) is present as a deleterious element in most of the flotation products.

The front end of the plant is a base metal polymetallic sulfide concentrator producing Pb, Cu, and Zn concentrates. The process plant was expanded to include production of an AsPy concentrate, which is treated via BIOX® to recover refractory Au via CIL technology. The original plant was designed and commissioned in 1999 to process 600 tpd of ore primarily from the Wellington and Constancia Veins. Operations have been intermittent since then and are currently under care and maintenance status. There are no major modifications or additions required to put the plant back into production.

The final tailings consist of the AsPy/Py flotation tailings, Py concentrate, neutralized BIOX® liquor sludge, CIL residue, and mine dewatering neutralization sludge. These are thickened using the tailings thickeners with the addition of flocculant before final dewatering in the tailings plate and frame filters. The tailings filter cake is shipped to the Chinchan TSF.

## **6.A.12** Infrastructure, Permitting and Compliance Activities

Coricancha is located next to the Central Highway, 90 km east of the city of Lima, adjacent to the Rímac River in an area known as Tamboraque. The mine area is situated near the confluence of the Rímac River and its tributary, the Aruri River. The project infrastructure covers the area of the mining concessions and has the following facilities:

- Crushing and grinding equipment;
- Flotation and bio-oxidation circuits;
- Access road to the mine;
- Historical TSF and waste storage areas;
- Electrical power supply and distribution for the plant and mine, along with power systems including transformers and electrical distribution cables from historical mining activities;
- Water and compressed air distribution systems;
- Utility water is available for the mine and plant;
- Communications Systems (internet based);
- Mine light rail haulage network;

- Camp and kitchen facilities for mine and plant personnel; and
- First aid facilities/Mine rescue equipment.

Future plans will consider the use of the existing facilities as well as the need for additional infrastructure.

Coricancha has all environmental permits and operation licenses required such as an environmental impact assessment ("EIA"), water supply licenses, mining effluents discharge authorization, certificate of inexistence of archaeological remains, and operation and concession licenses.

A recent environmental monitoring review identified some deficiencies which are being addressed as detailed below.

Cancha 1 and 2 TSFs represent the most important environmental and social risk for Coricancha. This is due to their location (130 m from Rímac River and 50 m above) and the fact that the Rímac River is a source for Lima's water. To manage that risk, following ground instability in 2008 above the tailings site, MEM ordered the tailings removed and transferred from Cancha 1 and 2 to Chinchan TSF (Phase I and II). To date, a significant portion of the tailings has been removed. The Company has sought approval of a modification to the remediation plan from MEM in accordance with the recommendations of an independent consultant to leave the remainder of the tailings in place to preserve the stability of the hillside. The Company has requested a change of the scheduling of the reclamation work, pending a decision from MEM regarding the proposal to modify the approved remediation plan. Concurrently, the Company has undertaken various legal measures to protect itself from any pending or future fines, penalties, regulatory action, or charges from government authorities which may be initiated as a result of the change in timing of the reclamation under the approved plan, including obtaining an injunction. Subsequent to the year ended December 31, 2020, the Company was notified of a second instance decision in its Constitutional Case which unfavorably dismisses the Company's constitutional challenge, but requests that the MEM issue a technical report evaluating the remediation plan within two months of the second instance decision. The Company expects that the related injunction will be cancelled in the near future. While the Company has appealed the Constitutional Case proceeding, it will not be possible to appeal the cancellation of the injunction. Separately, the Company plans to develop alternatives to propose to MEM to allow for full reclamation while preserving the stability of the surrounding areas. If the Company cannot resolve this matter favorable in a timely matter, the Company cancellation of the injunction will expose the Company to potential fines, penalties, regulatory action or charges from government authorities and may adversely impact the Company's stated plans and objectives for Coricancha. For a discussion of key risks concerning Coricancha, see Section 8 of this AIF under the headings "Risk Factors - Political Risk and Government Risk", "Risk Factors - Risks Associated with the Coricancha Acquisitions" and other risks set forth herein.

Other historical tailings storage locations in the area include Triana (which is approximately 5 m above the Rímac River) and Mayoc (which is approximately 1.3 km from Coricancha). The Triana site has been closed with high density polyethylene and is buttressed with a new upgraded concrete retaining wall, and the deposit itself may require resurfacing work in the future. Mayoc tailings were removed from the area and the site is currently under rehabilitation and remediation.

The location of tailings in the vicinity of the primary waterways and water sources, the regional seismic and atmospheric conditions, and the related past environmental, legal, and social issues, combine to form the most significant risk to the project and its future development, and which is continually under review for assessment and control.

## 7. PRIMARY EXPLORATION PROPERTIES

The Company has three primary exploration projects in Mexico, El Horcón, Santa Rosa and Plomo. Given the proximity to the GMC, mineralization from both these projects could conceptually be trucked to and processed at the Cata processing plant.

Considering that El Horcón and Santa Rosa could in future form part of the GMC's operations, the information for these properties (as disclosed in this section of the AIF) is contained in the 2017 GMC Technical Report. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. The information below is presented in summarized form and reference should be made to the full text of the 2017 GMC Technical Report which is available for review under the Company's profile on SEDAR located at <a href="https://www.sedar.com">www.sedar.com</a>.

## 7.A.1 El Horcón Project

## 7.A.1.a Property Description and Location

The El Horcón Project is situated north of the city of Leon (Guanajuato State), in the state of Jalisco, Mexico, approximately 470 km northwest of Mexico City. The 16 claims expire between 2051 and 2056. There are no known environmental liabilities associated with the mineral claims.

On December 6, 2017, the Company filed an application to reduce the land holdings in the area; specifically, to cancel the Horcón 4 Fraccion 1 concession. After dropping the Horcón 4 Fraccion 1 concession, the Company retains 15 contiguous claims and one isolated claim, totalling 3,520.72 hectares. The official resolution related to this application is pending.

The principal metals of interest are gold, silver, lead, and zinc. Mineralization occurs along structures, the largest of which is the Veta Madre with a strike length of 5 km.

#### 7.A.1.b History

The earliest known exploitation of veins on the El Horcón Project area was conducted by the Jesuits, during the Spanish reign, from the late 1500's to their expulsion from Mexico in 1767. No production records are available, and various shallow southwest dipping veins were mined all to the immediate northeast of Great Panther's drilling. Minor amounts of exploitation have been conducted, both by drifting along the veins and by stoping, on the Diamantillo and San Guillermo veins (including but not limited to the El Horcón, La Luz and Diamantillo underground access tunnels).

In 1932, a mining engineer Charles E. Pouliot, completed a mining study and evaluation of pillars, fill and remaining portions of the Diamantillo, San Guillermo and veins exploited by the Jesuits. It is not known if exploitation ensued. During the latter part of the 20th century, several bulk samples were shipped to various mills for metallurgical evaluation of the sulfide rich veins.

A number of academic geological studies were completed in the late 20th century by the Mexican Geological Survey. In 2004 and 2005, Mauricio Hochschild Mexico ("MHM") conducted significant geological, structural, and geochemical studies on the veins of the Comanja area, followed by drilling of 12 core holes totalling 3,570 m. In 2008 and 2009, Exmin Resources Inc. ("Exmin") conducted further geological and geochemical studies, including underground mapping and sampling, and core drilling (5 holes totaling 1,052 m) in an effort to move the project to exploitation, without success.

The Company purchased 100% of the El Horcón Project in 2012, which included most of the exploited veins mentioned above, except for certain internal claims covering portions of the veins.

## 7.A.1.c Geological Setting and Mineralization

The El Horcón Project area is underlain by Mesozoic marine sediments and predominantly mafic submarine lava flows, of the La Luz and Esperanza Formations; these are weakly metamorphosed and intensely deformed. This basal sequence is cut by a variety of intrusive bodies ranging in composition from pyroxenite to granite with tonalitic and dioritic intrusive being the most volumetrically significant.

Cenozoic volcanic and volcanogenic sediments unconformably overlie the Mesozoic basement rocks. In the area, the oldest Cenozoic unit is the Paleocene Comanja granite. This was followed by the Eocene extrusion of andesite which was sporadically deposited and contemporaneous with the deposition of the Guanajuato conglomerate in localized grabens. The Guanajuato conglomerate underlies an unconformity beneath a sequence of felsic to mafic volcanic rocks that consists of Oligocene ignimbrites, lava flows and domes.

Within the El Horcón Project area quartz-dominated veins follow fractures and faults and are hosted within the Comanja granite, as well as the surrounding Mesozoic meta-volcanic and meta-sedimentary rocks.

The vein system at El Horcón is a quartz-chalcedony-dominated, structurally controlled, epithermal system hosted by Paleocene Comanja granitic rocks and Mesozoic low-grade metamorphic metasedimentary / metavolcanic basement and consists of three principal vein sets that formed in faults and extension fractures.

- NW-striking, SW-dipping veins with dips generally ranging from 45°-70°+,
- NW-striking, SW-dipping low-dip veins (20°-30°), and
- NE-striking generally steep transverse veins.

Gangue minerals associated with the quartz veining include minor fluorite, hematite, chlorite, calcite, and pyrite, while minerals of economic interest include galena (lead), sphalerite (zinc), and minor chalcopyrite (copper). Petrographic work by MHM indicates that silver is present as acanthite. This undated (likely 2005) MHM report (un-acknowledged author) also indicated four stages of Phase 1, and three stages of Phase 2 vein mineralization. Phase 1 includes base metal and precious metal introduction into the vein structures (gold minerals unknown), while Phase 2 stages include calcite and further barren quartz. Beside silicified cataclastic quartz breccia (sealed fault structures), the quartz-chalcedony shows typical epithermal coliform textures.

The primary vein structures on the El Horcón Project include the Diamantillo, San Guillermo, El Ratones, Madre, Crucero, Del Alto, and Alaska veins. Based upon assay results from the channel samples across the surface expressions of these veins, vein widths, and underground exposures by Exmin, MHM, and the Company, it was decided to focus the initial core drill-hole program on the Diamantillo and San Guillermo veins. The narrow Natividad and Diamantillo HW veins were found both from drill site preparation and core drilling. The veins extend in a NW-SE orientation for approximately 7 km in strike and across approximately 2.5 km in width.

#### 7.A.1.d Exploration

Exploration work conducted by the Company has consisted of an initial thorough re-evaluation of the project by geological mapping, vein re-sampling both on surface and of all accessible underground openings in 2012-2013 (1,623 samples), followed by a surface core diamond drilling program of 24 drill holes totalling 2,160 m (1,177 samples). In 2018, a mapping and sampling surface campaign was completed (558 samples). The mapping is intended to define alteration and geochemical anomalies along

veins previously unmapped and sampled by the Company, while fully exploring the potential of the project.

#### 7.A.1.e Drilling

Diamond drilling at El Horcón was conducted by the Company's exploration staff. The exploration drilling was conducted on 50-100 m spaced sections, with one to three holes drilled per section, as well as at approximately 50 m spacing vertically between holes. The Company's 2013 drilling was focused from surface to approximately 100 m below surface along a strike length of 650 m.

The Company's Phase 1 drill-holes completed from mid-April to mid-June 2013 are prefixed by EH13 and include holes 1-24. Only the relevant MHM drilling was used in the Mineral Resource estimation (no records for the Exmin drilling). The drill contractor for the Company was G4 Drilling based in Hermosillo, Sonora.

The management, monitoring, surveying, and logging of the 2013 series "EH13" prefix exploration holes was carried out under the supervision of the Company's exploration geological staff.

Procedures related to sample and geological data integrity are consistent with those described for the Guanajuato Mine.

## 7.A.1.f Sample Preparation, Analyses and Security

The drill core samples were prepared by technicians working under the direction of the Exploration Department geologists. The exploration diamond drill core was HQ diameter.

All of the analytical work was completed by SGS and the quality control measures, and data verification procedures are consistent with those described for Guanajuato.

## 7.A.1.g Mineral Resource Estimates

Mineral Resources were estimated from four area-specific block models. A set of wireframes representing the mineralized zones served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID3) Au, Ag, Pb, and Zn grade interpolation. The effective date of the estimate is August 31, 2016.

There are no known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other factors that could materially affect the Mineral Resource estimates detailed in this report.

## MINERAL RESOURCE ESTIMATE AS OF AUGUST 31, 2016 – EL HORCÓN

Vein	Tonnage (tonnes)	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Pb (%)	Zn (%)	Ag eq (g/t)	Ag eq (oz)
Diamantillo	109,649	89	313,468	3.04	10,705	3.11	4.62	398	1,403,358
Diamantillo HW	4,781	54	8,269	4.59	706	2.65	0.47	459	70,518
Natividad	6,038	136	26,347	3.03	587	1.74	0.13	403	78,139
San Guillermo	41,672	37	50,011	4.44	5,943	1.75	2.53	404	540,899
Total Inferred	162,140	76	398,094	3.44	17,942	2.69	3.79	401	2,092,913

#### Notes:

- 1. \$110/tonne NSR Cut-off.
- 2. Silver equivalent was calculated using a 70 to 1 ratio of silver to gold value.
- 3. Rock Density for all veins for Diamantillo is 2.77 t/m³, San Guillermo 2.78 t/m³, Diamantillo HW is 2.62 t/m³, Natividad 2.57 t/m³.
- Totals may not agree due to rounding.
- 5. Grades in metric units.
- 6. Contained silver and gold in troy ounces.
- 7. Minimum true width 1.5 m.
- 8. Metal Prices: \$18.00/oz silver, \$1,300/oz gold and \$0.80/lb lead.
- 9. Ag eq (g/t) and Ag eq (oz) use only Au, Ag and Pb values.

#### 7.A.1.h Mineral Reserve Estimates

There is no Mineral Reserve estimate for the El Horcón Project.

## 7.A.1.i Mining Operations

The mining method considered when estimating the Mineral Resource is standard cut and fill with waste provided by the development.

#### 7.A.1.j Infrastructure, Permitting and Compliance Activities

The El Horcón Project is situated along the eastern side of the Sierra Guanajuato mountain range and is accessible via a rough access road 10 km north of Comanja, Jalisco. Comanja is a small village and has a population of approximately 500 people and is located within 40 km, by road, of an international airport at León, Mexico.

In 2017, the Environmental Assessment Manifest and Change of Land Use applications were approved by SEMARNAT. These authorizations allow the future exploration and exploitation on the property.

## 7.A.1.k Exploration and Development

During July and August of 2016, a program of detailed surface geological mapping (1:500 scale) was continued, along with rock sampling of prospective veins approximately one km southeast along the trends of the Diamantillo / Madre veins. Vein swarms and stockwork were noted with generally weakly anomalous gold, silver, lead, zinc and copper values.

During 2018, work included finalizing the details on the SEMARNAT application regarding exploration and exploitation permits and a work program that included additional surface mapping and sampling to prioritize targets for possible follow-up drilling. No exploration was completed at El Horcón in either 2019 or 2020.

## 7.A.2 Santa Rosa Project

In 2011, the Company purchased a 100% interest in the Santa Rosa silver-gold property in Guanajuato State, Mexico, for total consideration of \$1.5 million in cash.

#### 7.A.2.a Property Description and Location

The Santa Rosa Project includes a cluster of non-contiguous mineral claims to the northeast of Guanajuato. Most cover segments of historically known veins within the Sierra vein system, as well as one claims located further north staked more from a regional conceptual nature.

The six mineral claims comprise an area of 5,756.74 hectares and expire between 2040 and 2064. There are no known environmental liabilities associated with the mineral claims.

The claims of the Santa Rosa Project are situated along the eastern side of the Sierra Guanajuato mountain range, northeast of Guanajuato, Guanajuato.

# 7.A.2.b History

The core of the Santa Rosa Project claims covers vein exposures along the Sierra vein system, along the eastern flank of the central Veta Madre vein. Minor amounts of pitting, short adits, and shallow vertical shafts have been completed with a minor amount of vein exploitation. No records are available as to these activities. The Company completed due diligence sampling during 2011 and purchased the Santa Rosa claims during the same year. The Cañada de la Virgen claim was part of the Cooperative claim block (Guanajuato Mine) purchased by the Company in 2005.

## 7.A.2.c Geological Setting and Mineralization

The stratigraphy of the area presents to the Company basement rocks of the older units including Mesozoic age La Luz and La Esperanza Formations. These formations consist of meta-sedimentary sequences, including shale, andesite and felsic dykes deformed and folded by regional metamorphism. Upper volcanic package rocks in concordant contact include a sequence of the lithic tuff, ignimbrites, and also in some place's rhyolite dykes and jasperoids. The area generally presents a strong NW structural orientation, with normal faults and a dextral component.

In the second phase of exploration (July 2014), detailed mapping was completed in the Cañada de la Virgen claim and in the Virgin vein development tunnel. The Virgin vein structure with minor quartz is oriented around 320-330° with a dip of 35-45°NE, and an average width of 0.50 m. The vein, inside the tunnel, occurs at the contact of a diorite dike. On surface, there are two separate structures enveloping a quartz stockwork hosted in the meta-sedimentary rocks. The tunnel is 60 m long and there are several inclined shafts where mineralization has been extracted. The wall-rock of the Virgin vein, which outcrops for 400 m, shows propylitic alteration along its length. Host rocks include lithic tuffs, ignimbrites, and associated dykes.

Another vein structure identified during the mapping extends for more than 600 m and is exposed in the Salaverna North tunnel. It is a vein structure of 0.40 m width, with strong silicification and hosted in the meta-sedimentary package. The vein structure, when it reaches the upper rhyolite volcanic rocks becomes a stockwork with hematite, limonite, clays, and fine disseminated pyrite.

#### 7.A.2.d Exploration

In the first stage of the Company's exploration (2012) on the Cañada de la Virgen claim, a total of 168 rock samples from surface, and 537 core samples from the five diamond drill holes were collected.

During the second stage of the Company's exploration (2014), a total of 140 samples were taken from surface and underground.

## 7.A.2.e Drilling

During 2012, five core holes (HQ) were completed on the Santa Rosa Project, specifically on the Cañada de la Virgen claim. In 2017, a second drilling program comprising five core holes (HQ) was completed on the Cañada de la Virgen area. No results of economic significance were encountered in either program.

