ASX RELEASE
31 January 2021

QUARTERLY ACTIVITIES REPORT – DECEMBER 2021

- **A Dynamic Water Balance (DWB) study was completed for the Borborema Gold Project by SRK Consulting (SRK) to refine water requirements.**
  - **SRK modelling outcomes and iterative design improvements have significantly de-risked the water supply issues.**
  - **There is a near net zero demand for external water for the 2Mtpa base case and potential on current sewage water flows to support an operation up to 4Mtpa.**
- **The Engineering Cost Estimate (ECE) study for a 2Mtpa operation was completed post quarter end, with larger throughput options also being assessed given the outcome of the DWB study. Results to be announced in early February 2022**
- **A 13 hole (5,000m) Diamond Core drilling program commenced at Borborema Gold Project to target high-grade Mineral Resource extensions outside current pit optimisations. By quarters end one hole had been completed (CRDD-0174).**

Big River Gold Limited (ASX:BRV) (**Big River** or the **Company**) is pleased to present the activities of the company during the December 2021 quarter.

During that time:

- the capital and operating cost update for the operation continued in parallel with tax studies and assessment of larger throughput operation scenarios.
- A water management plan arising from dynamic water balance studies developed with implications for the reduction of process water supply risk for the operation, and
- Resource extension drilling recommenced with a program of 13 deep holes targeting high grade material immediately below the current limit of drilling (and deepest point of proposed large pit)

Engineering Cost Estimate (ECE) and Expansion Studies

Work on the Engineering Cost Estimate (**ECE**) was completed post quarter end with results to be announced in early February 2022. Finalisation of taxation implications and assessment of expansion options were also incorporated.

The findings of water management studies described below have also been considered in the engineering design currently being undertaken for the ECE. This includes assessment of the water filtration from tailings, site wide drainage and water storage and various equipment options that better reduce water loss and increase water re-capture.

Project Water Security

A Dynamic Water Balance (**DWB**) study completed by SRK Consulting (**SRK**) and the ongoing water management program to provide water security for the Borborema Gold Project providing the company with the potential to increase the plant throughput from that previously reported to the ASX on 23 December 2019 and 8 July 2020.

The DWB identified extended periods when no additional water is required from offsite to support a 2Mtpa operation. Sensitivity analyses of the model demonstrated that in average conditions an occasional peak shortfall of approximately 35m^3/hour of process water may be required to be sourced from offsite to support a 2Mtpa plant. These short term demands occur in under 10% of the modelled climatic conditions based on analysis of the historical data by SRK. This equates approximately to a 1 in 10 year dry year[1], the impact of which could be mitigated by several water conservation options and incorporation of the small Sao Francisco Dam into the Fines Dyke. More details are provided in the Company's ASX announcement of 2 December, 2021.

Figure 1. View to the south west over the Borborema pit showing the exposed ore zone and infrastructure.

