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Australian Securities Exchange
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ASX RELEASE

Discovery of Tin, Tantalum and Lithium Anomalies at Resende

Australian Mines Limited ("**Australian Mines**" or "**the Company**") is pleased to report the discovery of Tin ("Sn"), Tantalum ("Ta") and Lithium ("Li") anomalies at our Resende Lithium Project licences[1] located in Minas Gerais, Brazil.

Highlights

- The highest assay results returned Sn, Ta and Li of 1180, 56, 38 ppm and 769, 65, 51 ppm respectively compares favourably to regional results which returned less than the lower detection limits of 5, 10, 10 ppm respectively, using the ICP analysis method. (See Figure 1 and Table 1)
- Completed a targeted stream sediment sampling programme across the Resende Lithium Project licences representing an area of approximately 25km x 10km.
- Seven drainage basins with anomalous Sn, Ta and Li have been defined. These metals are strongly associated and consistent with the targeted pegmatite – greisen related mineralization systems being exploited along strike and to the Southwest at AMG's Mibra Mine[2], which produces Sn, Ta, Li and feldspar concentrates. (See Figure 2)
- These drainage basins are north of the historical Paiol Mine which recovered tin, tantalum and coarse gold from extensive historical eluvial workings[3].

[1] Resende Project licenses granted to RTB Geologia E Mineracao LTDA and are in the process of transfer to AUZ as per ASX Announcement, 19 February 2024.
[2] https://amglithium.com/solutions/resources
[3] Rolff, P.A.M.A., 1951. "Cassiterita aluvionar do Paiol no município de São João d' el Rey -- Minas Gerais", in Revista da Escola de Minas, Ano XVI, Maio de 1951, page 35-47

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- The 7 anomalous drainage basins defined by the sampling cover an area of approx. 16km^2, five are contiguous representing a catchment area of some 9km^2.
- The anomalous drainage basins are located in what appears to be a structurally favourable regional SW-NE structure extending from AMG's Mibra Mine and intersecting N-S structures coincident with the contact between coarse and medium facies of the Ritapolis Granite.
- AUZ intends to embark on a comprehensive grid soil sampling program to identify potential future drilling targets.

AUZ's CEO, Andrew Nesbitt commented *"We are pleased with this stream sediment program as it has highlighted priority areas within a very large tenement package. For instance, the highest tin assay is significantly greater than the regional results in an area known for tin, tantalum and lithium. Even though the lithium assays can be considered low, this is expected to be due to lithium's high leachability characteristics."*

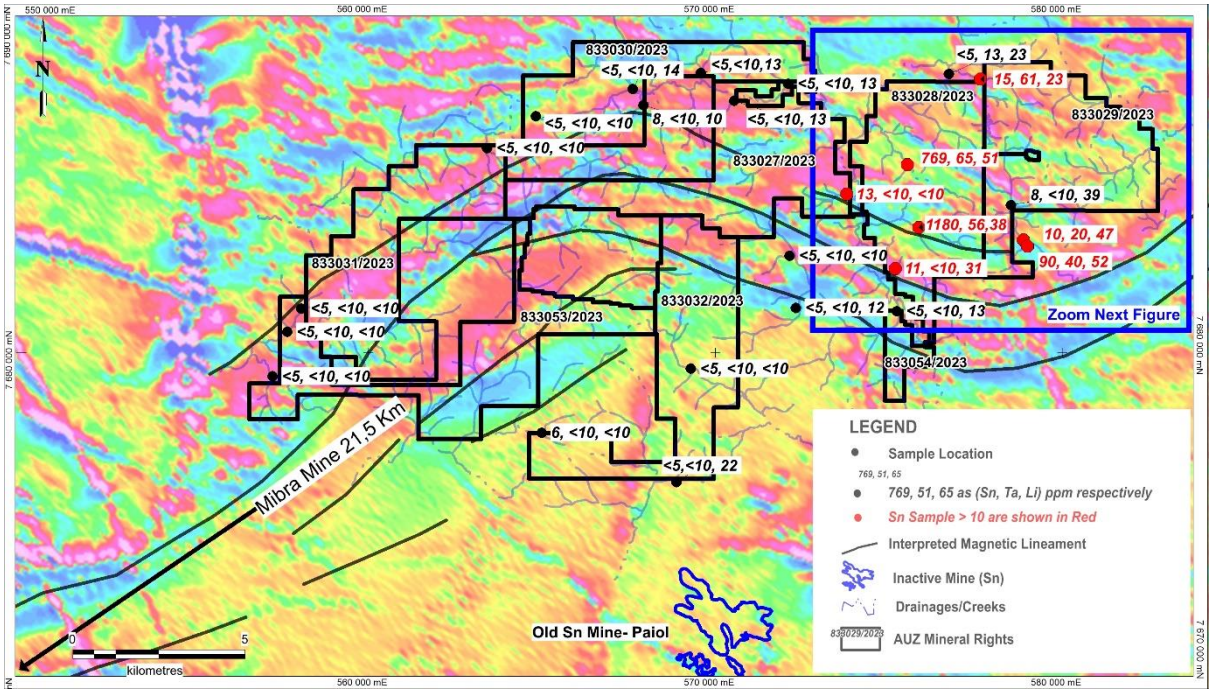

Figure 1: Location of regional assay results at the Resende Lithium Project[4]

[4] Figure 1 shows where appropriate half assay detection limits of <2.5, <5, <5 ppm for Sn, Ta and Li respectively.