#### 7.A.2.f Sample Preparation, Analyses and Security

The drill core samples were prepared by technicians working under the direction of the Exploration Department geologists. The exploration diamond drill core from Santa Rosa was of HQ diameter.

All the analytical work was completed by SGS and the quality control measures, and data verification procedures are consistent with those described for Guanajuato.

## 7.A.2.g Mineral Resource Estimates

There is no Mineral Resource estimate for the Santa Rosa Project.

#### 7.A.2.h Mineral Reserve Estimates

There is no Mineral Reserve estimate for the Santa Rosa Project.

## 7.A.2.i Mining Operations

The Santa Rosa Project is exploration in nature and no mining methods have been defined.

#### 7.A.2.j Infrastructure, Permitting and Compliance Activities

The southern claims of the Santa Rosa Project are accessible via road access 20 km northeast of Guanajuato. The city of Guanajuato is serviced by an international airport located on the outskirts of Silao, a 30-minute drive on a toll road from Guanajuato. The more northerly claims in the Santa Rosa Project are located nearer the town of San Felipe, an 80 km drive north of Guanajuato by paved road.

Access to local resources is provided within the city of Guanajuato and the town of San Felipe.

#### 7.A.2.k Exploration and Development

A work program consisting of 960 m of surface man-portable rig core drilling and associated trail building was completed in 2017. No significant results were returned from this drilling.

The Company has no program planned for 2021.

# 7.A.3 Plomo Project

# 7.A.3.a Property Description and Location

The Plomo Project which is located in NV Sonora State, Mexico consists of the Plomo and Plomo II mineral claims which total 4,279ha in NW Sonora State, Mexico. The Plomo Project is 100% owned by Great Panther Mining Ltd., through its wholly-owned Mexican subsidiary, Coboro Minerales De Mexico S.A. de C.V.

#### 7.A.3.b Geological Setting, Mineralization and Deposit Type

The geological setting of the northern Sonora desert is similar in many aspects to that of south eastern California and south western Arizona. The region, typical of the southern basin and range physiographic province is characterized by elongate, north west trending ranges, separated by wide alluvial valleys. Basement rock in the area include Precambrian gneisses, metamorphosed andesites, and granites. These rocks are overlain by younger Proterozoic quartzites and limestones, Paleozoic and Mesozoic carbonate rocks, and Mesozoic volcanic rocks. The Sonora-Mojave mega-shear appears to be a major fault which juxtaposes the Precambrian basement against the Jurassic magmatic terrane. The nature of movement along the shear is uncertain but may be 800km of left-lateral movement during the middle Jurassic time.

The Plomo geology is represented by volcanic/volcaniclastic and intrusive rocks that belong to the Jurassic magmatic arc, with mineralized zones controlled by low angle shear structures. To a large extent the upper plate rhyolite volcanic rock and mineralized shear has been eroded, leaving only remnants of the mineralized shear, and underlying lower plate mafic volcanic rocks. This interpretation comes out of several campaigns of geological mapping culminating in 2012 (described below) and a geochemistry program. A further drill program would test the mineralized shear zone by drilling through several remnant areas of upper plate rocks through the mineralized and altered shear, and into the lower plate volcanic rocks.

#### 7.A.3.c Exploration and Drilling

The Plomo project lies in one of the most prospective gold mineralized areas in Sonora, the Altar gold belt. The region hosts the La Herradura gold mine, held by Grupo Peñoles and Newmont. In 2007, a regional sampling and mapping program was conducted in an approximately five km long and two km wide area, resulting in discovery of several gold anomalous areas in hematite-tourmaline mineralized low angle shear zones. Within this widespread gold anomaly five gold anomalous areas were identified.

In 2008, a first phase drilling program (ten core holes totaling 1,498m) tested these anomalies. Ten diamond drill-holes were completed along a five km long trend. All the holes cut altered low angle shear zones except for one hold located at the Banco de Oro anomaly. Six of the ten holes intersected at least one intercept of two meters with geochemically anomalous gold concentrations.

In 2012, a property wide geological mapping, rock and stream silt sampling program took place to better understand the geology and structures considering the 2008 drilling. This work led to the present understanding of the geology and importantly the flat lying altered and gold mineralized shear between upper "plate" rhyolites and lower "plate" dominate mafic volcanic rocks. The sericite-quartz-tourmaline-hematite sheared small hills in the Pavoreal area, drilled in 2008, have been re-interpreted as remnant vestiges of the flat lying shear. Great Panther is targeting drilling remaining areas of shear located below areas of altered rhyolite upper plate rock.

In 2021, the Company plans to complete detailed geological/alteration/structural mapping to confirm an earlier geological interpretation from 2012, before any surface drill testing.

#### 7.A.3.d Mineral Resource Estimates

There is no Mineral Resource estimate for the Plomo Project.

## 7.A.3.e Mineral Reserve Estimates

There is no Mineral Reserve estimate for the Plomo Project.

The Plomo Project is exploration in nature and no mining methods have been defined.

# 8. RISK FACTORS

The operations of the Company are characterized by a number of risks inherent to the nature of the mining industry and to the nature of the Company's business in particular. The following risk factors, as well as other risks discussed in this AIF, could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company. These risks and uncertainties are not the only ones faced by the Company. Additional risks and uncertainties not presently known to management or that management currently consider immaterial may also impair the Company's business operations. If any of these events actually occur, the Company's business, prospects, financial condition, cash flow and operating results could be materially harmed. Before deciding to invest in securities of the Company, investors should carefully consider such risks and uncertainties.

## Metals and Mineral Prices Are Subject to Dramatic and Unpredictable Fluctuations

The market prices of precious metals and other minerals are volatile and cannot be controlled. If the prices of precious metals and other minerals drop significantly, the economic prospects of the Company's operating mines and projects could be significantly reduced or rendered uneconomic. There is no assurance that even if commercial quantities of ore are discovered, a profitable market may exist for the sale of same. Mineral prices have fluctuated widely, particularly in recent years. The marketability of minerals is also affected by numerous other factors beyond the control of the Company, including government regulations relating to royalties, allowable production and importing and exporting of minerals, the effect of which cannot be accurately predicted.

The Company's objective is to generally remain unhedged with respect to gold and siler prices. However, the Company may enter into hedging arrangements from time to time and fluctuations in metal prices may result in derivative losses and liabilities in respect of these arrangements due to metal price fluctuations. Correspondingly, determinations not to engage in hedging arrangements may expose the Company to risk of prices in gold and silver which could significantly impact the Company's cash flow from operations and adversely affect its ability to make debt repayments when due should these prices decline in circumstances when the Company does not have hedging arrangements in place. From time to time, the Company has also sought arrangements to price a proportion of the silver and gold content of its production in advance of contractual pricing periods which can be two to three months from the time of shipment. The arrangements entered into to date have not exceeded more than 33% of the Company's annual production and have not exceeded more than six months in duration. The Company did not enter any such arrangements in 2020, but may enter into similar arrangements in the future which may exceed the levels and duration of past arrangements. These arrangements may also be subject to realized losses as can involve fixing a future price for a given metal.

## **Current Global Financial Conditions**

In recent years, global financial markets have experienced increased volatility and global financial conditions have been subject to increased instability. These had a profound impact on the global economy. Many industries, including the mining sector, are impacted by these market conditions. Some of the key impacts of financial market turmoil include contraction in credit markets resulting in a widening of credit risk, devaluations and high volatility in global equity, commodity, foreign exchange and precious

metal markets and a lack of market liquidity. These factors may impact the ability of the Company to obtain equity or debt financing and, if available, to obtain such financing on terms favourable to the Company. If these increased levels of volatility and market turmoil continue, the Company's operations and planned growth could be adversely impacted and the trading price of the securities of the Company may be adversely affected.

#### **COVID-19 and Other Pandemics**

Since the outbreak of COVID-19 in late 2019, it has spread rapidly into areas where we have operations and where our offices are located. Government efforts to curtail the spread of COVID-19 resulted in the temporary suspensions of our operations in Mexico for approximately two months and State of Emergency orders in Peru have resulted in Coricancha, which has been on care and maintenance with some limited mining operations, being restricted to conducting exclusively care and maintenance activities to sustain the appropriate safety and environmental systems. In the three months ended December 31, 2020, the Company voluntarily suspended operations in Topia for a period of approximately one month due to the detection of COVID-19 among the workforce in an effort to limit the spread among the workforce and in the local community. Any sustained shut-down or significant curtailment to the Company's operations will have a material adverse impact on the Company's production, revenues and financial condition and may materially impact the Company's ability to meet its production guidance.

The spread of COVID-19 has impacted our employees and contractors, not only as it relates to potential health concerns, but also in terms of limitations on movement, availability of food and other goods, and personal well-being, among others. Our suppliers and service providers have also been impacted.

While COVID-19 has already had significant, direct impacts on our operations, our business, our workforce, and our production, the extent to which COVID-19 will continue to impact our operations will depend on future developments which are highly uncertain and cannot be predicted with confidence. These future developments include, but are not limited to, the duration of the outbreak, new information that may emerge concerning the severity of COVID-19, and the actions taken to contain COVID-19 or treat it. The impact of governmental restrictions and health and safety protocols could improve or worsen relative to our assumptions, depending on how each jurisdiction manages potential outbreaks of COVID-19, the development and adequate supply of vaccines, and the roll-out of vaccination programs in each jurisdiction. We assume operations will continue to be impacted by comprehensive COVID-19 protocols in 2021, which would increase costs and restrict throughput levels.

Our ability to conduct exploration and development programs was also impacted in 2020 due to COVID-related restrictions, protocols, and travel restrictions, and we anticipate that this impact will also be felt in 2021. The Company may experience delays and disruptions in carrying out its planned near mine and regional exploration plans at Tucano which may in turn delay the expansion of its mineral resource base. Further, there is no assurance that exploration and development activities relating to Urucum underground mine will not have to cease at some point during 2021 as a result of government orders directed at controlling COVID-19.

Our ability to continue with our operations and activities, or to successfully maintain our operations on care and maintenance if so required, or to restart or ramp-up any such operations efficiently or economically, or at all, is unknown. Disruptions in the Company's supply chain, including disruptions from the Company's suppliers and service providers, as a result of industry closures relating to containment of COVID-19 may result in the declaration by the Company's suppliers of force majeure in contracts or purchase orders, which may result in the Company's inability to complete projects in a timely manner. In

addition, the Company's customers may determine to delay their decisions in connection with new projects as they assess the impact of COVID-19 on their businesses.

Regulatory agencies the Company works with have been impacted by work-from home and other industry closures. As a result, the Company has also experienced delays in 2020 and expects in 2021 it will continue to be impacted by delays, in receiving permits and regulatory responses which could adversely impact its operations and exploration and development plans.

Further, the Company expects that it will continue in 2021 to experience disruptions to its operations as a result of COVID-19 including workforce shortages and the unavailability of contractors and subcontractors, interruption of supplies and the provision of services from third parties upon which the Company relies, regulatory restrictions that governments impose or that the Company voluntarily imposes to address the COVID-19 outbreak and to ensure the safety of employees and others. The Company may experience disruptions in transportation services as a result of COVID-19 that could adversely impact the Company's ability to deliver gold doré to refineries.

Moreover, the continued presence of, or spread, of COVID-19, and any future emergence and spread of COVID-19 mutations or other pathogens, globally would likely have material adverse effect on both global and regional economies, including those in which we operate, as we have seen already. Such effects would not only affect our business and results of operations, but also the operations of our suppliers, contractors and service providers, including smelter and refining service providers, and the demand for our production. COVID-19 could also negatively impact stock markets, including the trading price of our shares, adversely impact our ability to raise capital, cause continued interest rate volatility and movements that could make obtaining financing or refinancing our debt obligations more challenging or more expensive (if such financing is available at all), and result in any operations affected by COVID-19 becoming subject to quarantine or shut down. Any of these developments, and others, could have a material adverse effect on our business, results of operations and financial condition.

If the Company's operations are impacted or expected to be impacted, the Company may undertake measures to preserve cash resources including suspension of discretionary spending and other legal means to reduce and minimize contractual spending. However, any extended suspension of operations may ultimately impact on the Company's ability to repay its debt obligations and other creditors, with the result that the Company's financial position may be seriously jeopardized.

#### **Tucano Mine Life**

The Company significantly reduced its Mineral Reserve and Mineral Resource estimates for Tucano in March 2020, which resulted in a shorter open pit mine plan for Tucano than the forecast production from Mineral Reserves through the end of 2022. The Company announced a further update to its Mineral Reserve and Resources estimates for Tucano in December 2020 which extended the open pit mine life by approximately one year. In order to continue open pit mining at Tucano beyond 2023, the Company will need to expand its Mineral Reserve base or otherwise establish that the material currently classified as Mineral Resources can be economically mined. On January 19, 2021, the Company announced that it plans to complete a 60,000 m drilling program at Tucano in 2021, including plans to further advance nearmine drilling focused on converting existing Mineral Resources into Mineral Reserves, and further advance its regional exploration programs that are focused on increasing the Tucano Mineral Resource base. There is however no assurance that these development and exploration plans will ultimately be successful in increasing the mine life of Tucano or that such development work will result in the estimation of Mineral Reserves demonstrating economic viability. Further, there are uncertainties with respect to the amount of capital expenditures that may be required to be deployed to extend such mine life beyond 2023 and

related regulatory and permitted risks associated therewith. As a consequence, the Company may be required to evaluate whether to cease operations at Tucano if it cannot economically operate the mine. Any shut-down or curtailment of Tucano would materially and adversely impact on the financial condition and results of operations of the Company and may result in the Company not being able to pay its obligations, including outstanding debt.

# **Liquidity Risk**

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they arise. The Company has a planning and budgeting process in place to help determine the funds required to support the Company's normal operating requirements on an ongoing basis and its expansion plans. As at December 31, 2020, the Company had net working capital (current assets in excess of current liabilities) of approximately \$31.4 million, including approximately \$63.4 million in cash and short term deposits. At December 31, 2020, the Company has total borrowings of \$33.4 million, of which \$30.9 million is due over the next twelve months.

The Company believes it has sufficient net working capital to meet operating requirements as they arise for at least the next twelve months, but there can be no assurance that a sudden significant decrease in gold or silver prices, or unforeseen liabilities, or other matters affecting the operations of the business might arise which will have a material impact on the Company's sufficiency of cash reserves to meet operating requirements. In addition, further acquisitions or significant change in capital plans could significantly change the cash and working capital required by the Company. Government and industry measures to contain the spread of COVID-19 could also cause disruption to the Company's operations and adversely impact cash flow and liquidity.

The Company has not finalized its open pit mine plan for Tucano beyond 2023 and the capital requirements to extend the mine plan beyond this time are unknown at present. The Company may require additional financing in order to finance these ongoing operations at Tucano and this financing may not be available when required.

As at December 31, 2020, the Company has a provision of \$68.3 million on its Statement of Financial Position for the estimated present cost of reclamation and remediation expenditures associated with the future closure of its mineral properties, and plant and equipment, at the GMC, Topia, Tucano and Coricancha. The estimated expenditures are to commence near the end of each mine's useful life except may be required by applicable law. There is no assurance that the Company will have sufficient capital resources as required to fund these reclamation expenses as and when required.

#### **Inaccuracies in Production and Cost Estimates**

The Company prepares estimates of future production and future production costs for specific operations. No assurance can be given that these estimates will be achieved. Production and cost estimates are based on, among other things, the following: the accuracy of Mineral Reserve and Resource estimates; the ability to continue mining activities without disruption; the accuracy of assumptions regarding ground conditions and physical characteristics of mineralization, equipment and mechanical availability, labour, and the accuracy of estimated rates and costs of mining and processing. Actual production and costs may vary from estimates for a variety of reasons, including actual mineralization mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics, short-term operating factors relating to the Mineral Reserve and Resources, such as the need for sequential development of mineralized zones and the processing of new or different grades of mineralization; the ability to continue mining in accordance with the Company's mine plans, the availability of tailings storage facilities and the risks and

hazards associated with mining described below under "Mining and Mineral Exploration Have Substantial Operational Risks". In addition, there can be no assurance that silver recoveries or other metal recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production, or that the existing known and experienced recoveries will continue. Costs of production may also be affected by a variety of factors, including: variability in grade or dilution, metallurgy, labour costs, costs of supplies and services (such as, fuel and power), general inflationary pressures, changes in regulations and currency exchange rates. Failure to achieve production or cost estimates, or increases in costs, could have an adverse impact on the Company's future cash flow, earnings, results of operations and financial condition.

## **Uncertainty Regarding Resource Estimates**

Only Mineral Resources have been determined for certain of the Company's properties, and other than Tucano, no estimate of Mineral Reserves on any property has been completed. Mineral Resource estimates are based on interpretation and assumptions and may yield less mineral production under actual conditions than is currently estimated. In making determinations about whether to advance any projects to development, the Company must rely upon estimated calculations as to the Mineral Resources and grades of mineralization on its properties. Until mineralized zones are mined and processed, Mineral Resources and grades of mineralization must be considered as estimates only. These estimates are imprecise and depend upon geological interpretation and statistical inferences drawn from drilling and sampling which may prove to be unreliable. The Company cannot assure that:

- Mineral Resource or other mineralization estimates will be accurate; or
- Mineralization can be mined or processed profitably.

Any material changes in Mineral Resource estimates and grades of mineralization will affect the economic viability of a mine or a project and its return on capital. The Company's resource estimates have been determined and valued based on assumed future prices, cut-off grades and operating costs that may prove to be inaccurate. Extended declines in market prices for silver, gold, zinc and lead may render portions of the Company's mineralization uneconomic and result in reduced reported Mineral Resources.

Any material reductions in estimates of Mineral Resources, or of the Company's ability to extract such Mineral Resources, could have a material adverse effect on the Company's results of operations or financial condition. The Company cannot assure that mineral recovery rates achieved in small scale tests will be duplicated in large scale tests under on-site conditions or in production scale.