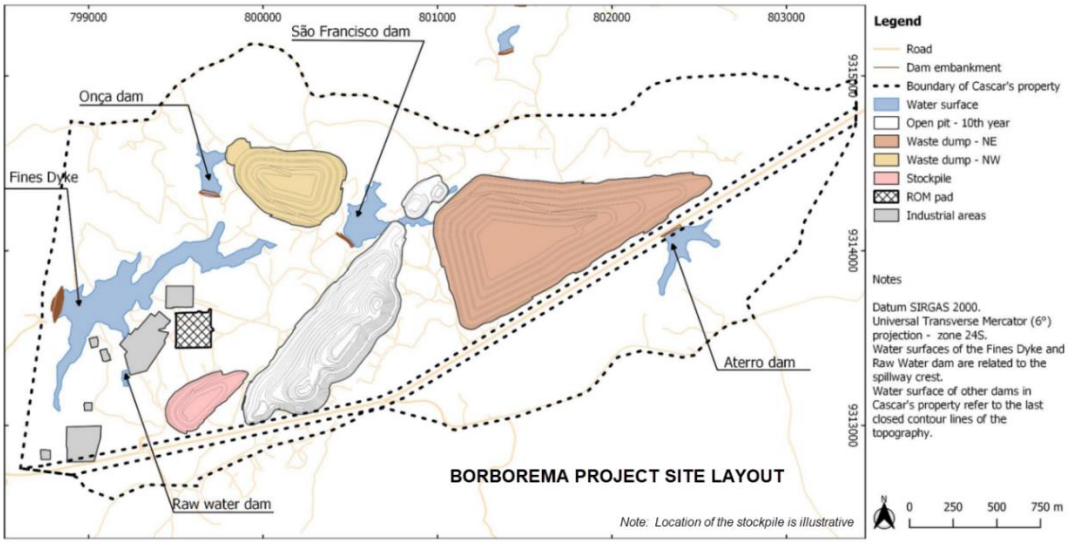

Figure 2. Borborema site layout and water management features (from: "Site-wide water balance for the Borborema Project", SRK (Oct 2021))

[1] A 1% Annual Exceedance Probability (AEP) event.

Importantly, the DWB study has established water management plans for the Project that indicates minimal additional external water will be required to support a 2 million tonnes per annum (Mtpa) operation. Extending this model and given the rehabilitation of the Currais Novos sewage facilities is progressing well, water supplies available from Currais Novos are considered sufficient to support the expansion of plant throughput up to approximately 4Mtpa.

The results of the SRK study are significant for the Project and BRV and increases the confidence of the Company in not requiring additional water supply from Currais Novos in most years to meet a 2Mtpa production profile. Furthermore, the water flows currently being obtained at Currais Novos not only further de-risk the Project but also identify a water source that could support production expansion up to 4Mtpa.

Currais Novos sewage water facility

Since assuming management and refurbishment of the assigned sewage pump station, BRV has been progressively repairing and refurbishing the sewage boxes and system, reaching flow rates of 55.8 m^3/hr by December 2021. BRV will continue to improve the existing infrastructure and plans to add additional pumps and surge tanks as we work toward achieving the 70m^3/hr flow for which we have agreed with the local water authority, CAERN.

In seeking increased water flow and security the Company is negotiating with CAERN to assume more responsibility for the system while working to increase the water allocation assigned to Borborema. We are also investigating identified bore fields to the north and south which may hold the potential to provide significant water flows with gravity feed to site as an additional risk mitigation.

Resource extension drilling

Diamond drilling commenced during the quarter to test depth and high-grade shoot extensions which can be incorporated into mine planning for expanded production scenarios. The program planned for 13 holes totalling approximately 5000m in the first phase[2].

Big River's objective is to better define the width and grade of the resource at depth for improved mine planning and investigation of expanded production scenarios for the Borborema project. In addition, there are significant previously reported high grade intercepts that appear part of a southerly plunging shoot development and warrant follow up. These intercepts include 50m at 4.95g/t Au (CRDD-138) and 47m at 2.31 g/t Au (incl 15m at 3.61g/t Au) in CRDD -134 (Refer Figures 5 and 6).

By quarters end, the first hole, CRDD-0174, was completed at 334.35m with a 40m mineralized zone intercepted (Figure 4). The drill contractor stopped for the Christmas period from 18 December and re-commenced the second hole in early January.

CRDD-0174 was fully sampled and logged with samples submitted to the SGS Laboratory in Belo Horizonte. Expected turn around for results is currently 6 weeks.

