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ASX Market Announcements Level 6, Exchange Centre 20 Bridge Street Sydney NSW 2000

# EXPLORATION POTENTIAL OF THE RIO GRANDE COPPER BELT

**Sydney, Australia,** - Aguia Resources Limited (ASX:AGR) ('Aguia' or the 'Company') is pleased to provide shareholders with a brief comparison of two prolific geological environments for copper mineralisation: the Kalahari Copper Belt in southern Africa and the Rio Grande Copper Belt in southernmost Brazil.

Investors may wonder why particular regions of the world contain rich mineral deposits. The answer lies in the time and place where they were originally formed. To better understand Aguia's copper assets, we thought that it would be worthwhile to provide to investors some context around the genesis of the copper mineralization in the Rio Grande Copper Belt in the state of Rio Grande do Sul in southernmost Brazil, where Aguia's Andrade copper project and eight satellite targets are located.

The rocks covered by Aguia's mineral rights evolved at least half a billion years ago when the land mass we now call South America was still joined to Africa. This ancient land mass referred to as Gondwana contained an area which is now famously known as the Kalahari Copper Belt. It is an area renowned for its prolific output of copper over the past 60 years. Geological studies have revealed unique and striking similarities in the geology of the Kalahari to that of Southern Brazil and in particular the Rio Grande Copper Belt. Over the same 60-year period, Southern Brazil did not attract the level of investment necessary to fund continuous exploration with the exception of Aguia's recent exploration efforts. There has also been some discontinuous investment in the last year by both Junior and Major minerals exploration companies. The only exception has been the Campaquã Mine, now exhausted, located in the Rio Grande Copper Belt that was mined continuously for 100 years.

You will find set out below a detailed analysis of scientific and geological data which explains this very interesting phenomena.

## **Management Commentary**

Managing Director Dr. Fernando Tallarico said: "We strongly believe in the potential of the Rio Grande Belt and with continuous mineral exploration over the coming years believe that it can develop into a major mining district. We will continue to explore for copper along the Belt whilst progressing our Andrade Copper Project into production and look forward to updating our shareholders on further developments."

#### Kalahari Copper Belt and Rio Grande Copper Belt comparison

Between 620 and 540 million years ago, the Kalahari and Rio de la Plata cratons were brought together during tectonic events. The Kalahari craton is today located in southern Africa, and includes countries such as Botswana and Namibia, which are home to large copper and silver deposits and mines, which have been discovered through over 50 years of continuous investment in mineral exploration work. The area is known as the Kalahari Copper Belt.

On the other side of the South Atlantic Ocean, in the continent of South America, a similar geological environment occurs, especially in the southernmost region of Brazil, in the state of Rio Grande do Sul, which hosts one of the first copper mines in the country where production commenced at the end of the 19th century and operated until the end of the 20th century (Camaqua Mines), Aguia's Andrade Copper Deposit, and several other copper, gold and silver occurrences that have not been the subject of systematic modern minerals exploration.

Prior to the opening of the Atlantic Ocean, South America and Africa were connected as part of a Super-Continent named Gondwana. Figure 01 shows the position of the continents about 600 million years ago with emphasis on the position of the Kalahari Copper Belt and the location of Aguia's Andrade Copper Project.

There are several similarities between the copper deposits of southern Africa and the copper occurrences in the Rio Grande Copper Belt, starting with the age of the mineralisation. In the Kalahari Copper Belt, a study using Pb-Pb isotopic age dating for the mineralisation produced a homogeneous age for both disseminated and fracture-hosted chalcocite mineralisation. Ore samples yielded an age of 586 + 62/-65 million years. A study done at Camaqua Mines, the U-Pb Shrimp concordance age of andesitic lava interlayered in the mineralised sedimentary rock packages, narrows the age for the mineralisation process to between  $568.3 \pm 8.9$  million years and  $547 \pm 6$  million years. The ages of mineralisation are almost identical and occurred at a time that the continents were either together or in the process of joining, which leads us to believe that the geological environment for the formation of copper deposits on both sides was similar.

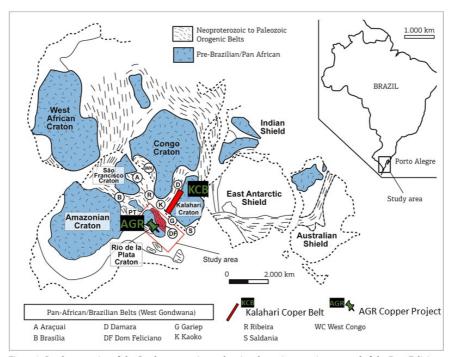


Figure 1. Southern portion of the Gondwana continent showing the main cratonic areas and of the Dom Feliciano belt and related belts of Africa. Cratons: A = Amazon, C = Congo, K = Kalahari, LP = Rio de la Plata, PT = Paraná, SF = São Francisco. Brasiliano-Pan-African Belts: B = Brasilia belt, DF = Dom Feliciano belt, G = Gariep belt, R = Ribeira belt, K = Kaoko belt, SG = São Gabriel Terrane. Modified from Rapela et al. (2011).

Figure 01 – Position of the continents about 600 million years ago with emphasis on the position of the Kalahari Copper Belt and the location of AGR's Andrade Copper Project.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Walraver, F. and Borg, G. 1992. Lead isotopic signatures at the Klein Aub Mine, Namibia implications for mineralisation models. Miner. Deposita, 27, 115-121.