#### **Production Decisions Made without Identified Mineral Reserves**

There are no current estimates of Mineral Reserves for any of the Company's Mexican mines and Coricancha. The Company made decisions to enter into production at Topia, Guanajuato and San Ignacio without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the mines. Any future production decisions at Topia, Guanajuato, and San Ignacio are also anticipated to be made without having completed feasibility studies. In addition, the Company may at some point in the future make decisions to extend mine operations at Tucano beyond the mine life of its current Mineral Reserves by mining material that is classified as Mineral Resources without the completion of a feasibility study that would be required to establish whether these Mineral Resources can be converted to Mineral Reserves. As a result, there may be increased uncertainty and risks of achieving any particular level of recovery of minerals from the Company's mines or the costs of such recovery. As the Company's mines

do not have established Mineral Reserves, except for Tucano, the Company faces higher risks that anticipated rates of production and production costs will not be achieved, each of which risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flow to fund operations from and ultimately achieve or maintain profitable operations.

## **Sufficiency of Current Capital and Ability to Obtain Financing**

The further exploitation, development and exploration of mineral properties in which the Company holds interests or which the Company acquires may depend upon its ability to obtain financing through equity financing and/or debt financing, to enter into joint venture arrangements or to obtain other means of financing. There is no assurance that the Company will be successful in obtaining required financing as and when needed. Volatile precious metals markets may make it difficult or impossible for the Company to obtain financing on favourable terms, or at all.

As at December 31, 2020, the Company had approximately \$63.4 million of cash and short-term deposits. During 2020, the Company generated positive cash flow from operating activities, however, this was not sufficient to make scheduled debt repayments and capital investments and the Company needed to raise other sources of capital. There is no assurance that the Company's cash flow generated from mining activities, along with its current cash and other net working capital, will be sufficient to fund the Company's operations without requiring any additional capital to meet its planned initiatives, and to fund investment and exploration, evaluation, and development activities for the foreseeable future. The Company's ability to fund its operations without additional capital will be highly dependent on metal prices and the ability of the Company to maintain cost and grade controls at its operations, and is subject to the Company's plans and strategy.

In addition, the Company had outstanding debt of \$33.4 million as at December 31, 2020. The Company may also enter into new debt arrangements in the future that may further increase its debt payable. In addition, the Company was liable from the fourth quarter of 2019 through February, 2021 under the terms of certain forward foreign exchange contracts used to hedge the Company's exposure to movements in the USD/BRL exchange rate. As at December 31, 2020, the Company held non-deliverable forward foreign exchange contracts for BRL against USD totaling BRL 88.2 million at various pre-determined rates ranging from BRL 4.37/USD to BRL 4.45/USD, at various maturity dates until February 2021. The fair value of these outstanding non-deliverable forward foreign exchange contracts resulted in a liability of \$3.0 million at December 31, 2020. These contracts were settled in cash at each maturity date for an amount equal to the difference between the spot market exchange rate on the settlement date and the contract rate multiplied by the contractual notional amount. Accordingly, cash settlement that is required under hedging arrangements had the potential to impact the Company's liquidity and financial condition. In 2020, the Company realized losses totalling \$21.6 million on BRL/USD forward exchange contracts that matured during the year and recorded unrealized mark-to-market losses of \$6.4 million. For January and February 2021, the Company realized a loss of \$3.5 million on final settlement of the remaining forward exchange contracts that were outstanding at December 31, 2020. The Company will be dependent upon its future ability to maintain production at its mines in order to generate the cash flow required to repay this indebtedness in accordance with the requirement payment schedules. In the event production cannot be maintained, the Company may be required to complete additional equity financings or sell assets in order to repay these creditors and avoid enforcement actions by these creditors or an insolvency event. There is no assurance that any equity financing would be available to the Company in these circumstances or that the Company would be able to market and sell assets at the prices that the Company would consider to be fair and representative of their market value.

The Company has completed acquisitions to achieve growth, and accordingly, may continue to evaluate opportunities to execute and complete additional acquisitions, and these may require additional capital. There is no assurance that the Company will be able to obtain additional capital when required. Failure to obtain additional financing on a timely basis may limit, expansion, development and exploration plans, or even to suspend operations.

## Mining and Mineral Exploration Have Substantial Operational Risks

Mining and mineral exploration involve many risks, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. These risks include but are not limited to:

- major or catastrophic equipment failures;
- mine failures and slope failures;
- failure of tailings facilities;
- ground fall and cave-ins;
- deleterious elements materializing in the mined resources;
- environmental hazards;
- industrial accidents and explosions;
- encountering unusual or unexpected geological formations;
- labour shortages or strikes;
- government regulations;
- civil disobedience and protests; and
- natural phenomena such as inclement weather conditions, floods, droughts, rockslides and earthquakes.

Tucano experienced a pit slope displacement at UCS in October 2019, as described in Section 5.A.8.b of this AIF. The pit was closed to mining while Great Panther worked toward a remediation plan with the assistance of an independent consulting firm, Knight Piésold. Even though full-scale mining recommenced in October, 2020, there is no assurance that the Company will be able to continue mining and be able to access the UCS Mineral Reserves. The Mineral Reserves in the UCS Pit represent a material portion of the Mineral Reserves planned for production in 2021. If the Mineral Reserves at UCS are unable to be accessed, either as a result of slope displacement or instability or otherwise, it would adversely impact the Company's production plans, future revenues and financial condition of the Company.

Draining the pit and monitoring of water levels in piezometer holes is being carried out as mining progresses, and any mining below 111 masl will be evaluated on the basis of whether further drainage is required using for horizontal drain holes in order to continue mining safely. If further drainage is required, there is a risk that there may be interruptions required to continue with horizontal drainage, which would increase the Company's costs of operations and reduce and substantially delay potential production.

In addition, the Company may experience similar pit wall displacements or other failures at the Tucano open pit mines, with further negative impact to the Company's ability to mine its Mineral Reserves. Any such events may increase the Company's costs of operations, delay production plans and reduce potential production.

Monitoring of the TSF at Topia by the Company's geotechnical consultants detected mass movement of the material underlying the TSF. As a result, the consultants issued a report in March 2020 recommending that the Company cease further deposit of tailings on the TSF. The Company has been working in 2020 with its independent consultant to assess these observations and develop a remediation plan.

During the suspension of non-essential activities due to COVID-19, the Company continued monitoring the conditions on Phase II and installed additional geotechnical instrumentation. In addition, tests were carried out to determine the state of the tailings in Phase I. Extensive work has been carried out to identify and reduce the flow of water into the base of the TSF. Monitoring indicated that it was safe to return to stacking in Phase II, which is expected to provide sufficient capacity until the end of 2022. Deposition at Phase II was restarted on the basis of continued positive results of monitoring and an interim stacking plan for Phase II received from a third-party consultant with strict control on sequence and compaction level. The Company has also received the required permit for Phase III, which will be available for use after constructing retaining walls and erosion controls around the base of the facility.

There is no assurance that the Company will be able to continue deposit of tailings on the TSF or that the ongoing monitoring and there is no assurance that any remediation plan will be successful in preventing further movement of the tailings. Any movement of the material underlying the TSF could result in significant environmental damage, potential loss of life and property and consequential liability to the Company.

These occurrences could result in environmental damage and liabilities, work stoppages and delayed production, increased production costs, damage to, or destruction of, mineral properties or production facilities, personal injury or death, asset write-downs, monetary losses, loss of or suspension of permits as a result of regulatory action, reputational damage and other liabilities. The nature of these risks is such that liabilities could exceed policy limits of the Company's insurance coverage, in which case the Company could incur significant costs that could prevent profitable operations.

## Risks Associated with Continued use of Topia Tailings and Expansion

In December 2017, SEMARNAT granted all permits for the construction and operation of Phase II of the Topia TSF. Phase II is not a conventional tailings dam, but instead a dry stack operation using filter cake. The deposition includes stacking and compaction of the material.

Phase I of the TSF was closed and contoured during 2018 and requires ongoing monitoring consisting of primarily of piezometers and inclinometers, and independent third-party geotechnical reviews.

The planned capacity of the Phase II TSF is sufficient to handle the processing of several years of mined material and additional longer term storage capacity is permitting for Phase III, which will be available for use after constructing retaining walls and erosion controls around the base of the facility. Phase III is on top of the legacy TSF managed by a former owner of the mine, where the proposed tails stacking will be part of the remediation. There are risks associated with future expansions including, but not limited to, identifying and procuring suitable sites, and obtaining the necessary permits for construction and operation.

On March 9, 2020, the Company announced it had temporarily ceased tailings deposition at its Topia Phase II TSF following receipt of a report on the TSF from an independent tailings management and geotechnical consultant engaged by the Company to regularly evaluate the TSF. The report recommended that stacking of tailings of the Phase II area of the TSF be discontinued based on evidence of mass movement underlying Phase I and Phase II of the TSF.

During the suspension of non-essential activities due to COVID-19, Great Panther continued monitoring the conditions on Phase II and installed additional geotechnical instrumentation. In addition, tests were carried out to determine the state of the tailings in Phase I. Extensive work has been carried out to identify and reduce the flow of water into the base of the TSF. Monitoring indicated that it was safe to return to stacking in Phase II, which is expected to provide sufficient capacity until the end of 2022. Deposition at Phase II was restarted on the basis of continued positive results of monitoring and an interim stacking plan for Phase II received from a third-party consultant with strict control on sequence and compaction level.

The Company cannot provide assurance that it will be successful in preventing further movement of the tailings. Any movement of the material underlying the TSF could result in significant environmental damage, potential loss of life and property and consequential liability to the Company.

These occurrences could result in environmental damage and liabilities, work stoppages and delayed production, increased production costs, damage to, or destruction of, mineral properties or production facilities, personal injury or death, asset write-downs, monetary losses, loss of or suspension of permits as a result of regulatory action, reputational damage and other liabilities. The nature of these risks is such that liabilities could exceed policy limits of the Company's insurance coverage, in which case the Company could incur significant costs that could prevent profitable operations.

Any shut-down of Topia due to permitting delays or lack of alternate tailings storage solutions would have a material impact on the Company's revenues and may adversely impact on the Company's revenues and financial condition.

In addition, reviews by the regulatory authorities dating back to 2015, coupled with permitting work undertaken by the Company in connection with the expansion of the Topia TSF have led to a broader review by PROFEPA of the permitting status for all of Topia operations, environmental compliance (including the historical tailings dating back to periods prior to Great Panther's ownership) and a clarification of land titles. Devised as a cooperative management strategy, the Topia Mine was accepted into a voluntary environmental audit program supported by PROFEPA which commenced during the second quarter of 2017. The Company is working on a compliance program authorized by PROFEPA to address the audit findings. This compliance program includes remediation, and technical reviews as defined by the audit. Progress updates are submitted to PROFEPA for further review. The Company anticipates that it will be able to achieve full compliance; however, the Company cannot provide complete assurance that upon conclusion of the compliance program further reviews will not lead to future suspensions of operations.

#### **Political Risk and Government Regulations**

The Company's mining, exploration and development activities are focused in Brazil, Mexico and Peru, and are subject to extensive national and local laws and regulations governing prospects, taxes, labour standards, employee profit sharing and occupational health and safety, including mine safety, land use, environmental protection, including biodiversity, and water, soil and air quality, permitting, management and use of toxic substances and explosives, management and use of natural resources, including water and energy supplies, management of waste, exploration, development, production, and post-closure reclamation of mines, imports and exports, transportation, community rights, human rights, social matters, including historic and cultural preservation, engagement and consultation, local hiring and procurement, development funds, anti-corruption and anti-money laundering, data protection and privacy and others which currently or in the future may have a substantial adverse impact on the Company. To comply with applicable laws and future laws, the Company may be required to make

significant capital or operating expenditures or face restrictions on or suspensions of our operations and delays in development of our properties. There is no guarantee that more restrictive, or new constraints on the Company's operations will not be imposed, including those that might have significant economic impacts on our operations and profitability. In addition, the regulatory and legal framework in some jurisdictions in which we operate are outdated, unclear and at times, inconsistent. A failure to comply with these laws and regulations, including with respect to our past and current operations, and possibly even actions of parties from whom we acquired our mines or properties, could lead to, among other things, the imposition of substantial fines, penalties, sanctions, the revocation of licenses or approvals, expropriation, forced reduction or suspension of operations, and other civil, regulatory or criminal proceedings the extent of which cannot be reasonably predicted.

The Company is seeking approval of a modification to a remediation plan from the MEM for the Coricancha project in accordance with the recommendations of an independent consultant to preserve the stability of nearby areas. The Company has changed the scheduling of the reclamation work, pending a decision from the MEM regarding the proposal to modify the approved remediation plan. To protect itself from any pending or future fines, penalties, regulatory action or charges from government authorities and to request that the MEM issue a decision on the proposed modification of the remediation plan for legacy tailings, the Company initiated a Constitutional Case and successfully obtained an injunction to prevent fines and penalties until MEM issues its decision.

The Company was recently notified of a second instance decision in the Constitutional Case, which unfavourably dismisses the Company's constitutional challenge. The Company expects that the related injunction will be cancelled. The cancellation of the injunction will expose the Company to potential fines, penalties, regulatory action or charges from government authorities.

Existing and possible future environmental legislation, regulation and action could cause additional expense, capital expenditures, restriction and delays in the activities of the Company, the extent of which cannot be reasonably predicted. Violators may be required to compensate those suffering loss or damage by reason of the Company's mining activities and may be fined if convicted of an offence under such legislation.

Mining and exploration activities in the countries where the Company operates may be affected in varying degrees by political instabilities and government regulations relating to the mining industry or business activities in general. Any changes in regulations or shifts in political conditions are beyond the Company's control and may adversely affect the business. Operations may also be affected to varying degrees by government regulations with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, environmental legislation and mine safety. The status of Brazil, Mexico and Peru as developing countries may make it more difficult for the Company to obtain any required financing for projects. The effect of all these factors cannot be accurately predicted. Notwithstanding the progress achieved in improving Brazilian, Mexican and Peruvian political institutions and in revitalizing their economies, the present administrations or any successor governments may not be able to sustain the progress achieved. The Company does not carry political risk insurance.

As governments continue to struggle with deficits and concerns over the effects of depressed economies, the mining and metals sector has often been identified as a source of revenue. Taxation and royalties are often subject to change and are vulnerable to increases in both poor and good economic times, especially in many resource rich countries. The addition of new taxes, specifically those aimed at mining companies, could have a material impact on our operations and will directly affect profitability and our financial results. The economic impact of COVID-19 on the global and national economies, the resulting costs to governments and increased fiscal debt is also expected to result in further taxation pressures, the impacts of which could impact our financial performance. For a discussion of recent legal reforms proposed in

Mexico, see Section 4.F of this AIF under the heading "Doing Business in Brazil, Mexico and Peru – Mining in Mexico".

To manage the COVID-19 pandemic, governments in all of the jurisdictions the Company has operations have implemented various regulations, orders, protocols and guidelines, many of which have negatively affected our business and our employees, contractors and local communities. COVID-19 has also impacted governments and national economies, and in addition to impacts on labour, supplies, and services that are needed to conduct the Company's business, this may also increase the likelihood of additional taxes, duties, royalties, or similar burdens being placed on mining operations in an effort to generate municipal, state and federal revenues and boost economies. For more detailed discussion of the risks related to COVID-19 on the Company's business, see Section 8 of this AIF under the heading "Risk Factors - COVID-19 and Other Pandemics".

## Risks Associated with Obtaining and Complying with Tailings and Other Permits

The Company's operations are subject to obtaining and maintaining permits (including environmental permits) from appropriate governmental authorities. There is no assurance that necessary permits will be obtained or that delays will not occur in connection with obtaining all necessary renewals of such permits for the existing operations, or additional permits for any possible future changes to operations, or additional permits associated with new legislation. Additionally, it is possible that previously issued permits may become suspended for a variety of reasons, including through government or court action. There can be no assurance that the Company will continue to hold or obtain, if required to, all permits necessary to develop or continue operating at any particular property.

The Company has been advised by the national water authority, CONAGUA, that the Company is required to make applications for permits associated with the occupation and construction of the TSF at the GMC, including the proposed expansion of the GMC TSF (lifts 18 and 19). Subsequently, the Company filed its applications and CONAGUA officials carried out an inspection of the TSF and requested further technical information, which the Company submitted in December 2017. The duration and success of efforts to obtain the tailings permits are contingent upon many variables not within the Company's control.

Approval for the expansion of the TSF at the GMC by SEMARNAT has been obtained, subject to also receiving approval by the national water authority, CONAGUA which is pending. In parallel, the Company has completed its review to identify technical alternatives to extend its tailings storage capacity utilizing existing permits and has begun modifying the tailings discharge using cyclones to extend the tailings capacity until June 30, 2021. This will allow more time for receipt of the pending expansion approval; however, if the expansion approval of the TSF has not been received in a timely manner and prior to June 30, 2021, the Company may need to cease milling operations at the GMC until receipt of the expansion approval.

The Company cannot assure that any tailings permits will be obtained or renewable on reasonable terms, or at all. Permitting authorities may impose conditions on the approval of any such permits which may not be economically feasible or could substantially delay production plans. Delays or a failure to obtain such required permits on reasonable terms, or the expiry, revocation or failure by the Company to comply with the terms of any such permits, if obtained, would adversely affect the Company's ability to continue operating or expand the TSF at the GMC and could result in a halt of operations at the GMC, each of which could adversely affect the Company's results of operations.

The Company may require additional water use and discharge permits for its operations at the GMC, particularly during of periods of excessive drought. The Company continues to evaluate whether such

permits are necessary. If such permits prove necessary, there can be no assurance that the Company will be able to obtain such permits, which could adversely affect the Company's operations.

#### **Factors Beyond the Company's Control**

There are a number of factors beyond the Company's control. These factors include, but are not limited to, changes in government regulation, political changes, high levels of volatility in metal prices, availability of markets, availability of adequate transportation and smelting facilities, availability of capital, environmental and social factors, acts of nature, catastrophic risks, and amendments to existing taxes and royalties. These factors and their effects cannot be accurately predicted.

## **Environmental and Health and Safety Risks**

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. There is no assurance that environmental regulations will not change in a manner that could have an adverse effect on the Company's financial condition, liquidity or results of operations, and a breach of any such regulation may result in the imposition of fines and penalties.

Environmental legislation is constantly expanding and evolving in ways that impose stricter standards and more rigorous enforcement, with higher fines and more severe penalties for non-compliance, and increased scrutiny of proposed projects. There is an increased level of responsibility for companies, and trends towards criminal liability for officers and directors for violations of environmental laws, whether inadvertent or not. The cost of compliance with changes in governmental regulations has the potential to reduce the profitability of the Company's operations.