[2] Refer ASX announcement 22 December, 2021

Figure 3 – Diamond drilling in progress at Borborema Gold Project

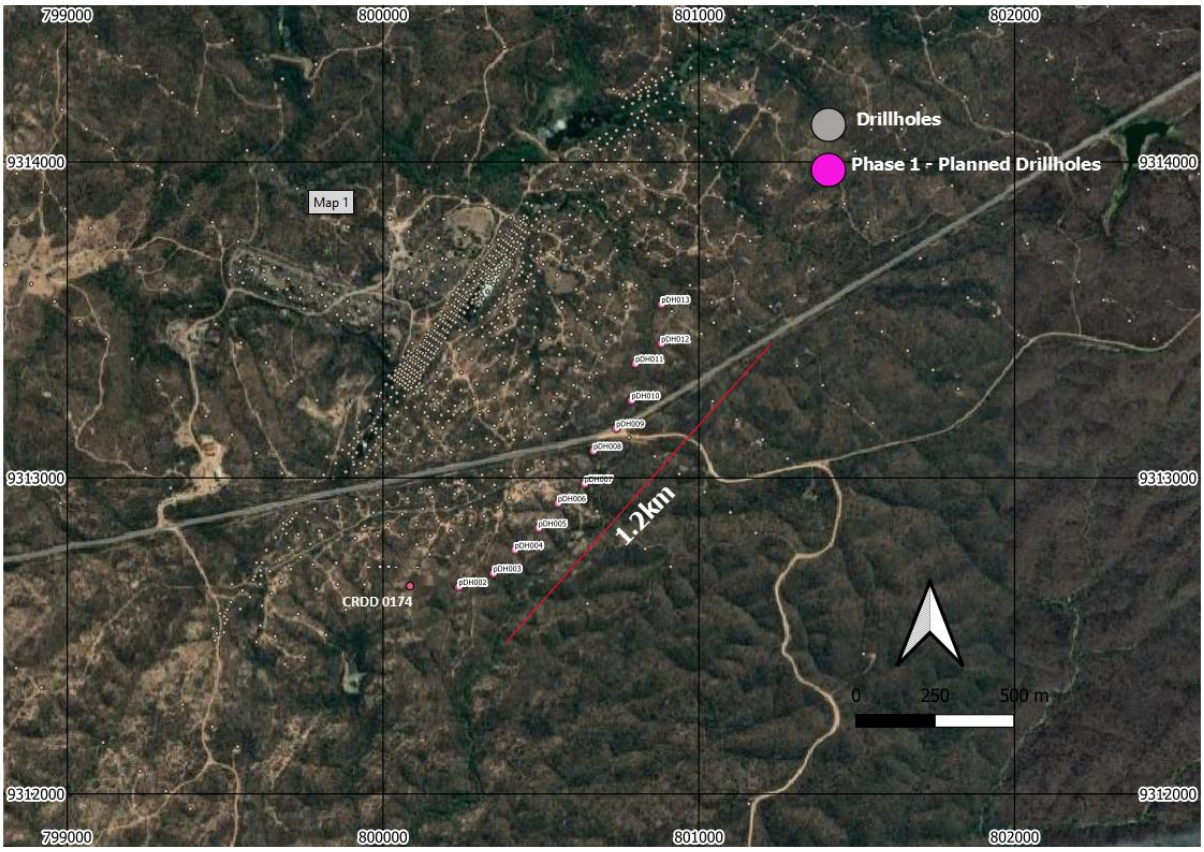

Figure 4 – Diamond drilling collar locations, Borborema Gold Project

