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Significant Strategic Expansion - Jequie Niobium Rare Earth Project

Australian Mines Limited¹ (ASX: **AUZ**) ("**AUZ**" or the "**Company**") is pleased to advise that it has significantly increased its exploration footprint within the State of Bahia. The new tenements are adjacent to existing Tenements² and tenements recently acquired by Brazilian Rare Earth³ (BRE.ASX).

- AUZ has, subject to transfer, acquired 17 new tenements comprising approx. 51,000 HA in the state of Bahia. Refer to Figure 1 and Table 1
- AUZ now controls in excess of 131,000 HA, making the Company one of the largest tenement holders in the region.
- The tenements are strategically situated in the highly prospective Rare Earth complex of Bahia, prospective for both Ionic Absorption Clay deposits and Hard rock deposits containing Rare Earth Elements and Niobium.
- The tenements are generally contiguous to the Company's current holdings within Bahia⁴ and are generally well located to nearby local and regional infrastructure.
- Initial exploration is set to commence this week.

AUZ's CEO, Andrew Nesbitt commented "We are delighted with this significant increase in our land position, and the strategy to acquire these tenements in conjunction with

¹ To be renamed EcoMetal Resources Limited

² The Tenements are subject to acquisition terms as per ASX Release, 6 December 2023

³ BRE Expands Control over Rocha da Rocha Rare Earth Province Link

⁴ ASX Release, 6 December 2023



Mineracao Paranai Ltda for a confidential but immaterial cash consideration for the benefit of our shareholders".



Figure 1: Newly acquired tenements



Tenement #	Ownership (held for AUZ)	Hectares
870.090/2024	Mineração Paranaí Ltda	1963,46
870.089/2024	Mine r ação Paranaí Ltda	1964,05
870.088/2024	Mine r ação Paranaí Ltda	1019,77
870.087/2024	Mine r ação Paranaí Ltda	1675,73
870.085/2024	Mine r ação Paranaí Ltda	1963,07
870.084/2024	Mine r ação Paranaí Ltda	1920,44
870.083/2024	Mine r ação Paranaí Ltda	1954,36
870.082/2024	Mine r ação Paranaí Ltda	1983,63
870.081/2024	Mine r ação Paranaí Ltda	1879,42
870.080/2024	Mine r ação Paranaí Ltda	1887,99
870.079/2024	Mine r ação Paranaí Ltda	1984,66
870.078/2024	Mine r ação Paranaí Ltda	1828,39
870.077/2024	Mine r ação Paranaí Ltda	1986,32
870.076/2024	Mine r ação Paranaí Ltda	1968,98
870.075/2024	Mine r ação Paranaí Ltda	1922,32
870.074/2024	Mine r ação Paranaí Ltda	1963,7
870.073/2024	Mine r ação Paranaí Ltda	1868,66
870.072/2024	Mine r ação Paranaí Ltda	1732,04
870.071/2024	Mine r ação Paranaí Ltda	1904,37
870.070/2024	Mine r ação Paranaí Ltda	1981,91
870.069/2024	Mine r ação Paranaí Ltda	1899,53
870.068/2024	Mine r ação Paranaí Ltda	1970,46
870.067/2024	Mineração Paranaí Ltda	1957,87
870.066/2024	Mineração Paranaí Ltda	1979,16
870.065/2024	Mineração Paranaí Ltda	1876,52
870.064/2024	Mineração Paranaí Ltda	1971,18
870.063/2024	Mineração Paranaí Ltda	1978,8
		50986,79

Table 1: List of newly required tenements

About Australian Mines in Brazil

Resende Lithium Project (Lithium Valley, Minas Gerais)⁵

Minas Gerais is a global leading mining jurisdiction. The government is well known for supporting productive and sustainable operations in the state. Recently the government is focused on encouraging the development of the lithium minerals sector

⁵ The Resende Lithium Project has no current or historical minerals resources.



within the province. The Lithium Valley is home to 3 notable lithium producers and several ASX explorers. The notable producers include the Mina da Cachoeira underground mine with a production capacity of 45,000t per annum of 5.5% Li₂O spodumene concentrate⁶, AMG Lithium GmbH's Mibra lithium-tantalum-niobium-tin mine which has capacity to produce 130,000t lithium concentrate per annum⁷ and Sigma Lithium Corporation's (NASDAQ: SGML) Grota do Cirio operation, which is ramping up to 270,000t per annum of lithium concentrate⁸. There is no guarantee that the Resende Lithium Project will have the same or similar levels of results, or that it will become a producing project.