Exploration activities and/or the pursuit of commercial production of the Company's mineral claims may be subject to an environmental review process under environmental assessment legislation. Compliance with an environmental review process may be costly and may delay commercial production. Furthermore, there is the possibility that the Company would not be able to proceed with commercial production upon completion of the environmental review process if government authorities do not approve the proposed mine, or if the costs of compliance with government regulation adversely affect the commercial viability of the proposed mine.

The development and operation of a mine involves significant risks to personnel from accidents or catastrophes such as fires, explosions or collapses. These risks could result in damage or destruction of mineral properties, production facilities, casualties, personal injury, environmental damage, mining delays, increased production costs, monetary losses and legal liability. The Company may not be able to obtain insurance to cover these risks at economically feasible premiums. Insurance against certain environmental risks, including potential liability for pollution and other hazards as a result of the disposal of waste products occurring from production, is not generally available to companies within the mining industry. The Company may be materially adversely affected if it incurs losses related to any significant events that are not covered by its insurance policies.

The Company has safety programs in place and continues to pursue further improvements on an ongoing basis. Safety meetings with employees and contractors are held on a regular basis to reinforce standards and practices. However, there is no assurance that safety incidents will not be experienced in the future, or that operations might not be materially affected by their occurrence. Further, a safety incident could have an adverse effect on the Company's financial condition, liquidity or results of operations, and may result in the imposition of fines and penalties.

#### Risks Which Cannot Be Insured

The Company maintains appropriate insurance for liability and property damage; however, the Company may be subject to liability for hazards that cannot be insured against, which if such liabilities arise, could impact profitability and result in a decline in the value of the Company's securities. The Company's operations may involve the use of dangerous and hazardous substances; however, extensive measures are taken to prevent discharges of pollutants in the ground water and the environment. Although the Company will maintain appropriate insurance for liability and property damage in connection with its business, the Company may become subject to liability for hazards that cannot be insured against or which the Company may elect not to insure itself against due to high premium costs or other reasons. In the course of mining and exploration of mineral properties, certain risks and, in particular, unexpected or unusual geological operating conditions including rock bursts, cave-ins, tailings facility failures, fires, flooding and earthquakes, may occur. It is not always possible to fully insure against such risks and the Company may decide not to take out insurance against such risks as a result of high premiums or other reasons.

## **Risk of Secure Title of Property Interest**

There can be no assurance that title to any property interest acquired by the Company or any of its subsidiaries is secured. Although the Company has taken reasonable precautions to ensure that legal title to its properties is properly documented, there can be no assurance that its property interests may not be challenged or impugned. Such property interests may be subject to prior unregistered agreements or transfers or other land claims, and title may be affected by undetected defects and adverse laws and regulations.

In the jurisdictions in which the Company operates, legal rights applicable to mining concessions are different and separate from legal rights applicable to surface lands; accordingly, title holders of mining concessions in such jurisdictions must agree with surface landowners on compensation in respect of mining activities conducted on such land.

## **Unauthorized Mining**

The mining industries in Brazil and Mexico are subject to incursions by illegal miners or "garimpeiros" or "lupios" who gain unauthorized access to mines or exploration areas to steal mineralized material mainly by manual mining methods. The Company has experienced such incursions including an incident in the first quarter of 2014 at the GMC which resulted in both a significant financial loss to the Company and a material impact to the Company's operations. This was also experienced historically at the Tatarugalzinho exploration project in Brazil. In addition to the risk of losses and disruptions, these illegal miners pose a safety and security risk. The Company has taken security measures at its sites to address this issue and ensure the safety and security of its employees, contractors and assets. These incursions and illegal mining activities can potentially compromise underground structures, equipment and operations, which may lead to production stoppages and impact the Company's ability to meet production goals.

# Commercialization Risk of Development and Exploration Stage Properties and Ability to Acquire Additional Commercially Mineable Mineral Rights

The Company's primary mineral properties in Mexico, Topia and the GMC (excluding San Ignacio), have been in the production stage for more than ten years under the ownership of the Company, and have generated positive cash flow from operating activities. However, the commercial viability of these mines was not established by a feasibility study or preliminary economic assessment. Similarly, San Ignacio

commenced commercial production in 2014 and has generated positive cash flow from operating activities; however, the commercial viability of this mine was not established by a feasibility study or preliminary economic assessment. Coricancha was a past producing mine that is currently on care and maintenance. There is no assurance that the Company's evaluation efforts will be sufficient to bring Coricancha into production.

Mineral exploration and development involve a high degree of risk. There is no assurance that commercially viable quantities of ore will be discovered at Coricancha, or the Company's other exploration projects, or that its exploration or development projects will be brought into commercial production.

Most exploration projects do not result in the discovery of commercially mineable ore deposits and no assurance can be given that any anticipated level of recovery of ore reserves will be realized or that any identified mineral deposit will ever qualify as mineable. Estimates of Mineral Reserves and Mineral Resources, and production costs can also be affected by such factors as environmental permitting regulations and requirements, weather, environmental factors, social dynamics in local communities, negotiations with landowners, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions.

Material changes in commodity prices, Mineral Resources, grades, dilution or recovery rates, or other project parameters may affect the economic viability of any project. The Company's future growth and productivity will depend, in part, on the ability to identify and acquire additional commercially mineable mineral rights, and on the costs and results of continued exploration and potential development programs. Mineral exploration and development is highly speculative in nature and is frequently non-productive. Substantial expenditures are required to:

- establish Mineral Resources through drilling and metallurgical and other testing techniques;
- determine metal content and metallurgical recovery processes to extract metal from the ore;
- evaluate the economic feasibility; and
- construct, renovate, expand or modify mining and processing facilities.

In addition, if potentially economic mineralization is discovered, it would take several years from the initial phases of exploration until production is possible. During this time, the economic feasibility of production may change. As a result of these uncertainties, there can be no assurance that the Company will successfully acquire additional commercially mineable properties.

Development projects usually have no operating history upon which to base estimates of future cash flow. Estimates of Proven and Probable Mineral Reserves, Measured and Indicated Mineral Resources, and Inferred Mineral Resources are, to a large extent, based upon detailed geological and engineering analysis. Further, Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. At this time, other than Tucano, the Company's properties do not have defined Mineral Reserves. Due to the uncertainty of Inferred Mineral Resources, there is no assurance that Inferred Mineral Resources will ever be upgraded to either Measured or Indicated Mineral Resources or to Proven or Probable Mineral Reserves.

Because mines have limited lives, the Company must continually replace and expand its Mineral Resources as production continues. The LOM estimates for the Company's mines may not be correct. The ability of the Company to maintain or increase its annual production of metals and the Company's future growth and productivity will be dependent in significant part on its ability to identify and acquire additional commercially mineable mineral rights, to bring new mines into production, to expand Mineral Resources at existing mines, and on the costs and results of continued exploration and potential development

programs. The inability to identify Mineral Resources in quantities sufficient to bring a mineral property into production may result in the write down of the value of the mineral property.

#### Risks Associated with the Coricancha Acquisition

The Company completed the acquisition of Coricancha on June 30, 2017. The Company's decision to acquire Coricancha was subject to a number of assumptions, including anticipated exploration results, the expected cost and timing of restarting operations, anticipated processing and production rates that may be achieved at Coricancha upon reactivation, the working capital position of Coricancha at closing, the ultimate cost of reclaiming legacy tailings facilities, potential increases to the Coricancha resource base, the anticipated cost of the mine closure bond, the indemnification obligations of Nyrstar under the Share Purchase Agreement (described in Section 6.A.1 of this AIF) and current environmental conditions and liabilities at Coricancha. While Nyrstar, as the former owner of Coricancha, has agreed to indemnify the Company with respect to certain reclamation costs, these indemnification obligations are capped. While the Company presently believes the ultimate reclamation costs for which Nyrstar is responsible to indemnify Coricancha will be less than the indemnity cap, there is no assurance that this will be the case. The recent dismissal of the Constitutional Case proceeding will require the Company to consider additional and/or alternative reclamation measures which may or may not be accepted by the authorities, and may subject the Company to further fines and penalties. The Company is uncertain to the ultimate cost of these alternatives and if these will even be accepted by the authorities. In the case there are accepted their cost may ultimately exceed the amount of the Nyrstar indemnity. In addition, there may be disagreements between the Company and Nyrstar as to the amount of Nyrstar's indemnification obligations under the Share Purchase Agreement. In addition, the parent guarantor of the Nyrstar entities has been replaced with a subsidiary of Trafigura that has acquired the Nyrstar entities as part of a sale by Nyrstar NV of its assets in a reorganization transaction with Trafigura. There is no assurance that the Trafigura guarantor will have the financial resources necessary to discharge any claim under the guarantee should the Nyrstar entities fail to discharge their obligations.

If any of these assumptions prove incorrect, the Company may not be able to achieve profitable operations at Coricancha. The acquisition of Coricancha is subject to a number of risks that may result in a materially adverse impact on the Company, including potential political risks involving the Company's operations in a foreign jurisdiction, technical and operational difficulties that may be encountered with reactivation of Coricancha, uncertainty of production and cost estimates and the potential for unexpected costs and expenses, uncertainty in Mineral Resource estimation, physical risks inherent in mining operations, currency fluctuations, fluctuations in the price of silver, gold and base metals, completion of economic evaluations, changes in project parameters as plans continue to be refined, permitting risks, the inability or failure to obtain adequate financing on a timely basis, unanticipated increases in the cost of the tailings reclamation, increased mine closure costs and related bond requirements, potential fines, penalties, regulatory actions or charges from government authorities in connection with the failure to move the Cancha 1 and 2 tailings as contemplated in the mine closure plan and the other risks and uncertainties described elsewhere in this AIF, any of which could have a material adverse impact on the Company and its results of operations.

The Company is required to make a decision as to whether to permanently close the Coricancha mine under its Amended and Restated Mine Closure Agreement with Nyrstar by June 30, 2022 but, has agreed it will not make such decision before July 1, 2021. If a decision to permanently close the mine is made, after July 1, 2021 and before June 30, 2022, Nyrstar will fund closure costs up to \$6.5 million but Coricancha will be required to post an additional \$6.5 million of the total required \$10.9 million bond with Peruvian government authorities. If no decision is made to permanently close Coricancha, then

Coricancha will likewise be required to post the entire amount of the \$10.9 million bond. Accordingly, either option will require a financial commitment from the Company which may divert capital and management time away from the funding of mining operations and other revenue generating activities and which may have an adverse impact on the Company's liquidity position. In addition, any costs of permanently closing Coricancha may be greater than the \$6.5 million that Nyrstar would be required to fund in the event of a decision to permanently close the mine by June 30, 2022.

In addition, although the Company has completed the Coricancha Technical Report in the form of a preliminary economic assessment at Coricancha and the BSP it is currently evaluating the conditions under which a restart of Coricancha production can be implemented. The Company may not conduct a preliminary feasibility study or feasibility study in connection with its decision. Mineral properties that are placed into production without the benefit of a feasibility study have historically had a higher risk of failure. There is no assurance the Company will achieve any particular level of production at Coricancha or that operations there will be profitable. The preliminary economic assessment completed includes Inferred Mineral Resources which are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Further, there is no certainty that the results of the preliminary economic assessment or the BSP will ever be realized.

#### **Financing Risks Associated with Tucano**

There can be no assurance that the Company will be able to secure the funds necessary to finance the optimization, planned exploration, further capital investment and development of Tucano and scheduled debt repayments in a manner that will increase value to shareholders. In addition, Tucano will have significant working capital needs, given its 2021 production profile with a much greater proportion of production in the second half of the year. Capital costs required to extend mine life at Tucano beyond 2023 are presently unknown as the mine plan to access additional ore has not been finalized. These capital requirements may require the Company to obtain additional financing, and there is no assurance that this financing will be available when required.

Substantial expenditures will be required to optimize, develop and to continue with the exploration of Tucano and near mine exploration targets. In order to explore and develop Tucano, the Company may be required to expend significant amounts for, among other things, geological, geochemical and geophysical analysis, drilling, assaying, and, if warranted, further mining and infrastructure feasibility studies. The Company may not benefit from any of these investments if it is unable to identify commercially exploitable mineralized material. If successful in identifying Mineral Reserves, it may require additional capital to construct infrastructure necessary to extract recoverable metal from those Mineral Reserves.

The ability of the Company to achieve sufficient cash flow from internal sources and obtain necessary funding through equity financing, joint ventures, debt financing, or other means, depends upon a number of factors, including the state of the worldwide economy and the price of gold, silver and other metals. The Company may not be successful in achieving sufficient cash flow from internal sources and obtaining the required financing as and when needed for these or other purposes on terms that are favorable to it or at all, in which case its ability to continue operating may be adversely affected. Failure to achieve sufficient cash flow and obtain such additional financing could result in delay or indefinite postponement of further exploration or potential development and may cause the Company to forfeit rights in some or all of its properties or reduce or terminate some or all of its planned operations.

#### **Exploration and Development Risks Associated with Tucano**

Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but also from finding mineral deposits that, though present, are insufficient in quantity and quality to return a profit from production. The marketability of minerals acquired or discovered by the Company with respect to Tucano may be affected by numerous factors that are beyond the control of the Company and that cannot be accurately predicted, such as market fluctuations, the proximity and capacity of milling facilities, mineral markets and processing equipment, and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting minerals and environmental protection, the combination of which factors may result in the Company not receiving an adequate return of investment capital.

The business of exploration for minerals and mining involves a high degree of risk. Few properties that are explored are ultimately developed into producing mines. There is no assurance that the mineral exploration and development activities of the Company will result in discoveries of commercial bodies of ore. The long-term profitability of the Company's operations will in part be directly related to the costs and success of its exploration programs, which may be affected by a number of factors.

Substantial expenditures are required to establish Mineral Reserves through drilling and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis.

In addition, any determination to proceed with the development of the Urucum underground mine at Tucano will require the completion of a feasibility study to demonstrate the technical and economic feasibility of the project. There is no assurance that this feasibility will be established or that the Company will be able to raise the capital to fund the development of the Urucum underground mine should feasibility be established.

## **Ability to Service Debt and Meet Financial Covenants**

The Company has incurred significant debt on the acquisition of Tucano, on a consolidated basis, and anticipates continuing to rely on debt financing to support mining operations at Tucano. Great Panther's ability to continue to service this debt and meet its financial covenants and other obligations will depend on its future performance and cash flow which to a certain extent are subject to general economic, financial, competitive, legislative, regulatory and other factors, including the price of gold, silver and other metals, many of which are beyond its control. Great Panther's historical financial results (on a *pro forma* basis) have been, and it is anticipated that Great Panther's future financial results will continue to be, subject to fluctuations. Cash flow can vary and Tucano has a limited life of mine based on its current Mineral Reserves. Accordingly, the Company's business may not generate sufficient cash flow from operations to enable it to satisfy its debt and other obligations, including reclamation obligations. Any inability to secure sufficient debt funding (including to refinance on acceptable terms) or to service its existing and new debt may have a material adverse effect on Great Panther's financial performance and prospects or its ability to continue to meet its financial covenants.

#### **Litigation Risk**

As discussed in Section 15 of this AIF, the Company is party to various legal proceedings in connection with its mining properties. The Company disclosed certain of these legal proceedings but has not disclosed other legal proceedings on the basis that they do not represent claims in excess of 10% of the assets of the Company. The Company has made various assessments as to the probability of the outcomes of these legal proceedings in connection with the preparation of its Audited Financial Statements. There is no assurance that the Company's assessment of the probability of these outcomes, and the amounts for which the Company may become liable to pay, will be accurate and representative of the actual outcomes in these legal proceedings. Adverse decisions in these legal proceedings could result in significant damages being awarded against the Company which could in have a material adverse impact on the Company's financial condition and results of operations. While the Company may be able to appeal any awards of decisions against the Company, there is no assurance that these appeals would be successful. In addition, the Company's inability to overturn the decision of the Federal labour court regarding the prohibition of cyanide usage at Tucano following the date that is one year following the date of any final appeal could result in the Company being required to cease operations at Tucano if an alternative to cyanide treatment cannot be identified and implemented in a cost-effective manner (of which there is no assurance). While the Company views such an order as being unprecedented in Brazil, the Company's failure to over-turn the order on appeal would have a material adverse impact on the Company's financial condition and results of operations.

All industries, including the mining industry, are subject to legal claims, with and without merit. The Company may become involved in additional legal disputes in the future. Defence and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding may have a material effect on the Company's financial position or results of operations.

The Company may be subject to governmental and regulatory investigations, civil claims, lawsuits and other proceedings in the ordinary course of its business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in regulatory actions and litigation, the difficulty of predicting decisions of regulators, judges and juries and the possibility that decisions may be reversed on appeal.

Management is committed to conducting business in an ethical and responsible manner, which it believes will reduce the risk of legal disputes. However, if the Company is subject to legal disputes, there can be no assurances that these matters will not have a material adverse effect on the Company's business, financial condition, results of operations, cash flow or prospects.

#### 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.

# Restrictions to the Acquisition of Rural Properties by Foreign Investors or Brazilian Companies under Foreign Control

Non-resident individuals and non-domiciled foreign legal entities are subject to restrictions for the acquisition or lease for agricultural purpose, or *arrendamento*, of rural properties in Brazil. Limitations also apply to legal entities domiciled in Brazil controlled by foreign investors, such as the Company's subsidiaries through which the Company will operate in Brazil. The limitations are set forth mainly in Law No. 5,709/1971 and in Decree No. 74,965/1974.

Until 2010, limitations imposed on the acquisition of rural property did not apply to Brazilian companies under foreign control. However, an opinion issued by the General Counsel of the Federal Government Office of Brazil significantly changed the interpretation of the applicable laws at the time. Accordingly, Brazilian companies that have the majority of their capital stock owned by foreign individuals and legal entities domiciled abroad are deemed "foreign investors" for the purposes of application of the restrictions on the acquisition of rural property in Brazil. The legality of such opinion has been and is currently being challenged, however prior challenges to the opinion have been unsuccessful.