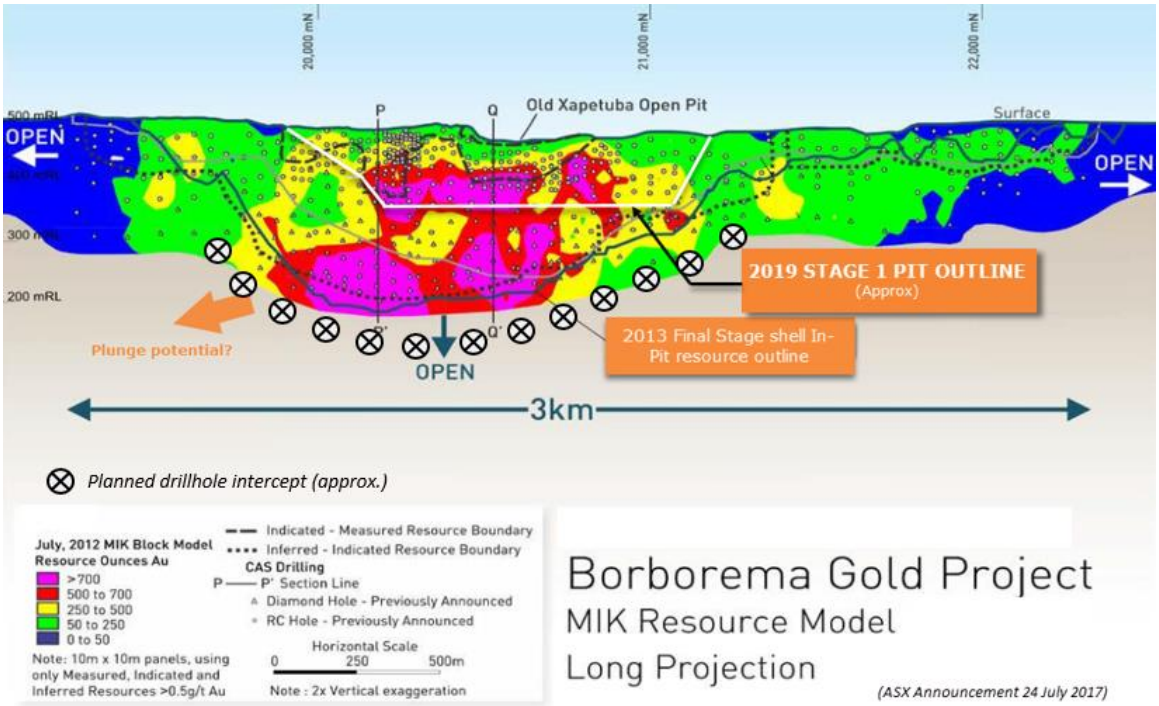

Figure 5 – Planned drill intercepts testing high-grade plunging shoots and extending resource immediately below limit of previous drilling and pit designs.