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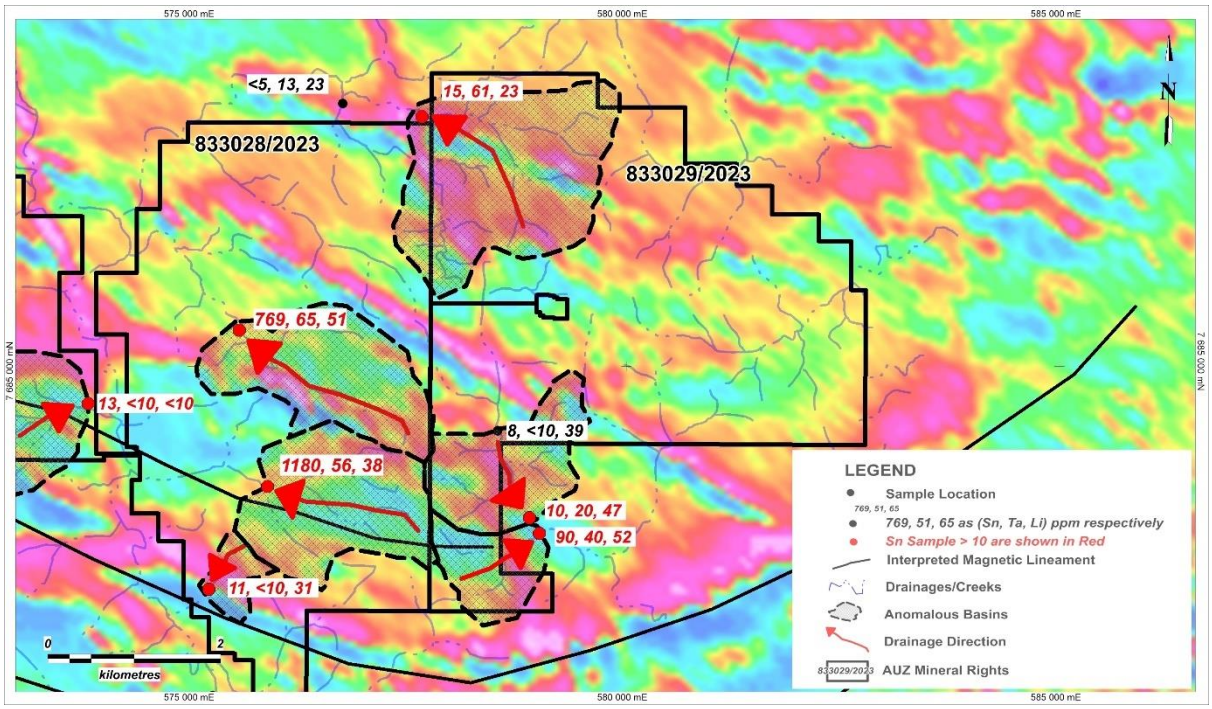

Figure 2: Defined basins prospective for tin, tantalum, and lithium[5]

[5] Figure 2 shows where appropriate half assay detection limits of <2.5, <5, <5 ppm for Sn, Ta and Li respectively.

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Sample No.	X	Y	Z	Sn ppm	Ta_ppm	Li_ppm
SS04	578,560	7,684,298	976	8	<10	39
SS05	578927	7,683,297	989	10	20	47
SS05A	579,045	7,683,115	1,018	90	40	52
SS06	577,690	7,687,923	1,086	15	61	23
SS07	576,776	7,688,072	957	<5	13	23
SS10	575,581	7,685,459	970	769	65	51
SS11	575,908	7,683,656	942	1180	56	38
SS12	575,229	7,682,471	957	11	<10	31
SS13	575,273	7,681,244	933	<5	<10	13
SS15	573,850	7,684,645	969	13	<10	<10
SS16	572,137	7,687,794	945	<5	<10	13
SS17	569,623	7,688,107	977	<5	<10	13
SS18	570,581	7,687,300	962	<5	<10	13
SS19	567,660	7,687,645	977	<5	<10	14
SS20	567,973	7,687,176	984	8	<10	10
SS21	564,877	7,686,863	1,059	<5	<10	<10
SS26	572,181	7,682,839	971	<5	<10	<10
SS27	572,361	7,681,339	971	<5	<10	12
SS28	569,337	7,679,588	966	<5	<10	<10
SS29	568,923	7,676,317	943	<5	<10	22
SS31	565,046	7,677,738	1,083	6	<10	<10
SS35	558,114	7,681,314	966	<5	<10	<10
SS36	557,285	7,679,366	954	<5	<10	<10
SS37	557,709	7,680,642	949	<5	<10	<10
SS39	563,462	7,685,938	1,044	<5	<10	<10

Table 1: Stream sediment samples, locations and assay results[6]

[6] Table 1 shows where appropriate half assay detection limits of <2.5, <5, <5 ppm for Sn, Ta and Li respectively.