A foreign investor or a Brazilian company under foreign control may only acquire rural property in Brazil without breaching the aforementioned opinion if certain conditions are met, including, among others, prior approval by the Brazilian Ministries or, in certain cases, by the Brazilian Congress. Pursuant to applicable legislation, any agreements regarding the direct or indirect ownership of rural properties by foreign individuals or entities may be considered null and void, as well as any agreements regarding corporate changes which might result in indirect acquisition or *arrendamento* of rural lands by foreign investors. Accordingly, the Company's ownership of any such rural properties in Brazil may be subject to legal challenges which could result in a material adverse effect on the Company's business, results of operations, financial condition and cash flow.

#### **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 of 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.

#### Inflation in Brazil

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.

#### **Fluctuations in the Price of Consumed Commodities**

Prices and availability of commodities or inputs consumed or used in connection with exploration, development and mining, such as natural gas, diesel, oil, electricity, and reagents fluctuate and affect the costs of production at the Company's operations. These fluctuations can be unpredictable, are beyond the control of the Company, can occur over short periods of time and may have a materially adverse impact on operating costs or the timing and costs of various projects.

#### **Fluctuation in Foreign Currency Exchange Rates**

The Company maintains bank accounts in Canadian, US, Australian, Mexican, Brazilian and Peruvian currencies. The Company earns revenue in US dollars while its costs are incurred in local currencies such the Canadian dollar, Australian dollar, Mexican peso, Brazilian real and Peruvian sol. An appreciation of these local currencies against the US dollar will increase operating, financing and capital expenditures as reported in US dollars. A decrease of these local currencies against the US dollar will result in a loss to the Company to the extent that the Company holds funds in such currencies.

The Company has, from time to time, used hedging instruments to manage its foreign exchange risk. Such instruments can be subject to material gains and losses. In particular, the Company was liable from the fourth quarter of 2019 through February, 2021 under the terms of certain forward foreign exchange contracts used to hedge the Company's exposure to movements in the USD/BRL exchange rate. As at December 31, 2020, the Company held non-deliverable forward foreign exchange contracts for BRL against USD totaling BRL 88.2 million at various pre-determined rates ranging from BRL 4.37/USD to BRL 4.45/USD, at various maturity dates until February 2021. The fair value of these outstanding non-deliverable forward foreign exchange contracts resulted in a liability of \$3.0 million at December 31, 2020. To the extent that the Company enters into future hedging instruments, it may again incur significant losses on derivative instruments and incur derivative liabilities based on exchange rate fluctuations.

# **Dependence on Key Personnel**

The Company's success and viability depends, in large part, on its ability to attract and maintain qualified key management personnel. Competition for such personnel is intense and may impact the ability to attract and retain such personnel. The Company's growth and viability has depended, and will continue to depend, on the efforts of key personnel. The loss of any key personnel may have a material adverse effect on the Company, its business and its financial position. The Company has employment contracts with these employees but does not have key-man life insurance. The Company provides these employees with long-term incentive compensation which generally vests over several years and is designed to retain these employees and align their interests with those of the Company's shareholders.

#### **Conflicts of Interest of Directors and Officers**

Certain of the Company's directors and officers may continue to be involved in a wide range of business activities through their direct and indirect participation in corporations, partnerships or joint arrangements, some of which are in the same business as the Company. Situations may arise in connection with potential acquisitions and investments where the other interests of these directors and officers may conflict with the interests of the Company. The directors and officers of the Company are required by law and the Company's Code of Business Conduct and Ethics to act in the best interests of the Company. They may have the same obligations to the other companies and entities for which they act as directors or officers. The discharge by the directors and officers of their obligations to these other companies and entities and, in certain circumstances, this could expose the Company to liability to those companies and entities. Similarly, the discharge by the directors and officers of their obligations to these other companies and entities could result in a breach of their obligation to act in the best interests of the Company. Such conflicting legal obligations may expose the Company to liability to others and impair its ability to achieve its business objectives.

#### **Concentration of Customers**

The Company sells gold doré and refined concentrates containing silver, gold, lead and zinc to metals traders and smelters. During the year ended December 31, 2020, five customers accounted for 99% of the Company's revenues. The Company believes that a limited number of customers will continue to represent a significant portion of its total revenue. The Company does not consider itself economically dependent upon any single customer or combination of customers due to the existence of other potential metals traders or smelters capable of purchasing the Company's supply. However, the Company could be subject to limited refinery or smelter availability and capacity, it could face the risk of a potential interruption of business from a third party beyond its control, or it may not be able to maintain its current significant customers or secure significant new customers on similar terms, any of which may have a material adverse effect on the Company's business, financial condition, operating results and cash flow.

#### Risks Associated with Transportation and Storage of Doré or Concentrate

The doré and concentrates produced by the Company have significant value and are transported by road, by air, and/or by ship to refineries and smelters in local countries and overseas. The geographic location of the Company's operating mines in Brazil and Mexico, and air and trucking routes taken through the country to the refinery, smelters and ports for delivery, give rise to risks including doré or concentrate theft, road blocks and terrorist attacks, losses caused by adverse weather conditions, delays in delivery of shipments, and environmental liabilities in the event of an accident or spill.

The ability of the Company to transport doré and concentrates may also be at risk due to regional quarantine measures related to the COVID-19 pandemic which could be imposed by various levels of governments in the jurisdictions in which the Company operates.

# Theft of Doré or Concentrate

The Company may have significant doré and concentrate inventories at its facilities or on consignment at other warehouses awaiting shipment. The Company has experienced theft of concentrates in the past and has taken additional steps to secure its doré and concentrate, whether in storage or in transit. The Company has insurance coverage; however, recovery of the full market value may not always be possible. Despite risk mitigation measures, there remains a continued risk that theft of doré or concentrate may have a material impact on the Company's financial results.

# Illegal Activity in the Countries in Which the Company Operates Could Have an Adverse Effect on Operations

The Company's primary mineral exploration and exploitation activities are conducted in Brazil, Mexico and Peru and are exposed to various levels of political, economic and other risks and uncertainties. These risks include but are not limited to, hostage taking, murder, illegal mining, high rates of inflation, corruption of government officials, blackmail, extortion and other illegal activity. Corruption of foreign officials could affect or delay required permits, service levels by foreign officials, and protection by police and other government services.

Mexico continues to undergo sometimes violent internal struggles between the government and organized crime with drug cartel relations and other unlawful activities. The number of kidnappings, violence and threats of violence throughout Mexico is of particular concern and appears to be on the rise. While the Company takes measures to protect both personnel and property, there is no guarantee that such measures will provide an adequate level of protection for the Company or its personnel. The occurrence of illegal activity against the Company or its personnel cannot be accurately predicted and could have an adverse effect on the Company's operations.

In January 2016, a small amount of explosives was stolen from the GMC. While the Company has taken additional security measures, there is no assurance that theft of explosives will not occur again. Explosives are highly regulated, and any theft or loss of explosives may be subject to investigation by Mexican regulatory authorities. The Mexican regulatory authorities may elect at their discretion to exercise administrative action during or after such an investigation. Administrative action could include fines and possibly suspension of the Company's explosives permit during the investigation period or longer, which would negatively impact the Company's operations.

#### **Compliance with Anti-Corruption Laws**

The Company's operations are governed by, and involve interaction with, many levels of government in Brazil, Mexico and Peru. The Company is subject to various anti-corruption laws and regulations such as the Canadian Corruption of Foreign Public Officials Act and the United States' Foreign Corrupt Practices Act, each of which prohibit 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, Mexico and Peru are each 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.

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.

#### **Information and Cyber Security**

The secure processing, maintenance and transmission of information and data is critical to the Company's business. Furthermore, the Company and its third-party service providers collect and store sensitive data in the ordinary course of the Company's business, including personal information of the Company's employees, as well as proprietary and confidential business information relating to the Company and in some cases, the Company's customers, suppliers, investors and other stakeholders. This may also include confidential information of prospective merger and acquisition targets or candidates with which the Company may have entered into confidentiality agreements. With the increasing dependence and interdependence on electronic data communication and storage, including the use of cloud-based services and personal devices, the Company is exposed to evolving technological risks relating to this information and data. These risks include targeted attacks on the Company's systems or on systems of third parties that the Company relies on, failure or non-availability of a key information technology systems, or a breach of security measures designed to protect the Company's systems. While the Company employ security measures in respect of its information and data, including implementing systems to monitor and detect potential threats, the performance of periodic audits, and penetration testing, the Company cannot be certain that it will be successful in securing this information and data and there may be instances where the Company is exposed to malware, cyber-attacks or other unauthorized access or use of the Company's information and data. Any data breach or other improper or unauthorized access or use of the Company's information could have a material adverse effect on the Company's business and could severely damage the Company's reputation, compromise the Company's network or systems and result in a loss or escape of sensitive information, a misappropriation of assets or incidents of fraud, disrupt the Company's normal operations, and cause the Company to incur additional time and expense to remediate and improve the Company's information systems. In addition, the Company could also be subject to legal and regulatory liability in connection with any such cyber-attack or breach, including potential breaches of laws relating to the protection of personal information.

#### **Acquisition Strategy**

As part of Great Panther's business strategy, the Company has made acquisitions in the past and continues to seek new acquisition opportunities in the Americas. The opportunities sought by the Company include operating mines, as well as exploration and development opportunities, with a primary focus on silver and/or gold. As a result, the Company may from time to time acquire additional mineral properties or the securities of issuers which hold mineral properties. In pursuit of such opportunities, the Company may fail to select appropriate acquisition candidates or negotiate acceptable arrangements, including arrangements to finance acquisitions or integrate the acquired businesses and their personnel into the Company, and may fail to assess the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition candidates, or to achieve identified and anticipated operating and financial synergies, and may incur unanticipated costs, diversion of management attention from existing businesses, the potential loss of the Company's key employees or of those of the acquired business. Acquisitions may also lead to the issuance of a large number of the Company's common shares, which would result in dilution to existing shareholders. The Company cannot assure that it can complete any acquisition or business arrangement that it pursues, or is pursuing, on favourable terms, or that any acquisitions or business arrangements completed will ultimately benefit the Company. Acquisitions may involve a number of special risks, circumstances or legal liabilities. These and other risks related to acquiring and operating acquired properties and companies could have a material adverse effect on the Company's results of operations and financial condition. Further, to acquire properties and companies, the Company may be required to use available cash, incur debt, issue additional securities, enter into offtake, royalty agreements or metal streaming agreements, or a combination of any one or more of these.

This could affect the Company's future flexibility and ability to raise capital, to operate, explore and develop its properties and could dilute existing shareholders and decrease the price of the common shares of the Company. There may be no right for the Company's shareholders to evaluate the merits or risks of any future acquisition undertaken by the Company, except as required by applicable laws and regulations.

#### **Community Relations and Social License to Operate**

The Company's relationship with the communities in which it operates is important to ensure the future success of its existing operations and the construction and development of its projects. While the Company believes its relationships with the communities in which it operates are strong, there is an increasing level of public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Certain non-governmental organizations ("NGOs"), some of which oppose globalization and resource development, are often vocal critics of the mining industry and its practices. Adverse publicity generated by such NGOs or others related to extractive industries generally, or its operations specifically, could have an adverse effect on the Company's reputation or financial condition and may impact its relationship with the communities in which it operates. While the Company believes that it operates in a socially responsible manner, there is no guarantee that the Company's efforts in this respect will mitigate this potential risk.

#### **Volatility of Share Price**

Trading prices of Great Panther's shares may fluctuate in response to a number of factors, many of which are beyond the control of the Company. In addition, the stock market in general, and the market for precious metals producers in particular has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of such companies. These broad market and industry factors may adversely affect the market price of the Company's shares, regardless of operating performance.

In the past, following periods of volatility in the market price of a company's securities, securities classaction litigation has been known to be initiated. Such litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources.

#### **Substantial Decommissioning and Reclamation Costs**

The Company reviews and reassesses its reclamation obligations at each of its mines based on updated mine life estimates, rehabilitation and closure plans. As at December 31, 2020, the Company had recorded a provision in the amount of \$68.3 million for the estimated present value of future reclamation and remediation costs associated with the expected retirement of its mineral properties, plants, and equipment.

The costs of performing the decommissioning and reclamation must be funded by the Company's operations. These costs can be significant and are subject to change. The Company cannot predict what level of decommissioning and reclamation may be required in the future by regulators. If the Company is required to comply with significant additional regulations or if the actual cost of future decommissioning and reclamation is significantly higher than current estimates, this could have an adverse impact on the Company's future cash flow, earnings, results of operations and financial condition.

#### Officers and Directors Are Indemnified Against All Costs, Charges and Expenses Incurred by Them

The Company's articles contain provisions limiting the liability of its officers and directors for all acts, receipts, neglects or defaults of themselves and all the other officers or directors for any other loss, damage or expense incurred by the Company which happen in the execution of the duties of such officers or directors, as do indemnification agreements between the directors and officers and the Company. Such limitations on liability may reduce the likelihood of derivative litigation against the Company's officers and directors and may discourage or deter shareholders from suing the officers and directors based upon breaches of their duties to the Company, though such an action, if successful, might otherwise benefit the Company and its shareholders.

#### **Enforcement of Legal Actions or Suits**

It may be difficult to enforce suits against the Company or its directors and officers. The Company is organized and governed under the laws of under the *Business Corporations Act* of British Columbia, Canada and is headquartered in this jurisdiction. Primarily all the Company's directors and officers are residents of Canada, and all of the Company's assets are located outside of the United States. Consequently, it may be difficult for United States investors to realize in the United States upon judgments of United States courts predicated upon civil liabilities under the *United States Securities Exchange Act of 1934, as amended.* There is substantial doubt whether an original action could be brought successfully in Canada against any of such persons predicated solely upon such civil liabilities.

# Dilution of Shareholders' Interests as a Result of Issuance of Incentive Stock Options, Restricted Share Units ("RSUs"), Performance Share Units ("PSUs") and Deferred Share Units ("DSUs") to Employees, Directors, Officers and Consultants

The Company has granted, and in the future may grant, to directors, officers, insiders, employees, and consultants, options to purchase common shares as non-cash incentives to those persons. Such options have been, and may in future be, granted at exercise prices equal to market prices, or at prices as allowable under the policies of the TSX. The issuance of additional shares will cause existing shareholders to experience dilution of their ownership interests. As at December 31, 2020, there are outstanding share options exercisable into 3,355,469 common shares which, if exercised, would represent approximately 1.0% of the Company's issued and outstanding shares as of that date.

The Company has also granted, and in the future may grant, to directors, officers, insiders, and employees, RSUs, PSUs and DSUs as incentive awards for service to those persons. Upon settlement, these awards entitle the recipient to receive common shares, a cash equivalent, or combination thereof. The choice of settlement method is at the Company's sole discretion. As at December 31, 2020, there are vested RSUs, PSUs and DSUs outstanding which could result in the issuance of up to 2,426,489 common shares. If exercised, these would represent approximately 0.68% of the Company's issued and outstanding shares as of that date.

If all these incentive awards are exercised and issued, such issuance will cause a reduction in the proportionate ownership and voting power of all other shareholders. The dilution may result in a decline in the market price of the Company's common shares.

#### Dilution of Shareholders' Interests as a Result of Issuances of Additional Shares

Depending on the Company's exploration, development and capital investment plans, acquisition activities, and operating and working capital requirements, the Company may issue additional common

shares as a means of raising capital. In the event that the Company is required to issue additional shares or decides to enter into joint venture arrangements with other parties in order to raise financing through the sale of equity securities, investors' interests in the Company will be diluted and investors may suffer dilution in their net book value per share depending on the price at which such securities are sold.

# Trading of the Company's Shares May Be Restricted by the SEC's "Penny Stock" Regulations Which May Limit a Stockholder's Ability to Buy and Sell the Shares

The SEC has adopted regulations which generally define "penny stock" to be any equity security that has a market price (as defined) less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. The Company's securities are covered by the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell to persons other than established customers and "accredited investors" (as defined). The penny stock rules require a broker-dealer to provide very specific disclosure to a customer who wishes to purchase a penny stock, prior to the purchase. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for the stock that is subject to these penny stock rules. Consequently, these penny stock rules may affect the ability of broker-dealers to trade the Company's securities.

#### The Company Does Not Expect to Declare or Pay Any Dividends

The Company has not declared or paid any dividends on its common stock since inception, and does not anticipate paying any such dividends for the foreseeable future.

#### **Credit and Counterparty Risk**

Credit risk is the risk of financial loss if a customer or counterparty fails to meet its contractual obligations. The Company's credit risk relates primarily to cash and cash equivalents, trade receivables in the ordinary course of business, and value added tax refunds primarily due from the Mexico taxation authorities, and other receivables. The Company sells and receives payment upon delivery of its doré and concentrates primarily through international organizations. These are generally large and established organizations with good credit ratings. Payments of receivables are scheduled, routine and received within the specific terms of the contract. If a customer or counterparty does not meet its contractual obligations, or if they become insolvent, the Company may incur losses for products already shipped and be forced to sell greater volumes of concentrate than intended in the spot market, or there may be no market for the concentrates, and the Company's future operating results may be materially adversely impacted as a result.

#### **Internal Controls over Financial Reporting**

The Company documented and tested its internal controls over financial reporting during its most recent fiscal year in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act ("SOX"). SOX requires an annual assessment by management and an independent assessment by the Company's independent auditors of the effectiveness of the Company's internal controls over financial reporting. For the year ended December 31, 2020, the Company qualified as an "emerging growth company" under the United States Securities Exchange Act of 1934 and therefore is eligible to forego the requirements for independent assessment of its internal controls over financial reporting under SOX. Notwithstanding, the Company has undergone an independent assessment of its internal controls over financial reporting under SOX for the year ended December 31, 2020 by its independent auditors, but to the extent it retains its "emerging growth company" status, may not do so in future periods.

