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ASX RELEASE

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REMOTE SENSING WORK IDENTIFIES AND CONFIRMS EXISTING JEQUIE REE/NIOBIUM TARGETS

Australian Mines Limited (ASX: AUZ) ("AUZ" or the "Company") is pleased to report to shareholders that preliminary exploration activities at the Jequie REE and Niobium project have been completed resulting in confirmation of multiple targets in 2 high priority areas, namely Jequie North and Jequie South.

Key Details

- AUZ has completed full geological field reconnaissance and remote sensing evaluation and targeting of its extensive tenement portfolio in the emerging Jequie Belt, Bahia, Brazil.
- Numerous hard rock boulder outcrops and surface saprolite clay systems have been identified on tenement ground.
- This work completed in the three months since entering the region has allowed AUZ to rapidly and efficiently focus exploration on what it considers to be the best 10% of its strategic tenement position in terms of REE prospectivity.
- The combined field program and remote sensing has successfully defined two high priority areas (Jequie North and Jequie South) with multiple targets for immediate field follow up.
- AUZ plans to follow up both areas with focused geochemical programmes (stream sediments and / or soil line sampling) as appropriate for the topography and regolith being evaluated.
- Discussions are in progress with local communities with strategic expansions likely.

AUZ's CEO, Andrew Nesbitt commented *"We have made great progress over a very short time with our disciplined and systematic approach to exploring our large tenement position in this rapidly emerging, world class REE district. With this approach we have been able to reduce and focus our search space into what we consider the most prospective tenements and now intend to test multiple priority targets within these areas defined by our Jequie North and South Projects."*

The Jequie North and South Project Areas and associated targets have been prioritised based on enhanced measured outcrop radioactivity associated with favourable host rock lithologies (leucogranites and charnockites). These rocks are coincident with elevated airborne Thorium anomalies. The radioactivity data is supported by both preliminary multi-element geochemical results which report high background REE results consistent with crustal abundances for REE associated with these favourable protolithologies and their coincidence with remote sensing targets which cluster over and near the same areas.

The Jequie North Project area is defined by a NW-SE trending sigmoid shaped Thorium anomaly extending some 7 km along strike and a width of 2km. Reconnaissance traverses over this area have identified radioactive leucogranites with high background REE levels consistent with crustal abundances for this rock type. This highlights the potential for these rocks to host primary REE mineralization or weathering to form secondary REE deposits. **AUZ intends to carry out approx. 24 km of soil traverses, with individual samples dug at 50m intervals along the traverses. A total of 480 samples are to be taken.**