The Resende Lithium Project comprises 8 mineral rights claims with total aggregate land holding of **13,314 HA** or ~**133km**² (Figure 2). The licences are in the Sao Joao del Rey Pegmatite Province, which is widely known for the presence of various mineralised bodies and is located~17km west of the AMG Mibra Spodumene producing Mine.

The licences are believed to contain the eastern extensions of the geological structures and intrusive rocks, responsible for the forming the mineralised pegmatites that are currently being mined at AMG's Mibra lithium-tantalum-niobium-tin mine. The district is characterised by numerous pegmatite bodies of varying mineralogical composition dominated by spodumene but including beryl, tantalite-columbite and monazite. **Several historically mapped pegmatite and tantalum occurrences have been mapped within the boundaries of the exploration licences⁹ and have not been previously tested/explored for lithium.**

⁶ <u>Mina da Cachoeira underground mine, https://www.cblitio.com.br/nossas-opera%C3%A7%C3%B5es, production rates</u> and grades are not compliant with JORC 2012 reporting guidelines.

⁷ <u>https://amglithium.com/solutions/resources</u>

⁸ Sigma Lithium, NI 43-101 TECHNICAL REPORT GROTA DO CIRILO LITHIUM PROJECT, 31 October 2022

⁹ Based on Geological Survey of Brazil, <u>https://geoportal.sgb.gov.br/geosgb/</u>





Figure 2: Location of Resende Lithium Project

Jequie Rare Earth Project (Bahia State)¹⁰

The project is located within the state of Bahia (Northeast Brazil). This renowned geological and government friendly jurisdiction has resulted in the establishment of several large-scale mining operations in the vicinity of the Jequie Rare Earth Project. The Jequie Rare Earth Project is expected to benefit from the associated complementary infrastructure of sealed roads and access to clean hydropower and a major deep-water port less than 200km distant.

The Jequie Rare Earth project comprises 45 mineral right claims covering a total aggregate land holding of **82,568 HA** or **~826km**² (Figure 3). The licences are located in the Jequié Block, a tectono-structural block of the northeastern Sao Francisco craton.

¹⁰ The Jequie Rare Earth Project has no current or historical mineral resources



The Jequié Block comprises granulite facies-metamorphosed intrusive rocks with demonstrated rare earth element ("REE") anomalism, with Ionic clay and hard rock REE occurrences in the district. The Jequie project which is targeting Rare Earths/ Niobium is located adjacent to Brazilian Rare Earth Limited (BRE.ASX), with their Inferred Mineral Resource Estimate of 510Mt at 1,513ppm Total Rare Earth Oxide¹¹. This has resulted in large scale pegging activity within the area. These results do not guarantee the same or similar levels of results at the Jequie Rare Earth Project.



Figure 3: Location of Jequie Rare Earth Project (Orange)

¹¹ Brazilian Rare Earth Prospectus of 13 November 2023,Pg 164. Rocha da Rocha Inferred mineral resource statement as of 23 May 2023 (reported in accordance with the JORC Code (2012)). These results do not guarantee the same or similar levels of results at the Jequie Rare Earth Project.



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For more information, please contact:

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Australian Mines Limited supports the vision of a world where the mining industry respects the human rights and aspirations of affected communities, provides safe, healthy, and supportive

workplaces, minimises harm to the environment, and leaves positive legacies.

COMPETENT PERSONS STATEMENT

"The information in this report is based on and fairly represents information and supporting documentation reviewed by Rodrigo Mello, who is a consultant to Australian Mines Ltd. Mr. Mello is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Mello consents to the inclusion in this report of the matters based on his information in the form and context in which they appear."