The Company may fail to achieve and maintain the adequacy of its internal controls over financial reporting as such standards are modified, supplemented, or amended from time to time, and the Company may not be able to ensure that it can conclude on an ongoing basis that its internal controls over financial reporting are effective. The Company's failure to maintain effective internal controls over financial reporting could result in the loss of investor confidence in the reliability of its 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. There can be no assurance that the Company will be able to remediate material weaknesses, if any, identified in future periods, or maintain all the controls necessary for continued compliance, and there can be no assurance that the Company will be able to retain sufficient skilled finance and accounting personnel, especially in light of the increased demand for such personnel among publicly traded companies. Future acquisitions of companies may provide the Company with challenges in implementing the required processes, procedures and controls in its acquired operations. Acquired companies may not have disclosure controls and procedures or internal control over financial reporting that are as thorough or effective as those required by the securities laws currently applicable to the Company.

No evaluation can provide complete assurance that the Company's internal control over financial reporting will detect or uncover all failures of persons within the Company to disclose material information otherwise required to be reported. The effectiveness of the Company's controls and procedures could also be limited by simple errors or faulty judgment. The challenges involved in implementing appropriate internal controls over financial reporting will likely increase with the Company's plans for ongoing development of its business and this will require that the Company continues to improve its internal controls over financial reporting. Although the Company intends to devote substantial time and incur costs, as necessary, to ensure ongoing compliance, the Company cannot be certain that it will be successful in complying with SOX.

#### **Climate Change**

Extreme weather events (for example, prolonged drought, or the increased frequency and intensity of storms) have the potential to disrupt the Company's operations and the transportation routes that the Company uses. The Company's ability to conduct mining operations depends upon access to the volumes of water that are necessary to operate its mines and processing facilities. Changes in weather patterns and extreme weather events, either due to normal variances in weather or due to global climate change, could adversely impact the Company's ability to secure the necessary volumes of water to operate its facilities.

The Coricancha mine has in the past experienced damage from flooding during periods of excessive rain. Increased precipitation, either due to normal variances in weather or due to global climate change, could result in flooding that may adversely impact mining operations and could damage the Company's facilities, plant and operating equipment. Accordingly, extreme weather events and climate change may increase the costs of operations and may disrupt operating activities, either of which would adversely impact the profitability of the Company.

## DIVIDENDS

Holders of the Company's common shares are entitled to receive such dividends as may be declared from time to time by the Board, in its discretion, out of funds legally available for that purpose. The Company

intends to retain future earnings, if any, for use in the operation and expansion of its business and does not intend to pay any cash dividends in the foreseeable future.

# 10. DESCRIPTION OF CAPITAL STRUCTURE

The Company's authorized share capital consists of an unlimited number of common shares without par value, an unlimited number of Class A preferred shares without par value issuable in series, and an unlimited number of Class B preferred shares without par value issuable in series. As at December 31, 2020, the issued share capital consisted of 355,032,512 common shares. No Class A preferred shares or Class B preferred shares were issued or outstanding.

#### **Common Shares**

Subject to the rights of the holders of the Class A preferred shares and the Class B preferred shares of the Company, holders of common shares of the Company are entitled to dividends if, as and when declared by the directors. Holders of common shares of the Company are entitled to one vote per common share at meetings of shareholders except at meetings at which only holders of a specified class of shares are entitled to vote. Upon liquidation, dissolution or winding-up of the Company, subject to the rights of holders of the Class A preferred shares and the Class B preferred shares, holders of common shares of the Company are to share rateably in the remaining assets of the Company as are distributable to holders of common shares. The common shares are not subject to redemption or retraction rights, rights regarding purchase for cancellation or surrender, or any exchange or conversion rights.

#### **Class A Preferred Shares**

Class A preferred shares may be issued from time to time in one or more series, and the directors may fix from time to time before such issue the number of Class A preferred shares of each series and the designation, rights and privileges attached thereto including any voting rights, dividend rights, redemption, purchase or conversion rights, sinking fund or other provisions. The Class A preferred shares rank in priority over common shares and any other shares ranking by their terms junior to the Class A preferred shares as to dividends and return of capital upon liquidation, dissolution or winding up of the Company or any other return of capital or distribution of the assets of the Company.

#### **Class B Preferred Shares**

Class B preferred shares may be issued from time to time in one or more series, and the directors may fix from time to time before such issue the number of Class B preferred shares of each series and the designation, rights and privileges attached thereto including any voting rights, dividend rights, redemption, purchase or conversion rights, sinking fund or other provisions. The Class B preferred shares rank in priority over common shares and any other shares ranking by their terms junior to the Class B preferred shares as to dividends and return of capital upon liquidation, dissolution or winding up of the Company or any other return of capital or distribution of the assets of the Company.

# 11. MARKET FOR SECURITIES

### 11.A. TRADING PRICE AND VOLUME

The Company's common shares trade on the TSX and the NYSE American, trading under the symbols GPR and GPL, respectively.

The following table sets forth the price ranges in Canadian dollars and trading volume of the common shares of the Company as reported by the TSX for the periods indicated:

Period	High	Low	Volume
	(CAD\$)	(CAD\$)	
January 2020	0.85	0.65	4,183,185
February 2020	0.85	0.56	4,160,369
March 2020	0.73	0.3175	7,528,492
April 2020	0.85	0.41	6,737,419
May 2020	0.77	0.54	12,157,476
June 2020	0.69	0.54	11,694,010
July 2020	1.20	0.68	16,157,198
August 2020	1.42	1.10	16,339,541
September 2020	1.375	1.07	8,632,175
October 2020	1.22	0.97	6,438,258
November 2020	1.20	0.97	5,090,973
December 2020	1.18	0.99	6,411,669

The following table sets forth the price ranges in US dollars and trading volume of the common shares of the Company as reported by the NYSE American for the periods indicated:

Period	High	Low	Volume
	(US\$)	(US\$)	
January 2020	0.655	0.495	28,295,070
February 2020	0.649	0.42	23,611,752
March 2020	0.5473	0.2261	42,312,210
April 2020	0.62	0.29	39,428,549
May 2020	0.55	0.384	77,489,893
June 2020	0.51	0.3998	61,341,057
July 2020	0.90	0.476	85,950,235
August 2020	1.07	0.7706	89,991,254
September 2020	1.05	0.805	52,229,458
October 2020	0.9299	0.74	35,609,919
November 2020	0.93	0.75	28,708,751
December 2020	0.92	0.781	36,507,593

#### 11.B. PRIOR SALES

The following table sets forth the date, price and number of stock options that were granted by the Company during the financial year ended December 31, 2020:

#### Stock Options(1)

Date of Issuance	Exercise Price per Security (C\$)	Aggregate Number
April 9, 2020	\$0.54 per share	5,579,000
April 21, 2020	\$0.67 per share	576,000
July 6, 2020	\$0.73 per share	100,000
Total:		6,255,000

Note:

1. As at December 31, 2020, the Company had 9,708,633 stock options outstanding.

The following table sets forth the date and number of restricted share units, performance share units and deferred share units granted by the Company in the financial year ended December 31, 2020:

#### Restricted Share Units, Performance Share Units and Deferred Share Units

Date of Issuance	Type of Securities Issued (1)	Number of Securities Issued
April 9, 2020	Deferred Share Units	1,525,366
April 9, 2020	Performance Share Units	1,278,200
April 9, 2020	Restricted Share Units	1,403,500
April 21, 2020	Deferred Share Units	318,420
April 21, 2020	Performance Share Units	232,500
April 21, 2020	Restricted Share Units	232,500
May 22, 2020	Deferred Share Units	86,753
July 1, 2020	Deferred Share Units	237,400
Total:		5,314,639
Note:		

As at December 31, 2020, the Company had 2,420,189 Deferred Share Units outstanding, 1,904,500 Performance Share Units outstanding and 1,911,434
Restricted Stock Units outstanding.

As at December 31, 2020, the Company had 9,749,727 warrants to purchase Common Shares outstanding and no warrants were granted by the Company in the financial year ended December 31, 2020.

# 12. ESCROWED SECURITIES

As at December 31, 2020, there were no escrowed securities or securities subject to contractual restriction on transfer.

#### 13. DIRECTORS AND OFFICERS

#### 13.A. NAMES, OCCUPATIONS AND SECURITY HOLDINGS

At the date of this AIF, the directors and executive officers of the Company are as follows:

Name and Residence	Office Held with the Company	Principal Occupation or Employment for the Past Five Years
DAVID GAROFALO, CPA, CA, ICD.D British Columbia, Canada	Board Chair and Director of the Company since April 2020	Chairman and CEO, Gold Royalty Corp. since August 2020
british Columbia, Canada		Chairman and Chief Executive Officer, Marshall Precious Metals Fund since December 2019
		President and CEO and Director, Goldcorp Inc. from January 2016 to April 2019
		President, CEO and Director, Hudbay Minerals Inc. from July 2010 to December 2015

Name and Residence	Office Held with the Company	Principal Occupation or Employment for the Past Five Years
JOSEPH GALLUCCI, MBA (1), (3) Quebec, Canada	Director of the Company since April 2020	Managing Director, Head of Mining, Investment Banking, Laurentian Bank Securities Inc. since March 2019
		Principal, Managing Director, Investment Banking, Eight Capital from December 2016 to January 2019
		Managing Director, Head of Metals and Mining Research, Dundee Capital Markets from June 2012 to December 2016
R.W. (BOB) GARNETT, CPA, CA, ICD.D (1), (3)	Director of the Company since May 2011	Commissioner, British Columbia Financial
British Columbia, Canada	Lead Independent Director from November 2019 to April 2020	Institutions Commission from May 2012 to June 2018
	Board Chair from February 2012 to July 2019	President, Sagebrush Golf and Sporting Club from September 2012 to 2015 and Chief Financial Officer from 2006 to 2012
		Director, Media Valet Inc. (formerly VRX Worldwide Inc.) since 2009
ALAN HAIR, CEng MIMMM, ICD.D (2), (4), (5)	Director of the Company since April 2020	Independent Director, Gold Royalty Corp. since November 2020
Ontario, Canada		Independent Director, Bear Creek Mining Corporation since September 2019
		President & Chief Executive Officer, Hudbay Minerals Inc. from January 2016 to July 2019
		Chief Operating Officer, Hudbay Minerals Inc. from June 2012 to December 2015
ROBERT HENDERSON, P.Eng	President, Chief Executive Officer and Director of the Company since April	President, Chief Executive Officer and Director of the Company since April 2020
British Columbia, Canada	2020	President & CEO, Amerigo Resources Ltd. from October 1, 2015 to December 2019
(1) (2)		Director of BQE Water Inc. since 2018
JOHN JENNINGS, MBA, CFA (1), (2) British Columbia, Canada	Director of the Company since June 2012	Practice Lead, Board Director and Executive Search with WATSON Advisors Inc. since October 2017
		Senior Client Partner, Korn Ferry International from 2012 to May 2017
W. JAMES MULLIN (3), (4), (5)	Director of the Company since August 2013	Retired Professional Engineer in the Province of British Columbia
British Columbia, Canada		Served as Senior Vice President of North American Operations for Newmont Mining Corporation until his retirement in 2001
		Independent consultant in the mining industry, and owned and operated a mid-sized cattle ranch

Name and Residence	Office Held with the Company	Principal Occupation or Employment for the Past Five Years
ELISE REES, FCPA, FCA, ICD.D (1), (2) British Columbia, Canada	Director of the Company since April 2017	Director of Enmax Corporation since September 2015
Shillsh Columbia, Canada		Director and Board Chair of EasyPark, Parking Corporation of Vancouver from 2013 to 2018
		Director of Westland Insurance since 2016 to 2021
		Director of the Greater Vancouver Board of Trade from 2015 to 2019
		BC Market Leader & Managing Partner Transaction Advisory Practice, at Ernst & Young LLP from 1998 to June 2016
KEVIN ROSS, B.Sc. (Hon) Min Eng., MBA <sup>(3),</sup> <sup>(4), (5)</sup>	Director of the Company since May 2019	Chief Operating Officer of Orca Gold Inc. since August 2016
British Columbia, Canada		Director, Montage Gold Corp., a subsidiary of Orca Gold Inc., since August 2019
		Chief Operating Officer, RB Energy Inc. from 2014 to 2015
JIM A. ZADRA, CPA, CA	Chief Financial Officer	Chief Financial Officer of the Company since July 2012
British Columbia, Canada		Corporate Secretary of the Company from September 2011 to July 2020
		Vice President, Finance of the Company from September 2011 to July 2012
		Director and Audit Committee Chair of Good Natured Products Inc. since March 2016
NEIL HEPWORTH, M.Sc. Engineering	Chief Operating Officer	Chief Operating Officer since October 2019
(Mining), C. Eng. Sesimbra, Setubal, Portugal		Self-Employed Consultant/Interim Positions from 2016 to 2019
		Chief Operating Officer/Vice President Technical Jaguar Mining Inc. from 2016 to 2019
SHANNON D. WEBBER	Vice President, Legal and Corporate	Vice President, Legal and Corporate Secretary
British Columbia, Canada	Secretary	since July 2020  Adjunct Faculty Member, Allard School of Law, UBC since September 2020
		General Counsel, Alterra Power Corp. from May 2014 to May 2018

# Notes:

- 1. Member of Audit Committee
- 2. Member of People and Culture Committee
- 3. Member of Nominating and Corporate Governance Committee
- 4. Member of the Safety, Health, Environment and Social Committee
- 5. Member of the Technical Operations Committee

In addition, the Board will, from time-to-time, appoint ad-hoc committees for specific purposes as circumstances require.

Each of the directors is elected to hold office until the next annual meeting of the Company or until a successor is duly elected or appointed. The next annual meeting of the Company is expected to be held in June 2021.

As of March 11, 2021, the directors and executive officers as a group beneficially own, directly or indirectly, or exercise control or direction over 967,425 common shares representing 0.27% of the common shares outstanding before giving effect to the exercise of options to purchase common shares held by such directors and executive officers. The statement as to the number of common shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the directors and executive officers of the Company as a group is based upon information furnished by the directors and executive officers.

#### 13.B. CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS

Other than set forth below, none of Great Panther's directors or executive officers:

- (a) are, as at the date of this AIF, or have been, within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including Great Panther) that,
  - (i) was subject to cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation (collectively, an "Order") that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
  - (ii) was subject to an Order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;
- (b) are, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director or executive officer of any company (including Great Panther) that, while that person was acting in that capacity, or 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; or
- (c) have, within the 10 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 director or executive officer.

In addition, none of Great Panther's directors and executive officers has been subject to:

- (d) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities' regulatory authority; or
- (e) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable shareholder in making an investment decision.

As of the date of this AIF, Great Panther is not aware of any shareholder holding a sufficient number of securities of Great Panther to affect materially the control of Great Panther.

Mr. Ross is a director of the Company. Mr. Ross was previously the Chief Operating Officer of RB Energy Inc., ("RBI") from April 2014 to May 2015. On October 14, 2014, RBI applied for and obtained an Initial Order (the "Initial Order") to commence proceedings under the *Companies' Creditors Arrangement Act* (the "CCAA") in the Québec Superior Court (the "Court"). On October 15, 2014, RBI announced that the Court issued an Amended and Restated Initial Order in respect of RBI and certain of its subsidiaries under the CCAA, which granted an initial stay of creditor proceedings to November 13, 2014. The Initial Order was subsequently extended to April 30, 2015. On May 8, 2015, the Court appointed a receiver, Duff & Phelps Canada Restructuring Inc., under the Bankruptcy and Insolvency Act, and terminated the CCAA proceedings. The TSX-de-listed RBI's common shares effective at the close of business on November 24, 2014 for failure to meet the continued listing requirements of the TSX. Mr. Ross ceased employment as Chief Operating Officer of RBI in May 2015.

Mr. Garofalo is a director of the Company. He was a director of Colossus Minerals Inc. ("Colossus") from December 2012 to November 2013. On January 14, 2014, Colossus announced that it had filed a notice of intention to make a proposal under the *Bankruptcy and Insolvency Act* (Canada), which was intended to enable Colossus to pursue a restructuring process. Colossus' proposal and plan of reorganization ("Plan") was approved by creditors on February 25, 2014 and, following the approval of the Ontario Superior Court of Justice (Commercial List) in March 2014, was implemented by Colossus in April 2014. The Plan effectively converted all of Colossus' outstanding debt, and its obligations under a precious metals stream agreement, into equity of Colossus.

#### 13.C. CONFLICTS OF INTEREST

To the best of the Company's knowledge, and other than as disclosed herein, there are no known existing or potential material conflicts of interest between the Company (or a subsidiary of the Company) and any director or officer of the Company (or a subsidiary of the Company), except that certain of the directors and officers serve as directors, officers or members of management of other public companies and therefore it is possible that a conflict may arise between their duties as a director or officer of the Company and their duties as a director, officer, promoter or member of management of such other companies.

The directors and officers of the Company are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosure by directors of conflicts of interest and the Company relies upon such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors and officers. All such conflicts have been disclosed by such directors and officers in accordance with the *Business Corporations Act* (British Columbia) and they have governed themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law.

#### 14. AUDIT COMMITTEE INFORMATION

#### 14.A. AUDIT COMMITTEE CHARTER

The Audit Committee is ultimately responsible for the policies and practices relating to integrity of financial and regulatory reporting, as well as internal controls to achieve the objectives of safeguarding of corporate assets, reliability of information, and compliance with policies and laws.

The Audit Committee's charter sets out its mandate and responsibilities and is attached as Schedule "A" to this AIF.

#### 14.B. MEMBERS OF THE AUDIT COMMITTEE

The members of the Company's Audit Committee are Elise Rees (Chair), Joseph Gallucci, Bob Garnett, and John Jennings. Each of these individuals are independent and financially literate within the meaning of National Instrument 52-110 *Audit Committees*. The relevant education and experience of each Audit Committee member are outlined below:

#### Elise Rees, FCPA, FCA, ICD.D (Audit Committee Chair)

Ms. Rees is an experienced director, having served on the boards of a number of profit and not-for-profit organizations, including as Board Chair, Treasurer, and Audit and Finance Committee Chair. She currently serves on the boards of Enmax Corporation and was a Director of The Greater Vancouver Board of Trade until November 2019, Director of Westland Insurance until 2021, as well as a director of Alcanna Inc. from August 2018 to February 2019. Ms. Rees retired from Ernst & Young LLP in June 2016 after a thirty-five-year career in professional accountancy. She spent eighteen years as a Partner with Ernst & Young, LLP with the last 14 years of her tenure focused on acquisitions, mergers and corporate reorganizations. She has a breadth of experience in a large variety of industries with specific focus on mining, infrastructure, transportation, technology, real estate, retail and distribution. Ms. Rees has been recognized for her leadership with the designation of Fellow Chartered Professional Accountant and Fellow Chartered Accountant in 2007; Community Builder Award, Association of Women in Finance (2012); Influential Woman in Business Award (2007); and the Ernst & Young Rosemarie Meschi Award for Advancing Gender Diversity (2007). She was also recognized as one of the Top 100 Most Powerful Women in Canada in 2015 by Women's Executive Network. Ms. Rees has a B.A. (Hons) from the University of Strathclyde, Scotland and is a graduate of the ICD-Rotman Directors Education Program with the designation of ICD.D.