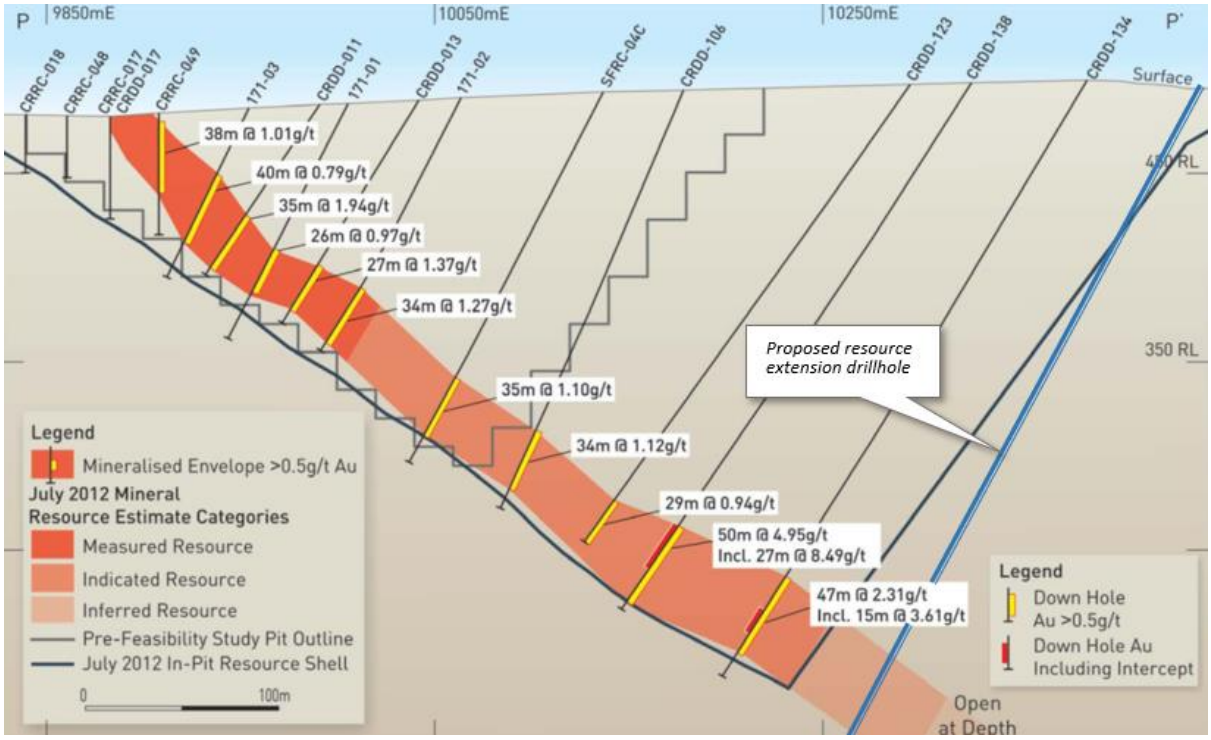

Figure 6 – Section P-P' showing planned diamond drilling below limit of previous drilling.

Corporate

Financial Position

At the end of December 2021, Big River had cash reserves of $16.6M

The aggregate amount of payments to related parties and their associates included in the December quarter cash flows from operating activities was $128k, comprising of Chairman and directors' fees, salaries and superannuation.

During the quarter the company made payments totalling $739k of capitalised exploration and evaluation expenditure consisting of costs in Brazil (staff, consultants and other) of $451k, and consultants in Australia (GR Engineering, Vector, Rhodes Engineering, Macromet, and other) of $288k relating to the Borborema ECE and project development.

Exploration expenditure expensed for the period in Australia and Brazil totalled $111k.

For and on behalf of the Board.

Andrew Richards
Executive Chairman
Big River Gold Ltd

About Big River Gold

Big River Gold Ltd (ASX:BRV), is a mineral exploration and development company listed on the Australian Securities Exchange. Its major focus is the 2.43M ounce Borborema Gold Project in Brazil; a country the Company believes is underexplored and offers high potential for the discovery of world class mineral deposits.

Borborema Gold Project

Borborema is a project with a resource of 2.43Moz gold, located in the Seridó area of the Borborema province in north-eastern Brazil. It is 100% owned by Big River and consists of three mining leases covering a total area of 29 km2 including freehold title over the main prospect area.

The Project benefits from a favourable taxation regime, existing on-site facilities and excellent infrastructure such as buildings, grid power, water and sealed roads. It is close to major cities and regional centres and the services they can provide.

Competent Person Statements

Borborema mineral resource estimate

The information in this announcement that relates to the mineral resource estimate for the Borborema Project was first reported in accordance with ASX Listing Rule 5.8 on 24 July 2017. Big River confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 24 July 2017 and

that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed.

Borborema ore reserve estimate

The information in this announcement that relates to the Ore Reserve estimate for the Borborema Gold Project was first reported in accordance with ASX Listing Rule 5.9 on 6 March 2018, 29 March 2018 and 11 April 2018. All material assumptions and technical parameters underpinning the Ore Reserve estimate continue to apply and have not materially changed.

That portion of the Ore Reserve that was included in the Stage 1 Mining Schedule for the December 2019 Definitive Feasibility Study (DFS) was reviewed by Porfirio Cabaleiro Rodriguez, BSc. (MEng), MAIG of GE21 as part of the DFS. The Ore Reserve was first reported in accordance with ASX Listing Rule 5.9 on 24 July 2017 and updated on 6 March 2018 and is based on information compiled by Mr. Linton Kirk, Competent Person who is a Fellow and Chartered Professional of The Australasian Institute of Mining and Metallurgy. Mr. Kirk is employed by Kirk Mining Consultants Pty Ltd and is an independent consultant to the company.