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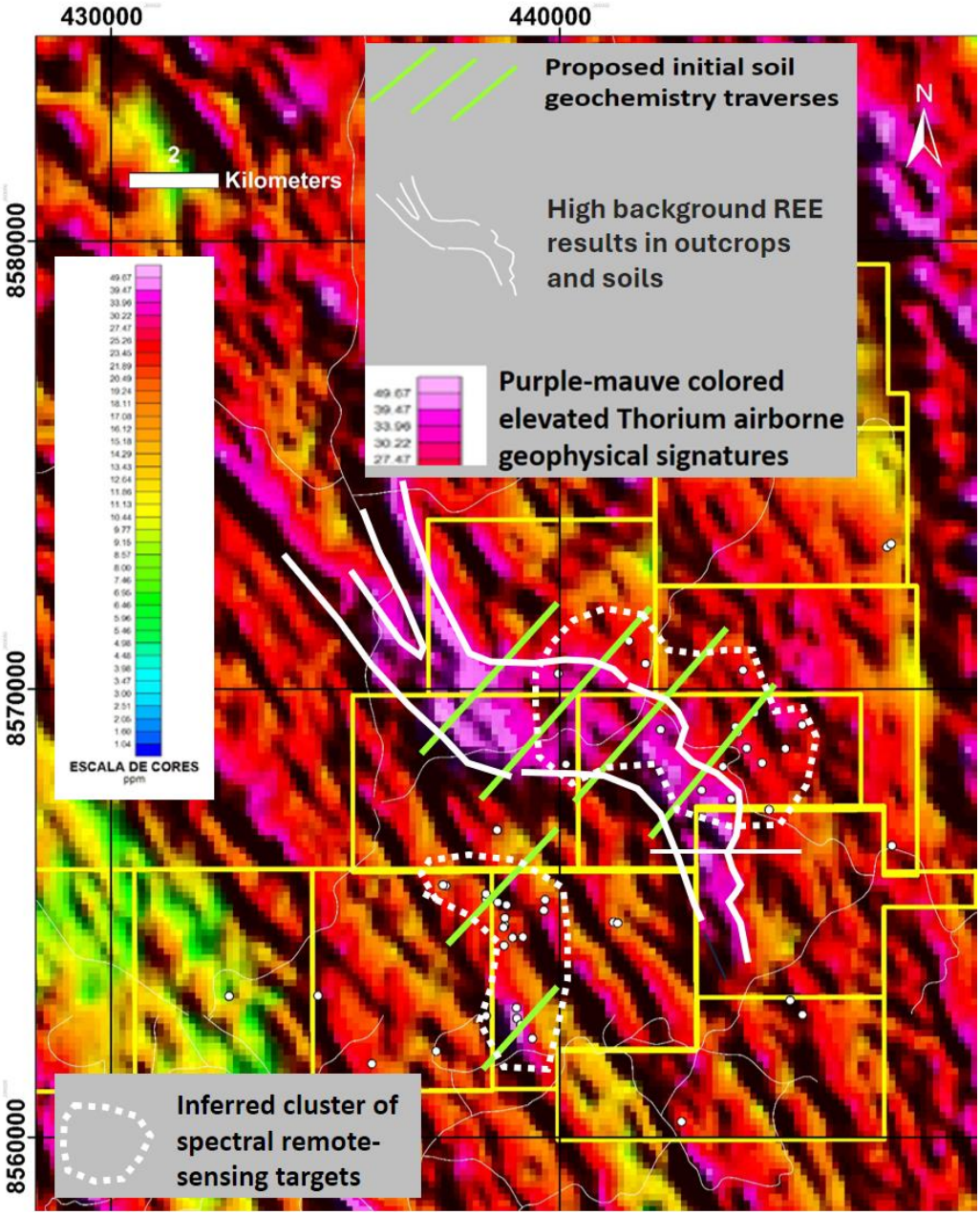

Figure 1: Jequie REE Niobium Project[1] (Northern Target) – Coincidental Remote Sensing Targets and high background Rare Earth Geochemical results, with planned soil traverse sampling lines.

The Jequie South Project area is defined by a N-S trending linear shaped Thorium anomaly extending some 25 km along strike and a width of 1.5 km. Reconnaissance traverses over this area have identified radioactive charnockite with high background REE levels consistent with

[1] Licenses granted to RTB Geologia E Mineracao LTDA and are to be transferred to AUZ as per ASX Announcement, 6 December 2024

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crustal abundances for this rock type. This again highlights the potential for these rocks to host primary REE mineralization or weathering to form secondary REE deposits. **AUZ intends to embark on a stream sediment program consisting of 35-40 stream sediments sample.**