#### Joseph Gallucci, MBA

Mr. Gallucci is a capital markets executive with over 15 years of experience in investment banking and equity research focused on mining, base metals, precious metals and bulk commodities on a global scale. He is currently the Managing Director and Head of Mining Investment Banking at Laurentian Bank Securities Inc. His career has spanned across various firms including BMO Capital Markets, GMP Securities, Dundee Securities, and he was a founding principal of Eight Capital where he led their Mining Investment Banking Team. In his previous roles, he has acquired experience in corporate finance, mergers, acquisitions, business and operational development, financings and corporate strategy. He was directly involved in raising over \$1 billion for mining companies with focused expertise on Canadian base metal companies. Prior to investment banking, Mr. Gallucci spent over a decade in equity research with a focus on global mining at both GMP and Dundee Securities. At Dundee Securities, he was a Managing Director and Head of the Metals and Mining Research Team, where he oversaw the entire mining franchise. He holds a Bachelor of Commerce degree from Concordia University and an MBA in Investment Management from the Goodman Institute of Investment Management.

#### R.W. (Bob) Garnett, CPA, CA, ICD.D

Mr. Garnett is a Chartered Professional Accountant in the Province of British Columbia (1973) and obtained a Bachelor of Arts (Commerce) from Simon Fraser University in 1972. In 2007, he graduated from the ICD-Rotman Directors Education Program with the designation of ICD.D. In 2012, he was appointed a Commissioner of the Financial Institutions Commission by the Lieutenant Governor in Council on the recommendation of the Minister of Finance of the Province of British Columbia, which appointment expired in June 2018. Mr. Garnett also currently serves on the board of Media Valet Inc., a Vancouver based company that provides cloud-based digital asset management software to many of the world's

leading brands and chairs the Audit Committee. Mr. Garnett also served as President of a world-class ranked golf facility located near Merritt, British Columbia from 2012 to 2015.

#### John Jennings, MBA, CFA

Mr. Jennings is employed as Practice Co-Lead, Board Director and Executive Search with WATSON Advisors Inc., a leading consulting firm focused on corporate governance and recruiting board directors and executive talent. Prior to joining WATSON in October 2017, he was a Senior Client Partner with Korn Ferry International from 2012 to May 2017. Upon earning his B.Sc. (Chemistry) from Western University, Mr. Jennings started a career in precious metals mining operations before becoming a sell-side mining analyst in Toronto. Following completion of his Master of Business Administration from London Business School, he entered a 26-year career in investment banking with leading firms in the UK and Canada, including as CEO of an investment firm. Mr. Jennings is an experienced director, having served on the boards of a number of profit and purpose-driven organizations, including as Board Chair, and Audit and Finance Committee Chair. He currently serves on the Executive Committee of the BC Chapter of the Institute of Corporate Directors and the Faculty Advisory Board of the Sauder School of Business at the University of British Columbia. He holds the designation of Chartered Financial Analyst.

#### 14.C. PRE-APPROVAL POLICY

The Audit Committee has adopted specific policies for the engagement of non-audit services to be provided to the Company by the external auditor.

Annually, the Audit Committee pre-approves a budget for specified non-audit services within which limits the Company may contract the services of the Company's external auditor.

#### 14.D. EXTERNAL AUDITOR SERVICE FEES

The following table sets out the aggregate fees billed to the Company by its external auditor, KPMG LLP, in each of the last two fiscal years:

Category	Year ended December 31, 2020	Year ended December 31, 2019
Audit Fees <sup>(1)</sup>	C\$ 991,875	C\$ 1,065,000
Audit-Related Fees	Nil	Nil
Tax Fees <sup>(2)</sup>	Nil	Nil
All Other Fees <sup>(3)</sup>	C\$ 19,000	C\$ 18,000
Total	C\$ 1,010,875	C\$ 1,083,000

#### Notes:

- "Audit Fees" include fees billed by the Company's auditor for the 2020 and 2019 periods related to the audits of the Company's consolidated financial statements and internal controls over financial reporting, and the reviews of the Company's interim financial statements.
- 2. "Tax Fees" are not billed to the Company as tax services are not provided to the Company by the Company's auditor.
- 3. "All Other Fees" include fees billed for the involvement with payroll audits of the Company's Mexican subsidiaries.

# 15. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

During the financial year ended December 31, 2020, the Company was party to the following legal proceedings that relate to the Tucano mine, as described in the Company's audited consolidated financial statements for the years ended December 31, 2020 and 2019 (the "Audited Financial Statements"). Additional information regarding the accounting for these legal proceedings is included in the Audited Financial Statements. In addition to these legal proceedings, the Company may from time to time become and is, party to litigation incidental to its business. Such other litigation matters are presently deemed by the Company to not be material on the basis that they do not involve any claim on an individual basis for damages in excess of ten per cent of the current assets of the Company.

#### 15.A. VARIOUS CLAIMS RELATED TO BRAZIL INDIRECT TAXES AND LABOUR MATTERS

As a result of the Acquisition, the Company has various litigation claims for a number of governmental assessments related to indirect taxes, and labour disputes associated with former employees and contract labor in Brazil.

The indirect tax matter principally relates to claims for the state sales tax, Imposto Sobre Operações Relativas à Circulação de Mercadorias e Serviços de Transporte Interestadual de Intermunicipal e de Comunicações ("ICMS"), which are mostly related to rate differences. For these claims, the possibility of loss was not considered probable by the Company's Brazilian attorneys, and no provision has been recognized in the Audited Financial Statements.

The labour matters principally relate to claims made by former employees and contract labour for the equivalent payment of all social security and other related labour benefits, as well as consequential tax claims, as if they were regular employees. As of December 31, 2020, the items for which a loss was probable related to the labour disputes, inclusive of any related interest, amounted to approximately \$1.6 million, for which a provision was recognized.

### 15.B. ENVIRONMENTAL DAMAGES - WILLIAM CREEK

In May 2009, The State of Amapá Public Prosecutor ("MPAP") filed a public civil action seeking payment for environmental damages caused to William Creek, as well as to other creeks located in the region of influence of the Zamin Amapá Mineração ("Zamin") and Tucano mines. The alleged damage is related to the modification of the creek's riverbed, soiling and sedimentation. In January 2018, the Amapá State Court ordered Mina Tucano to pay a fine of approximately \$1.1 million (BRL 6.0 million plus interest and inflation counted as from the date of the damage) to the State Environmental Fund. As at December 31, 2020, the updated value with interest and inflation is approximately \$5.7 million (BRL 29.7 million). The Company is in the process of appealing and the likelihood of total loss is not considered probable based on legal advice received. However, an adjusted lower fine is considered probable and the Company has accrued the amount payable considered more likely than not in long-term other liabilities, representing the Company's best estimate of the cost to settle the claim.

#### 15.C. ARCHAEOLOGICAL SITES DAMAGE

In May 2016 and June 2016, respectively, The Brazilian Federal Public Prosecutor ("MPF") filed public civil actions seeking compensation to be paid by Zamin, the State of Amapá and Mina Tucano for damages to 34 archaeological sites as a result of activities in 2006-2009 at the Amapá-MMX Iron Ore Project currently owned by Zamin and as a result of activities in 2004-2010 at the Amapari Project and for the State of Amapá failing to take proper action during the respective environmental licensing procedures (the "Archaeological Civil Actions").

In the three months ended December 31, 2020, the 6th Federal Lower Court of Macapá ratified a settlement agreement between Tucano and the MPF in respect of the Archeological Civil Actions (the "Settlement Agreement"). Under the terms of the Settlement Agreement, as full and final settlement of the Archaeological Civil Actions, Mina Tucano agreed to earmark BRL 8 million, no later than December 31, 2021, for implementation of socio-environmental measures for the benefit of the State of Amapá community, including a combination of community food donations in the first three months following ratification and those socio-environmental measures defined by mutual agreement of Tucano and MPF for the benefit of the communities in the Municipalities of Pedra Branca do Amapari and Serra do Navio funded in the second half of 2021. The Instituto do Patrimônio Histórico e Artístico Nacional - Historic

and Artistic National Heritage Institute ("IPHAN") have sought clarification of the settlement agreement requesting certain of the settlement funds be designated specifically to IPHAN.

In related proceedings, Mina Tucano is in the process of appealing fines and damages arising in Federal Court of Appeal. The likelihood of total loss is not considered probable based on legal advice received. However, an adjusted lower fine is considered probable and the Company has accrued the amount payable considered more likely than not in long-term other liabilities, representing the Company's best estimate of the cost to settle the claim.

#### 15.D. CYANIDE USAGE

In October 2018, the public prosecutor's office of labor affairs for the State of Amapá filed a public civil action seeking payment for potential damages and medical costs in relation to the Company's employees' exposure to cyanide used in the processing of its gold. In August 2019, a regional labour court ordered Mina Tucano to pay compensation of approximately BRL 4 million plus interest and inflation for these damages, in addition to surveillance and funding medical costs of any diseases to Mina Tucano's internal and outsourced employees and former employees, and to stop using cyanide in its production process within one year from the final non-appealable decision on the proceedings. Mina Tucano is in the process of appealing to a Federal Superior Labour Court all aspects of the regional labour court decision. In March 2020, it was accepted that the appeal, exclusively with respect to whether or not the use of cyanide may continue, be admitted for consideration by the Federal Superior Labour Court and the balance of the decision has not yet been accepted for consideration and is under appeal. Mina Tucano is not aware of any circumstances of former or current employees who have suffered health consequences from exposure to cyanide at the Company's operations. In addition, the Company notes that the use of cyanide in the processing of gold is common in the industry within Brazil and is not prohibited by any federal law in Brazil and that the Company complies with proper safety standards in the use and handling of cyanide in its operations. The Company believes the claims are without merit and that it is too early in the process to be able to determine the ultimate outcome. This assessment will be reviewed after a decision is reached on whether an appeal will be admitted to Superior Labor Court.

#### 16. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as stated elsewhere in this AIF and in the Annual Financial Statements, to the best of the Company's knowledge, none of the Company's directors, executive officers or any shareholder who beneficially owns or controls or directs, directly or indirectly, more than 10% of any class or series of voting securities of the Company, or any of their respective associates or affiliates, had any material interest, directly or indirectly, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to affect the Company.

# 17. TRANSFER AGENTS AND REGISTRARS

The transfer of the Company's common shares is managed by Computershare Investor Services. The register of transfers for the common shares of the Company is located at 510 Burrard Street, 3rd Floor, Vancouver, British Columbia, Canada, V6C 3B9.

#### 18. MATERIAL CONTRACTS

#### 18.A. LIST OF MATERIAL CONTRACTS

Below is a list of material contracts entered into and still in effect, which have been filed on SEDAR in accordance with the requirements of Section 12.2 of NI 51-102, each as defined below, unless otherwise noted:

- 1. Scheme Implementation Deed and Scheme;
- 2. MACA Agreement;
- 3. Coricancha Agreements; and
- 4. ATM Agreement.

Except as set forth above, the Company is not at present party to any other material contracts, other than material contracts entered into in the ordinary course of business and upon which the Company's business is not substantially dependent.

#### 18.B. DESCRIPTION OF MATERIAL CONTRACTS

#### 18.B.1.a Scheme Implementation Deed, Scheme and MACA Agreement

The Company entered into a scheme implementation deed on September 23, 2018 to acquire all of the issued ordinary shares of Beadell, a gold mining company that was listed on the Australian Securities Exchange, which owned Tucano, by means of a scheme under the *Australian Corporations Act 2001* ("Scheme"). In connection with the acquisition of Beadell, the Company also entered into the MACA Agreement.

On February 11, 2019, the Scheme was approved by the Company's shareholders (96% in favour) and on February 12, 2019, the Scheme was also approved by 97% of the number of votes cast, and 75% of the number of Beadell shareholders present and voting, at the meeting of Beadell shareholders. On March 5, 2019, the Acquisition was completed.

Pursuant to the Scheme Implementation Deed and Scheme:

- Beadell shareholders received 0.0619 of the Company's common shares for each Beadell share held (the "Exchange Ratio"). Upon completion of the Scheme, Beadell shareholders received approximately 103.6 million of the Company's common shares equal to approximately 38% of the Company's pro-forma outstanding common shares.
- Under concurrent arrangements, each Beadell warrant holder received a number of Company share purchase warrants equal to the number of their Beadell warrants multiplied by the Exchange Ratio at a price adjusted in accordance with the Exchange Ratio, and otherwise on the same terms and conditions as the original warrant. The Company issued the following pursuant to these arrangements on completion of the Scheme: (a) warrants to purchase 3,428,032 Great Panther Shares with an exercise price of \$1.317 and an expiry date of May 17, 2022; and (b) warrants to purchase 6,321,695 Great Panther Shares with an exercise price of \$1.317 and an expiry date of June 27, 2022. See Section 11.B of this Agreement for the issued and outstanding share purchase warrants.

Some of the key closing conditions that were completed or satisfied included:

• The modification to MACA Limited's ("MACA") outstanding \$54.7 million Australian dollar (A\$) loan due from Beadell on terms satisfactory to Great Panther. On November 19, 2018, an

agreement to modify the terms was reached and Great Panther, Beadell, Mina Tucano, MACA and Mineração e Construção Civil Limitada executed the Amended and Restated Deed of Acknowledgement of Debt, termination and Release of Open Pit Mining Services Contract dated effective March 5, 2019 (the "MACA Agreement"). Under the MACA Agreement, MACA agreed to consent to the change of control of Beadell, keep the loan in place with a term to June 2022, and other amendments with effect from the date of completion of the Scheme. During 2020, the Company repaid A\$18.5 million under the MACA Agreement and an aggregate of A\$3.8 million is required to be paid in 2021. On December 31, 2019, the Company agreed to convert up to A\$15.0 million of the outstanding balance into common shares at a price equal to 95% of the 20-trading day volume weighted average price of the Company's shares on the NYSE American with MACA limited to converting A\$5.0 million in any quarter. Beadell remains liable for the full principal amount of the loan, however the Company guaranteed the first A\$6.0 million in payments following the Acquisition, which payments have been completed. Under the terms of the MACA Agreement, the Company is required to pay to MACA an amount equal to 10% of the proceeds of future debt or equity financings (other than through the ATM Agreement defined below), net of direct costs and expenses of undertaking such financings, including legal, brokerage and advisor fees.

- Under the terms of the indenture agreement governing Beadell's outstanding \$10.0 million convertible debentures, the Company was required to make an offer to purchase all convertible debentures at a price equal to 105% of the principal amount, plus accrued and unpaid interest, upon the change of control. All of the holders of the convertible debentures accepted the Company's repurchase offer.
- Consent to the change of control on behalf of Beadell's senior secured lenders in Brazil (Santander and ITAU) was obtained and the loan was fully repaid in the second quarter of 2019.

Under the terms of the MACA Agreement, the loan amount is repayable on a change of control of Great Panther, Beadell or Mina Tucano.

#### 18.B.1.b Coricancha Agreements

The Coricancha Agreements are defined and described in Section 6.A.1 of this AIF.

#### 18.B.1.c ATM Agreement

On July 9, 2019, the Company entered into an At-the-Market Offering Agreement (the "ATM Agreement") with H.C. Wainwright & Co. and Eight Capital. Under the ATM Agreement, the Company is entitled, at its discretion and from time-to-time during the term of the ATM Agreement, to sell common shares of the Company equal to the lesser of: i) 10% of the aggregate market value of the Company's outstanding common shares as at the last trading day of the month before the month in which the first trade under the offering is made; and ii) aggregate gross proceeds of US\$25 million. No shares have been sold under the ATM Agreement to the date of this AIF.

#### 19. INTERESTS OF EXPERTS

The following is a list of the persons or companies named as having prepared or certified a report, valuation, statement or opinion described or included in a filing, or referred to in a filing, made under National Instrument 51-102 by the Company during, or relating to, Company's most recently completed financial year, and whose profession or business gives authority to the report, valuation, statement or opinion made by the person or company:

- (i) Auditors: KPMG LLP is the external auditor of the Company and reported on the Company's audited financial statements for the years ended December 31, 2020 and 2019 filed on SEDAR.
- (ii) Tucano Technical Report Authors: Messrs. Fernando A. Cornejo, M.Eng., P. Eng., Neil Hepworth, M.Sc., C. Eng., MIMMM, Carlos H. B. Pires, B.Sc. Hons, MAusIMM CP. (Geo), Nicholas R. Winer, B.Sc Hons., FAusIMM, each of whom is from Great Panther and Reno Pressacco, M.Sc.(A), P.Geo. and Tudorel Ciuculescu, M.Sc., P.Geo., each respectively, from Roscoe Postle Associates Inc., co-authored the technical report entitled "Amended and Restated Technical Report on the 2020 Mineral Reserves and Mineral Resources of The Tucano Gold Mine, Amapá State, Brazil" dated February 2, 2021, with an effective date of September 30, 2020.
- (iii) Topia Technical Report Author, GMC Technical Report Co-Author and 2017 GMC Technical Report Author: Robert F. Brown, P.Eng. authored the technical report entitled "NI 43-101 Report on the Topia Mine Mineral Resource Estimates" dated February 28, 2019, with an effective date of July 31, 2018 and the technical report entitled "NI 43-101 Technical Report on the Guanajuato Mine Complex Claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón and Santa Rosa Projects", dated February 20, 2017, with an effective date of the information related to the El Horcón and Santa Rosa Projects of August 31, 2016 and coauthored the technical report entitled "NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico" dated December 22, 2020, with an effective date of July 31, 2020.
- (iv) GMC Technical Report Co-Author: Mohammad Nourpour co-authored the technical report entitled "NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico" dated December 22, 2020, with an effective date of July 31, 2020.
- (v) Coricancha Technical Report Authors: Ronald Turner, MAusIMM CP (Geo) from Golder; Daniel Saint Don, P. Eng., previously from Golder; and Jeffrey Woods, P.E., previously from Golder co-authored the technical report entitled "NI 43-101 Technical Report Summarizing the Preliminary Economic Assessment of the Coricancha Mine Complex", dated July 13, 2018. The Coricancha Technical Report was submitted by Golder as Report Assembler of the work prepared by or under the supervision of the foregoing authors and Qualified Persons.