<sup>&</sup>lt;sup>2</sup> Almeida, D.P.M.; Chemale, F.J.; Machado, A. 2012. Late to Post-Orogenic Brasiliano-Pan-African Volcano-Sedimentary Basins in the Dom Feliciano Belt, Southernmost Brazil. Petrology – New Perspectives and Applications, pp 73-130.

<sup>&</sup>lt;sup>3</sup> Philipp, R.P., Pimentel, M.M. and Chemale, F. J. 2016. Tectonic evolution of the Dom Feliciano Belt in Southern Brazil: geological relationships and U-Pb geochronology. Braz. J. Geol., 46, 83–104.



Figure 02 – Global map with copper occurrences and the position of the Kalahari Copper Belt and the Rio Grande Copper Belt. Source: USGS (https://mrdata.usgs.gov/general/map-global.html#home).

The mineralised host rocks of both Kalahari and the Rio Grande Copper Belt are sedimentary rocks, conglomerates and sandstones, and volcanic rocks, particularly intermediate. The main copper mineral is chalcocite, minor bornite and rarely chalcopyrite. In the weathering profile, malachite is the most common copper mineral. The common mineralisation textures are disseminations, open-space fillings, veins (quartz and/or carbonates), stockworks and some replacement textures and the respective hydrothermal alterations are also similar, associated with minerals such as chlorite, carbonates, epidote, sericite, albite, and hematite.

The geological similarities between the two belts also includes the metal content which is the most important attribute of a mineral district. The Kalahari Copper Belt contains several copper and silver mines and deposits discovered through over 50 years of continuous of exploration and mine development. Figure 03 shows the evolution of the mineral resources of the Kalahari Copper Belt over five decades of exploration investment. The Kalahari Copper Belt has only emerged as a word-class mineral province in the last decade.

Aguia holds a significant position in the Rio Grande Copper Belt, including 104,035 hectares of exploration permits and further 32,275 hectares under application. The most advanced copper project in the Company's portfolio is the Andrade Copper Project with a current Mineral Resource (that conforms with the JORC Code 2012) consisting of an Indicated Resource of 18.03Mt at 0.41% Cu and 1.87g/t Ag, and an Inferred Resource of 3.98Mt at 0.53% Cu and 2.06 g/t Ag, that was previously announced by the Company on 9 March 2021. There has been no material change in the resource between March 2021 and the current date. As well as the Andrade Copper Deposit, most of the eight exploratory targets have the same copper and silver metal content, for example the Primavera, Passo Feio, Lagoa Parada and Canhada targets, which have already returned rock assay results greater than 4.00% Cu and 100g/t Ag.

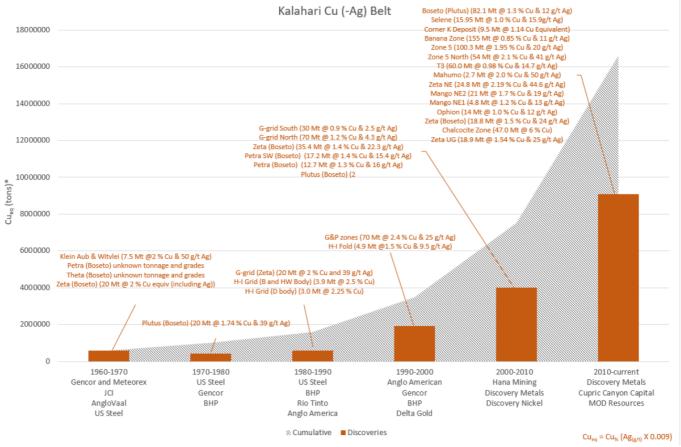


Figure 03 – Historical discoveries and cumulative copper resources over 50 years at The Kalahari Copper Belt. Source: Kalahari Metals – Investor Presentation (https://kalaharimetals.com/wp-content/uploads/2019/04/190322-kml-investor-presentation.pdf).

# AUTHORISED FOR ISSUE TO ASX BY FERNANDO TALLARICO, MANAGING DIRECTOR OF AGUIA RESOURCES LIMITED

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#### **About Aguia:**

Aguia Resources Limited, ("Aguia") is an ASX listed multi-commodity company (AGR:ASX) with pre-production phosphate and metallic copper projects located in Rio Grande do Sul, the southernmost state of Brazil. Aguia has an established and highly experienced in-country team based in Porto Alegre, the capital of Rio Grande do Sul. Aguia is committed to advancing its existing projects into production whilst continuing to pursue other opportunities within the sector.

#### **JORC Code Competent Person Statements:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr. Fernando Tallarico, who is a member of the Association of Professional Geoscientists of Ontario. Dr. Tallarico is a full-time employee of the company. Dr. Tallarico has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr. Tallarico consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Caution regarding forward-looking information:**

This press release contains "forward looking information" within the meaning of applicable Australian securities legislation. Forward looking information includes, without limitation, statements regarding the next steps for the project, timetable for development, production forecast, mineral resource estimate, exploration program, permit approvals, timetable and budget, property prospectivity, and the future financial or operating performance of the Company. Generally, forward looking information can be identified by the use of forwardlooking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including, but not limited to: general business, economic, competitive, geopolitical and social uncertainties; the actual results of current exploration activities; other risks of the mining industry and the risks described in the Company's public disclosure. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities law.