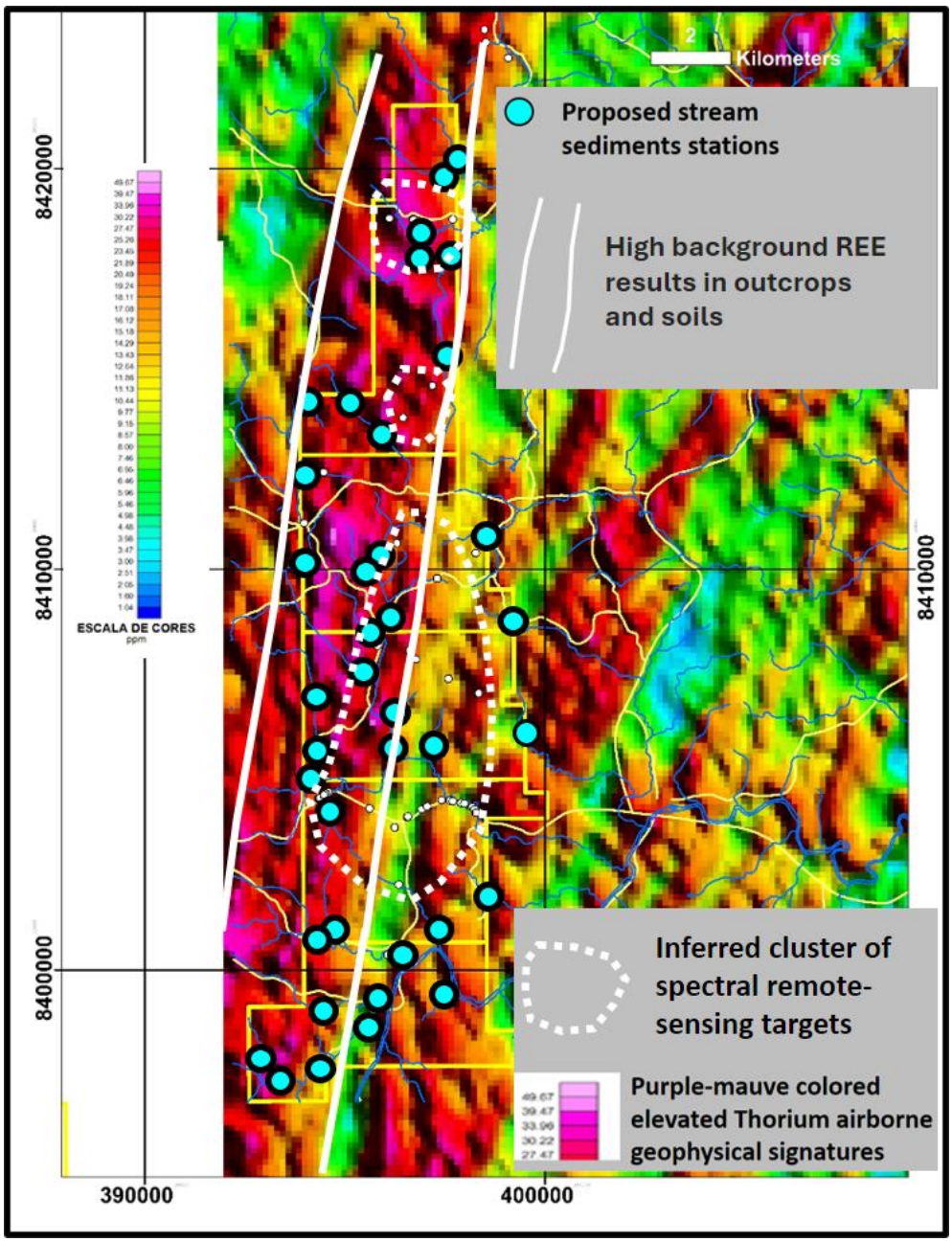

Figure 2: Jequie REE Niobium Project[2] (Southern Target) – Coincidental Remote Sensing Targets and high background Rare Earth Geochemical results, with planned stream sediment locations.

[2] Licenses granted to RTB Geologia E Mineracao LTDA and are to be transferred to AUZ as per ASX Announcement, 6 December 2024

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Remote Sensing

The main REE-bearing minerals in the Jequié Complex are bastnäsite and monazite, which are found, according to BRE.ASX[3], as magmatic cumulates in the highly prospective Volta do Rio Plutonic Suite (VRPS). Key constituents of the VRPS encompass granulite-facies, high-potassium (high-K) calc-alkaline, ferroan (A-type) granitoids and leucogranites. The REE-Nb-Sc-bearing later magmatic event related to the Volta do Rio Plutonic Suite (VRPS) is hosted within some geographic portions of the Archean-age Jequié Complex and apparently forms the prime exploration target zone for high grade REE-Nb-Sc mineralization in the region. The highly prospective REE-Nb-Sc-bearing leucogranites are inferred to be layered within the Jequié Complex scale VRPS massifs from the progressive separation of a fertile parent magma.