To the Company's knowledge, each of the aforementioned firms or persons did not hold more than 1% of the outstanding securities of the Company or of any associate or affiliate of the Company when they prepared the reports referred to above or following the preparation of such reports. None of the aforementioned firms or persons received any direct or indirect interest in any securities of the Company or of any associate or affiliate of the Company in connection with the preparation of such reports.

Mr. Hepworth, Chief Operating Officer of Great Panther; Mr. Cornejo, Vice President of Operations, Brazil; Mr. Winer, Vice President of Exploration, Brazil; Mr. Pires, Master Geologist, Mina Tucano Ltda; Mr. Nourpour, Resource Geologist; and Mr. Brown, Resource Consultant, are each current or former employees of the Company or its subsidiaries. Based on information provided by the relevant persons, except as set forth above, none of the aforementioned firms or persons, nor any directors, officers or employees of such firms are currently expected to be elected, appointed or employed as a director, officer or employee of the Company or of any associate or affiliate of the Company.

KPMG LLP are the auditors of the Company and have confirmed with respect to the Company that they are independent within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and also that they are independent accountants with respect to the Company under all relevant US professional and regulatory standards.

#### 20. ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at www.sedar.com.

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, and securities authorized for issuance under equity compensation plans, as applicable, is contained in the Company's information circular for its most recent annual general meeting.

Additional financial information is provided in the Audited Financial Statements and 2020 MD&A which may be obtained upon request from Great Panther's head office or may be viewed on the Company's website (www.greatpanther.com) or on the SEDAR website under the issuer's profile (www.sedar.com).

# SCHEDULE "A" CHARTER OF THE AUDIT COMMITTEE

# GREAT PANTHER MINING LIMITED (the "Company") CHARTER OF THE AUDIT COMMITTEE

#### 1. MANDATE

The mandate of the Audit Committee (the "Committee") of the board of directors (the "Board") of the Great Panther Mining Limited (the "Company") is to:

- **a.** assist the Board in fulfilling its oversight responsibilities in respect of:
  - i. the quality and integrity of the Company's financial statements, financial reporting processes and systems of internal controls and disclosure controls regarding risk management, finance, accounting, and legal and regulatory compliance;
  - **ii.** ensuring the independence and qualifications of the Company's external auditors and appointing the external auditor;
  - iii. requiring the rotation of the audit partner every five years as required under Section 203 of the Sarbanes-Oxley Act of 2002 and that the External Auditor provide a plan for the orderly transition of audit engagement team members;
  - **iv.** the review of the periodic audits performed by the Company's external auditors and the Company's internal accounting department; and
  - **v.** management's development and implementation of policies and processes in respect of accounting and financial reporting matters
  - vi. overseeing the non-audit services provided by the independent auditor;
  - **vii.** reviewing with management management's evaluation of the effectiveness of internal controls; and
  - viii. assessing the Company's enterprise risk management framework.
- **b.** provide and establish open channels of communication between the Company's management, internal accounting department, external auditor and directors;
- c. oversight of all filings and disclosure documents required to be prepared by the Company pursuant to all applicable federal, provincial and state securities legislation and the rules and regulations of all securities commissions having jurisdiction over the Company;

- **d.** review and confirm the adequacy of procedures for the review of all public disclosure of financial information extracted or derived from the Company's financial statements, and to periodically assess the adequacy of those procedures; and
- **e.** establish procedures for:
  - i. the receipt, retention and treatment of complaints or concerns received by the Company regarding accounting, internal accounting controls or auditing matters, including, but not limited to, concerns about questionable accounting or auditing practices; and
  - **ii.** the confidential, anonymous submission by employees of the Company of such complaints or concerns.

The Committee will primarily fulfil its mandate by performing the duties set out in Section 7 hereof.

The Board and management of the Company will ensure that the Committee has adequate funding to fulfil its mandate.

#### 2. COMPOSITION

The Committee will be comprised of members of the Board, the number of which will be determined from time to time by resolution of the Board, but will in no event be less than three directors. The composition of the Committee will be determined by the Board such that the membership and independence requirements set out in the rules and regulations, in effect from time to time, of any securities commissions (including, but not limited to, the Securities and Exchange Commission and the British Columbia Securities Commission) and any exchanges upon which the Company's securities are listed (including, but not limited to, the Toronto Stock Exchange and the NYSE American) are satisfied (the said securities commissions and exchanges are hereinafter collectively referred to as the "Regulators"). All members shall, to the satisfaction of the Board of Directors, be "financially literate" as defined in NI 52-110 and meet the NYSE American financial literacy requirements. At least one member of the Committee shall have accounting or related financial management expertise to qualify as a "financial expert" as defined under SEC Regulation S-K.

#### 3. TERM OF OFFICE

The members of the Committee will be appointed or re-appointed by the Board on an annual basis. Each member of the Committee will continue to be a member thereof until such member's successor is appointed, or until such member resigns or is removed by the Board. The Board may remove or replace any member of the Committee at any time. However, a member of the Committee will automatically cease to be a member of the Committee upon either ceasing to be a director of the Board or ceasing to

meet the requirements established, from time to time, by any Regulators. Vacancies on the Committee will be filled by the Board.

#### 4. COMMITTEE CHAIR

The Board, or if it fails to do so, the members of the Committee, will appoint a chair from the members of the Committee. If the chair of the Committee is not present at any meeting of the Committee, an acting chair for the meeting will be chosen by majority vote of the Committee from among the members present. In the case of a deadlock in respect of any matter or vote, the chair will refer the matter to the Board for resolution. The Committee may appoint a secretary who need not be a member of the Board or Committee.

#### The Chair of the Committee:

- provides leadership to the Committee with respect to its functions as described in this Charter and as otherwise may be appropriate, including overseeing the logistics of the operations of the Committee;
- **b.** chairs meetings of the Committee, unless not present, including in camera sessions, and reports to the Board following each meeting of the Committee on the findings, activities and any recommendations of the Committee;
- **c.** ensures that the Committee meets as often as it deems necessary, but will not meet less than once quarterly;
- **d.** in consultation with the Chair of the Board and the Committee members, establishes a calendar for holding meetings of the Committee;
- **e.** establishes the agenda for each meeting of the Committee, with input from other Committee members, the Chair of the Board, and any other parties as applicable;
- f. acts as liaison and maintains communication with the Chair of the Board and the Board to optimize the effectiveness of the Committee. This includes reporting to the full Board on all proceedings and deliberations of the Committee at the first meeting of the Board after each Committee meeting and at such other times and in such manner as the Committee considers advisable;
- **g.** reports annually to the Board on the role of the Committee and the effectiveness of the Committee role in contributing to the objectives and responsibilities of the Board as a whole;

- **h.** ensures that the members of the Committee understand and discharge their duties and obligations;
- fosters ethical and responsible decision making by the Committee and its individual members;
- j. together with the Corporate Governance and Nominating Committee and its individual members ensures that resources and expertise are available to the Committee so that it may conduct its work effectively and efficiently and pre-approves work to be done for the Committee by consultants;
- k. facilitates effective communication between members of the Committee and management; and
- **l.** performs such other duties and responsibilities as may be delegated to the Chair by the Board from time to time.

#### 5. MEETINGS

The time and place of meetings of the Committee and the procedures at such meetings will be determined, from time to time, by the members thereof, provided that:

- a. a quorum for meetings will be a majority of the members of the Committee, present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak to and hear each other. The Committee will act on the affirmative vote of a majority of members present at a meeting at which a quorum is present. The Committee may also act by unanimous written consent in lieu of meeting;
- **b.** the Committee may meet as often as it deems necessary, but will not meet less than once quarterly;
- c. the Committee shall meet within 45 days following the end of each of the first three financial quarters to review and discuss the unaudited financial results for the preceding quarter and the related MD&A and shall meet within 90 days following the end of the fiscal year end to review and discuss the audited financial results for the year and related MD&A prior to their publishing;
- **d.** the Committee may ask members of management or others to attend meetings and provide pertinent information as necessary. For purposes of performing their audit related duties, members of the Committee shall have full access to all corporate information and shall be permitted to discuss such information and any other matters relating to the financial position of the Company with senior employees, officers and independent auditors of the Company;
- e. as part of its job to promote and foster open communication, the Committee should meet at least annually (or more frequently as required) with management, the internal auditor and the independent auditor in separate executive sessions to discuss any matters that the Committee

- or each of these groups believe should be discussed privately. In addition, the Committee or at least its Chair should meet with the independent auditor and management quarterly to review the Company's financial statements;
- f. notice of the time and place of every meeting will be given in writing and delivered in person or by facsimile or other means of electronic transmission to each member of the Committee at least 48 hours prior to the time of such meeting; and
- **g.** the Committee will maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Board. The Committee will make regular reports of its meetings to the Board, directly or through its chair, accompanied by any recommendations to the Board approved by the Committee.

#### 6. AUTHORITY

The Committee will have the authority to:

- **a.** retain (at the Company's expense) its own legal counsel, accountants and other consultants that the Committee believes, in its sole discretion, are needed to carry out its duties and responsibilities;
- **b.** conduct investigations that it believes, in its sole discretion, are necessary to carry out its responsibilities;
- c. take whatever actions it deems appropriate, in its sole discretion, to foster an internal culture within the Company that results in the development and maintenance of a superior level of financial reporting standards, sound business risk practices and ethical behaviour; and
- **d.** request that any director, officer or employee of the Company, or other persons whose advice and counsel are sought by the Committee (including, but not limited to, the Company's legal counsel and the external auditors) meet with the Committee and any of its advisors and respond to their inquiries.

#### 7. SPECIFIC DUTIES

In fulfilling its mandate, the Committee will, among other things:

- **a.** with respect to the external auditor:
  - i. select the external auditors, based upon criteria developed by the Committee;
  - **ii.** approve all audit and non-audit services in advance of the provision of such services and the fees and other compensation to be paid to the external auditors;

- **iii.** oversee the services provided by the external auditors for the purpose of preparing or issuing an audit report or related work; and
- iv. review the performance of the external auditors, including, but not limited to, the partner of the external auditors in charge of the audit, and, in its discretion, approve any proposed discharge of the external auditors when circumstances warrant, and appoint any new external auditors. Notwithstanding any other provision of this Charter, the external auditor will be ultimately accountable to the Board and the Committee, as representatives of the shareholders of the Company, and those representatives will have the ultimate authority and responsibility to select, evaluate and, where appropriate, replace the external auditor (or to nominate the external auditor to be proposed for shareholder approval);
- b. periodically review and discuss with the external auditors all significant relationships that the external auditors have with the Company to determine the independence of the external auditors. Without limiting the generality of the foregoing, the Committee will ensure that it receives, on an annual basis, a formal written statement from the external auditors that sets out all relationships between the external auditor and the Company, and receives an opinion on the financial statements consistent with all professional standards that are applicable to the external auditors (including, but not limited to, those established by any securities legislation and regulations, the Canadian Institute of Chartered Professional Accountants Chartered Accountants, Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States) and the American Institute of Certified Public Accountants, and those set out in the International Financial Reporting Standards as issued by the International Accounting Standards Board);
- **c.** evaluate, in consultation with the Company's management, internal accounting department and external auditors, the effectiveness of the Company's processes for assessing significant risks or exposures and the steps taken by management to monitor, control and minimize such risks; and obtain, annually, a letter from the external auditors as to the adequacy of such controls
- **d.** in connection with its risk management function, the Committee shall periodically, and no less than once a year, consider and discuss risks and the steps management has taken to monitor and control such exposures, including the top risks identified by management and the policies and practices adopted by the Company to mitigate those risks. These risks should include, without limitation, consideration of:
  - A. management's assessment of risks and steps taken to address significant risks or exposure;
  - B. financial risks associated with investing, hedging or other financial instruments;

- C. privacy cyber security risk exposures and measures taken to protect the security and integrity of the Company's management information systems and Company data;
- D. management's assessment of internal control risks and exposures and steps taken by management to minimize such risks;
- E. litigation and reputational risks;
- F. climate change and carbon taxes/carbon usage restrictions risk;
- G. the Company's crisis management and response plans and business continuity plans (including work stoppage and disaster recovery plans); and
- H. the availability and or adequacy of insurance coverage for insurable risks.
- **e.** consider, in consultation with the Company's external auditors and internal accounting department, the audit scope and plan of the external auditors and the internal accounting department;
- **f.** coordinate with the Company's external auditors the conduct of any audits to ensure completeness of coverage and the effective use of audit resources;
- **g.** assist in the resolution of disagreements between the Company's management and the external auditors regarding the preparation of financial statements; and in consultation with the external auditors, review any significant disagreement between management and the external auditors in connection with the preparation of the financial statements, including management's responses thereto;
- **h.** after the completion of the annual audit, review separately with each of the Company's management, external auditors and internal accounting department the following:
  - i. the Company's annual financial statements and related footnotes;
  - ii. the external auditors' audit of the financial statements and their report thereon;
  - iii. any significant changes required in the external auditors' audit plan;
  - **iv.** any significant difficulties encountered during the course of the audit, including, but not limited to, any restrictions on the scope of work or access to required information;
  - **v.** the Company's guidelines and policies governing the process of risk assessment and risk management; and

- i. other matters related to the conduct of the audit that must be communicated to the Committee in accordance with the standards of any regulatory body (including, but not limited to, securities legislation and regulations, the Canadian Institute of Chartered Professional Accountants -Chartered Accountants, International Financial Reporting Standards as issued by the International Accounting Standards Board, Canadian generally accepted auditing standards, the Public Company Accounting Oversight Board (United States), and the American Institute of Certified Public Accountants);
- **j.** consider and review with the Company's external auditors (without the involvement of the Company's management and internal accounting department):
  - i. the adequacy of the Company's internal controls and disclosure controls, including, but not limited to, the adequacy of computerized information systems and security;
  - ii. the truthfulness and accuracy of the Company's financial statements; and
  - **iii.** any related significant findings and recommendations of the external auditors and internal accounting department, together with management's responses thereto;
- **k.** consider and review with the Company's management and internal accounting department:
  - i. significant findings during the year and management's responses thereto;
  - ii. any changes required in the planned scope of their audit plan;
  - iii. the internal accounting department's budget and staffing; and
  - **iv.** the internal auditor department's compliance with the appropriate internal auditing standards;
- **I.** establish systems for the regular reporting to the Committee by each of the Company's management, external auditors and internal accounting department of any significant judgments made by management in the preparation of the financial statements and the opinions of each as to appropriateness of such judgments;
- m. review (for compliance with the information set out in the Company's financial statements and in consultation with the Company's management, external auditors and internal accounting department, as applicable) all filings made with Regulators and government agencies, and other published documents that contain the Company's financial statements <u>before</u> such filings are made or documents published (including, but not limited to:
  - i. any certification, report, opinion or review rendered by the external auditors;
  - ii. any press release announcing earnings (especially those that use the terms "pro forma", "adjusted information" and "not prepared in compliance with generally accepted accounting principles"); and

- **iii.** all financial information and earnings guidance intended to be provided to analysts, the public or to rating agencies);
- n. prepare and include in the Company's annual proxy statement or other filings made with Regulators any report from the Committee or other disclosures required by all applicable federal, provincial and state securities legislation and the rules and regulations of Regulators having jurisdiction over the Company;
- **o.** review with the Company's management:
  - i. the adequacy of the Company's insurance and fidelity bond coverage, reported contingent liabilities and management's assessment of contingency planning;
  - **ii.** management's plans in respect of any changes in accounting practices or policies and the financial impact of such changes;
  - **iii.** any major areas in that, in management's opinion, have or may have a significant effect upon the financial statements of the Company; and
  - **iv.** any litigation or claim (including, but not limited to, tax assessments) that could have a material effect upon the financial position or operating results of the Company;
- **p.** annually review the Company's directors' and officers' third-party liability insurance to ensure adequacy of coverage.
- **q.** The Committee shall periodically, and no less than once a year, consider and discuss the Company's legal and ethics compliance matters. The Committee should meet at least once a year with the Company's legal counsel to discuss these matters. These matters should include, without limitation, consideration of:
  - (i) legal and regulatory compliance matters that could have a material impact on the Company's business, operations or financial statements;
  - I. the effectiveness of the Company's disclosure controls and procedures in ensuring compliance by the Company with securities law and stock exchange disclosure requirements; and
  - J. an annual review of the appropriateness and effectiveness of the Company's compliance policies.
- r. at least annually, review with the Company's legal counsel and accountants all legal, tax or regulatory matters that may have a material impact on the Company's financial statements, operations and compliance with applicable laws and regulations;

- review and update periodically a Code of Business Conduct and Ethics for the directors, officers and employees of the Company; and review management's monitoring of compliance with the Code of Ethics and Business Conduct;
- review and update periodically the procedures for the receipt, retention and treatment of complaints and concerns by employees received by the Company regarding accounting, internal accounting controls or auditing matters, including, but not limited to, concerns regarding questionable accounting or auditing practices;
- **u.** consider possible conflicts of interest between the Company's directors and officers and the Company; and approve for such parties, in advance, all related party transactions;
- **v.** review policies and procedures in respect of the expense accounts of the Company's directors and officers, including, but not limited to, the use of corporate assets;
- **w.** review annually and update this Charter and recommend any proposed changes to the Board for approval, in accordance with the requirements of all applicable federal, provincial and state securities legislation and the rules and regulations of Regulators having jurisdiction over the Company; and

perform such other functions, consistent with this Charter, the Company's constating documents and governing laws, as the Committee deems necessary or appropriate.

Last presented by the Committee for review and approval to, and so approved by, the Board of Directors on November 4, 2020 (previously on October 29, 2019).