Outcrops of monazite and its presence in soils may be mapped at high spatial resolution (10 m) by spectral unmixing of visible near infrared (VNIR)and shortwave infrared (SWIR) satellite imagery.

Monazite often contains thorium and uranium which release helium through radioactive decay. Helium may also be mapped at high spatial resolution as may methane originating in clays (illite), a secondary or accessory mineral, potentially associated with the alteration or weathering of the primary REE-bearing minerals or the host rocks. Illite could also be present in the sedimentary or metamorphic rocks surrounding the alkaline complex.

The presence of many recent exploration drill holes in the Jequié may be used to characterize the spectral signatures of REE deposits. Through machine learning and artificial intelligence techniques, other areas with similar spectral signatures as known REE mineralization may be identified.

Granting of Licences[4]

At the Jequie Rare Earth project, a total of 43 of the 72 or (~751km2 of ~1,310km2) licences submitted for exploration status have now been granted, with the remaining areas expected to be approved imminently. (See Figure 3)

[3] BRE.ASX, ASX Announcement, 22/02/2024
[4] Licenses granted to RTB Geologia E Mineracao LTDA and are to be transferred to AUZ as per ASX Announcement, 6 December 2024

At the Resende Lithium Project, a total of 7 of the 8 or (~113km2 of ~133km2) licences submitted for exploration status have now been granted, with the remaining areas expected to be approved imminently. (See Figure 4)

Exploration licences, and most importantly the licences covering the Jequie North Target and South Target have been granted.

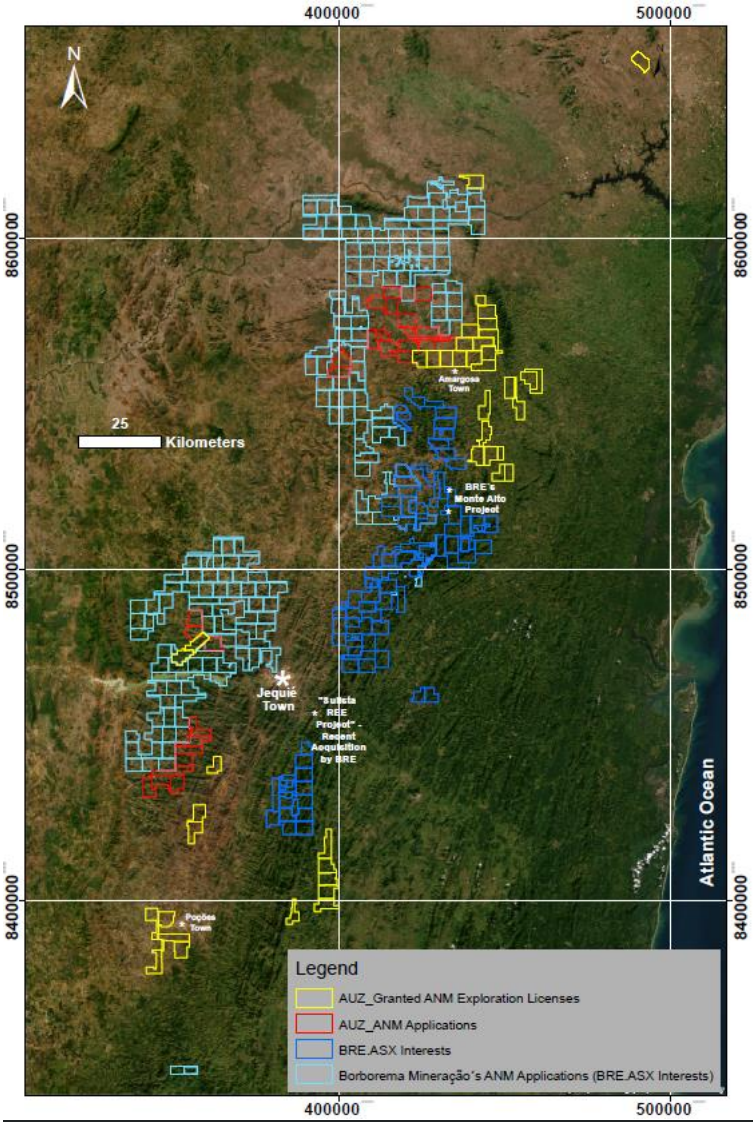

Figure 3: AUZ Exploration Licences Granted – Jequie REE Niobium Project[5]

[5] Licenses granted to RTB Geologia E Mineracao LTDA and are to be transferred to AUZ as per ASX Announcement, 6 December 2024

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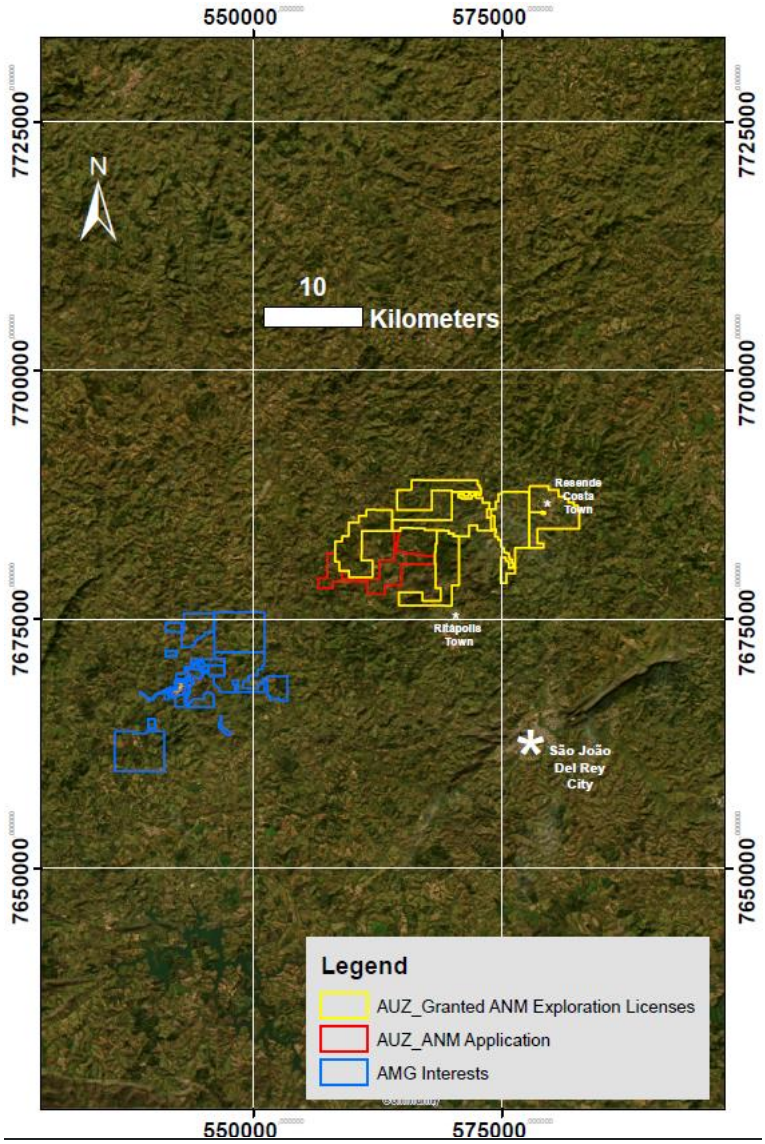

Figure 4: AUZ Exploration Licences Granted[6] – Resende Lithium Project

About Australian Mines in Brazil

Resende Lithium Project (Lithium Valley, Minas Gerais)[7]

[6] Licenses granted to RTB Geologia E Mineracao LTDA and are to be transferred to AUZ as per ASX Announcement, 6 December 2024

[7] The Resende Lithium Project has no current or historical minerals resources

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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 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% Li_2O spodumene concentrate[8], AMG Lithium GmbH's Mibra lithium-tantalum-niobium-tin mine, which is expected to produce 130,000t lithium concentrate per annum[9] and Sigma Lithium Corporation's (NASDAQ: SGML) Grota do Cirio operation, which is ramping up to 270,000t per annum of lithium concentrate[10] . 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 right claims with total aggregate land holding of **13,314 HA** or ~**133km²** (Figure 5). The Jequie Rare Earth Project is subject to acquisition terms as per ASX Announcement, 6 December 2023 and subject to transfer as per ASX Announcement 19 February 2024. 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 licences[11] and have not been previously tested/explored for lithium.**

[8] Mina da Cachoeira underground mine, https://www.cblitio.com.br/nossas-opera%C3%A7%C3%B5es, production rates and grades are not compliant with JORC 2012 reporting guidelines.
[9] https://amglithium.com/solutions/resources
[10] Sigma Lithium, NI 43-101 TECHNICAL REPORT GROTA DO CIRILO LITHIUM PROJECT, 31 October 2022, https://sigmalithiumresources.com/wp-content/uploads/2023/05/2023-01-SGML-Updated-Technical-Report-1.pdf
[11] Based on Geological Survey of Brazil, https://geoportal.sgb.gov.br/geosgb/

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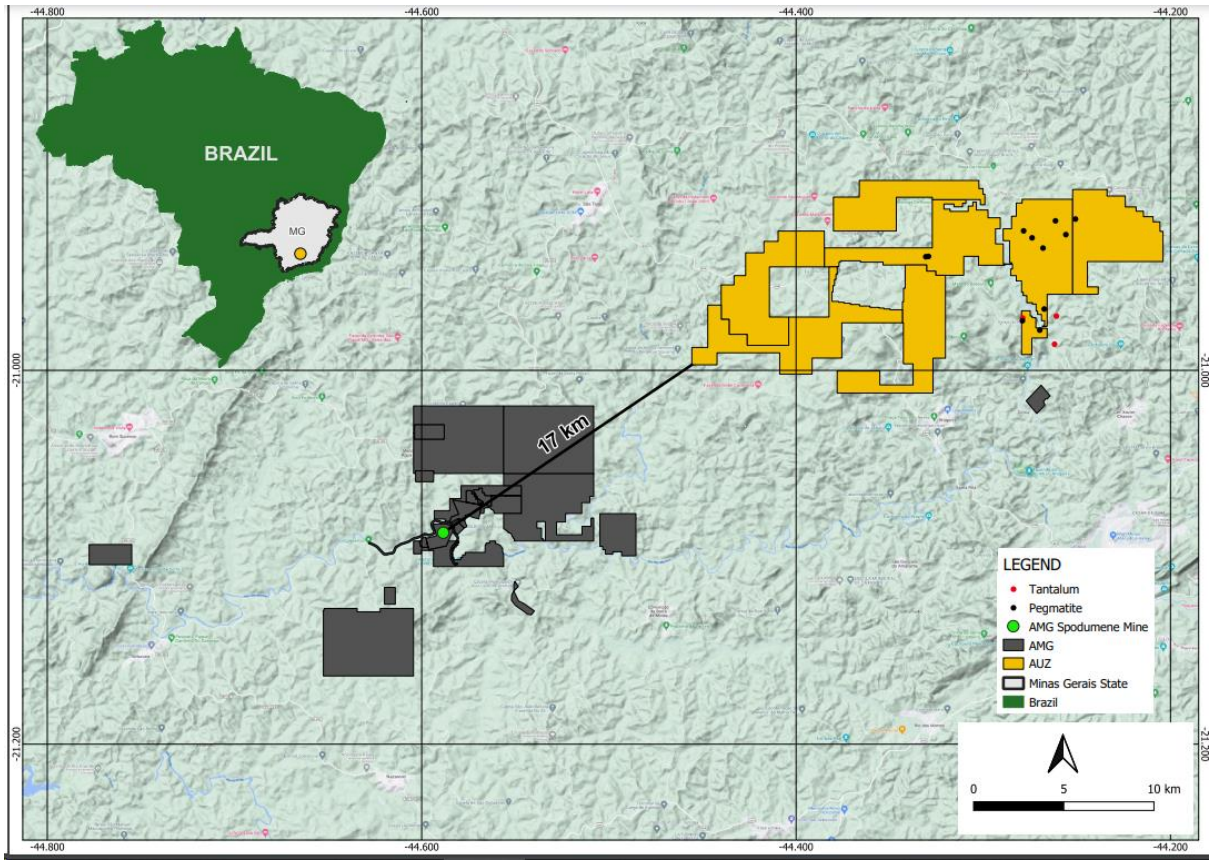

Figure 5: Location of Resende Lithium Project

Jequie Rare Earth Project (Bahia State)[12]

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 72 mineral right claims covering a total aggregate land holding of approx. **131,000 HA** or **~1,310km²** (Figure 6). The licences are located in the Jequié Block, a tectono-structural block of the northeastern Sao Francisco craton. The Jequié Block comprises granulite facies-metamorphosed intrusive rocks with

[12] The Jequie Rare Earth Project has no current or historical mineral resources

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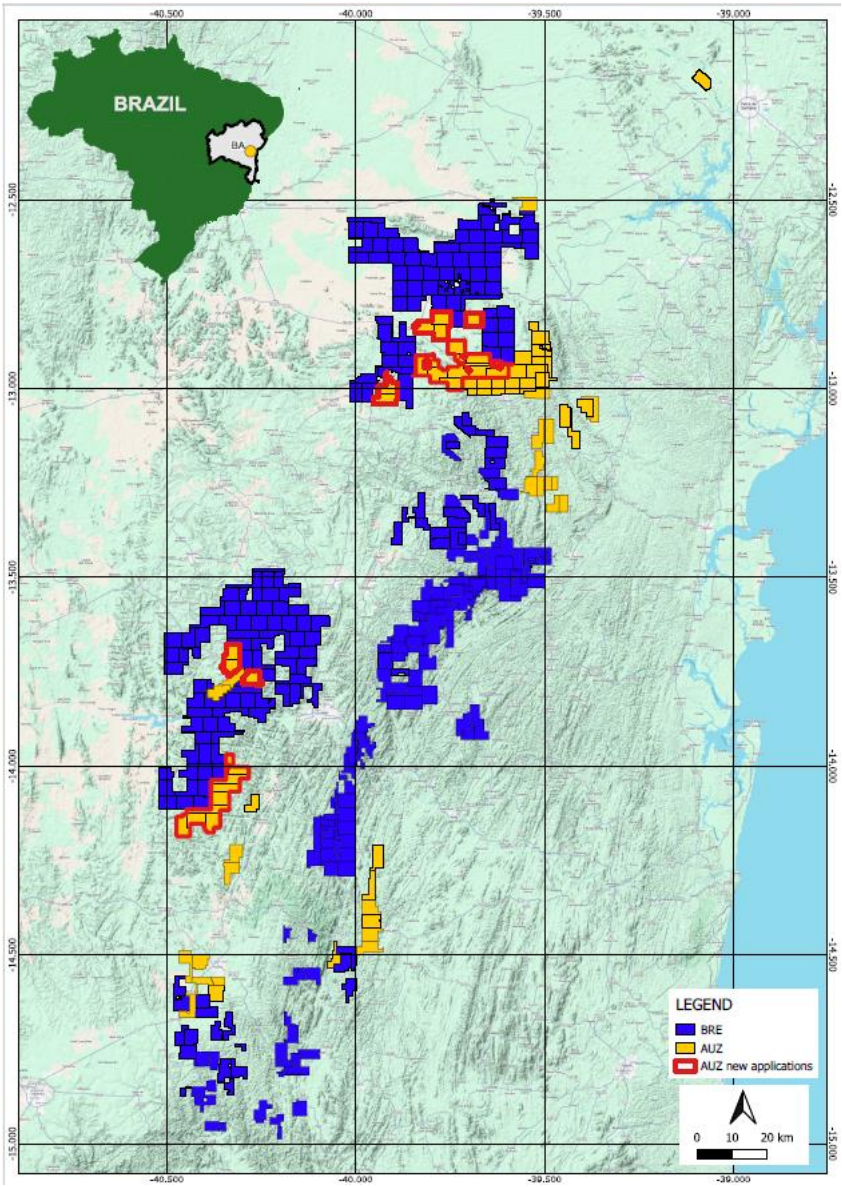
demonstrated rare earth element ("REE") anomalism, with Ionic clay and hard rock REE occurrences in the district. The Jequie project which is targeting Rare Earths/ Niobium is located adjacent to Brazilian Rare Earth Limited (BRE.ASX), with their Inferred Mineral Resource Estimate of 510Mt at 1,513ppm Total Rare Earth Oxide[13]. 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.



[13] 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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Figure 6: Location of Jequie Rare Earth Project (Orange)

ENDS

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Authorised for release by the Board of Directors of Australian Mines Limited

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."

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Appendix 1 – JORC Code, 2012 Edition – Table 1

The purpose of Table 1 below is to comply with Question 36 of the ASX "Mining Reporting Rules for Mining Entities: Frequently Asked Questions".

Section 1: Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• No assay results are reported. However, the company carried out rock-chip sampling and soil sampling, which were analysed using a handheld XRF. Also, a radioactivity detector was used to investigate the possible association of radioactivity and REE mineralization. Samples, with above background results will be sent to a commercial laboratory for analysis. • Airborne geophysics used was obtained from public sources from the state and federal government. The Brazilian Geological Survey in association with the Geological Survey of Bahia (CPRM/CBPM) executed the survey for the areas at the Jequié project.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Not applicable as no drilling is reported nor has known drilling taken place on the project
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have	• Not applicable as no drilling is reported nor has known drilling taken place on the project

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	occurred due to preferential loss/gain of fine/coarse material.	
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	• Not applicable as no drilling is reported nor has known drilling taken place on the project Not applicable as no drilling was performed at the project
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Not applicable as no assay results are reported. When the assay results are reported the sampling techniques and sample preparation methodology will be described
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Not applicable as no assay results are reported. When the assay results are reported the Quality of the assay data and laboratory tests will be described, if applicable • For the radiation detection, a GC-01 by FNIRSI was used. It was used only as a support in the search for prospective rocks.

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Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Not applicable, as no drilling or known drilling nor assay results are reported.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• Not applicable, as no drilling or known drilling nor assay results are reported. A handheld GPS was used for sample location
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Not applicable as no mineral resource estimation is reported
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Not applicable as only rock-chip and soil sampling for exploratory purposes was performed
Sample security	• The measures taken to ensure sample security.	• The samples were securely bagged and remained in the possession of the exploration geologist
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No previous reviews following the JORC code are known to this CP

Section 2 Reporting of Exploration Results

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(Criteria listed in the preceding section also apply to this section.)

Criteria	*Explanation*	*Commentary*
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The details concerning the mineral tenement are described in the ASX announcement by Australian Mines Ltd of December 6th, 2023 ASX Announcement 6 December 2023 • The surface area belongs to third parties (usually, small farmers) and have no interference with any known protected area • A small portion of licence 872455/2023 (<5%) has interference with two protected areas which allows mining under a more restrictive regime.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Nothing to report, the company is not aware of any previous reported exploration
Geology	• Deposit type, geological setting and style of mineralisation.	• Refer to the information presented in the text above and in this announcement.

Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
	  • easting and northing of the drill hole collar
	  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
	  • dip and azimuth of the hole
	  • down hole length and interception depth
	  • hole length.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.
		• Not applicable as no drilling was reported, nor has any known drilling taken place on the project in the past

Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade	• Not applicable as no assay results are reported nor available at this stage.

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	truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Not applicable as no assay results are reported nor available at this stage.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• *Not applicable as no assay results are reported nor available at this stage.*
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• *Not applicable as no drilling nor assay results are reported nor available at this stage.*
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• All relevant information regarding geophysical and geological interpretation is presented in this announcement.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• A stream sediment geochemical program, associated with soil sampling lines over

	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	mapped prospective units, is planned for the next phase of work.

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