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About Australian Mines in Brazil

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

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's Mibra Mine targeting lithium-tantalum-tin and is expecting 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 3). The Resende Lithium project is 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's Mibra Mine.

The licences are believed to contain the eastern extensions of the geological structures and intrusive rocks, responsible for forming the mineralised pegmatites that are currently being mined at AMG's Mibra Mine to produce lithium, tantalum and tin concentrates. 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.**

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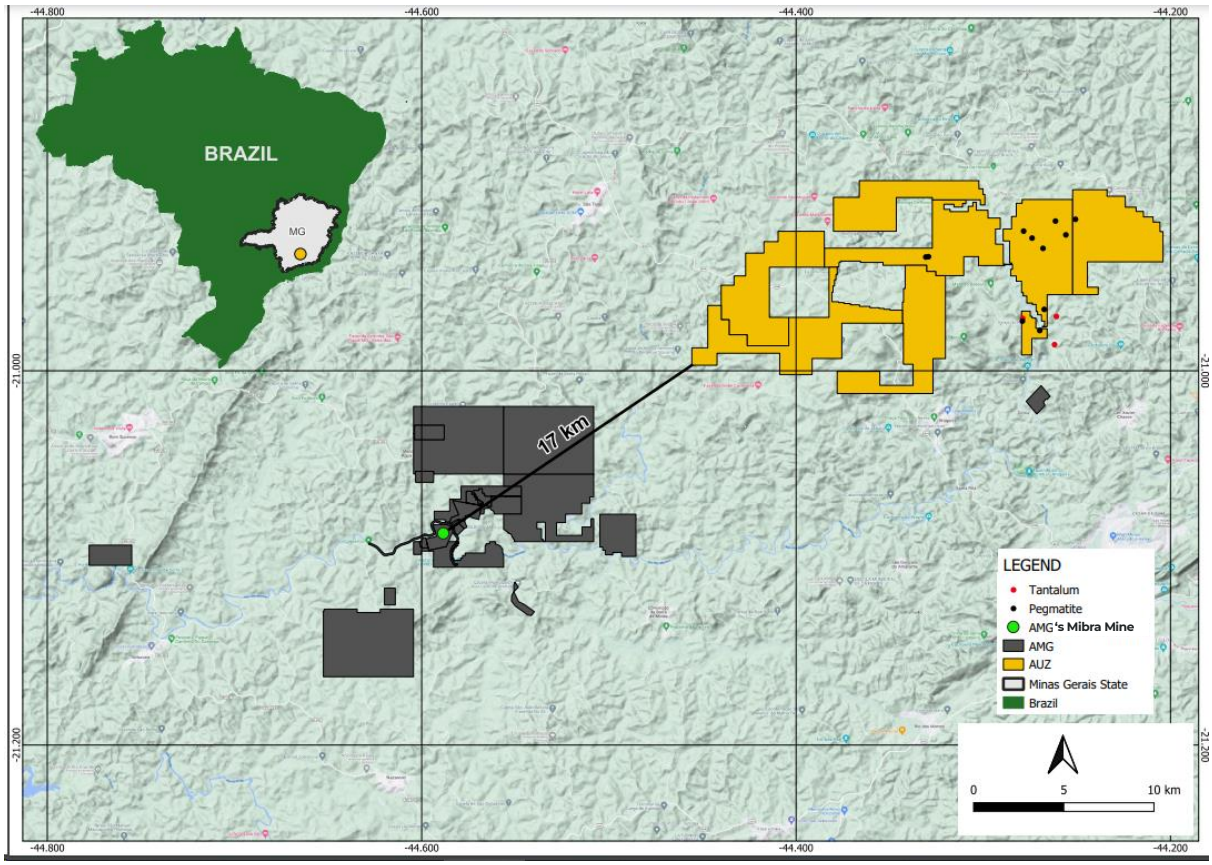

Figure 3: Location of Resende Lithium Project[12]

Jequie Rare Earth Project (Bahia State)[13]

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 4). The Jequie Rare

[12] Resende licenses granted to RTB Geologia E Mineracao LTDA and are in the process of transfer to AUZ as per ASX Announcement, 19 February 2024

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

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Earth project is subject to transfer as per ASX Announcement 19 February 2024. 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 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[14]. 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.

[14] 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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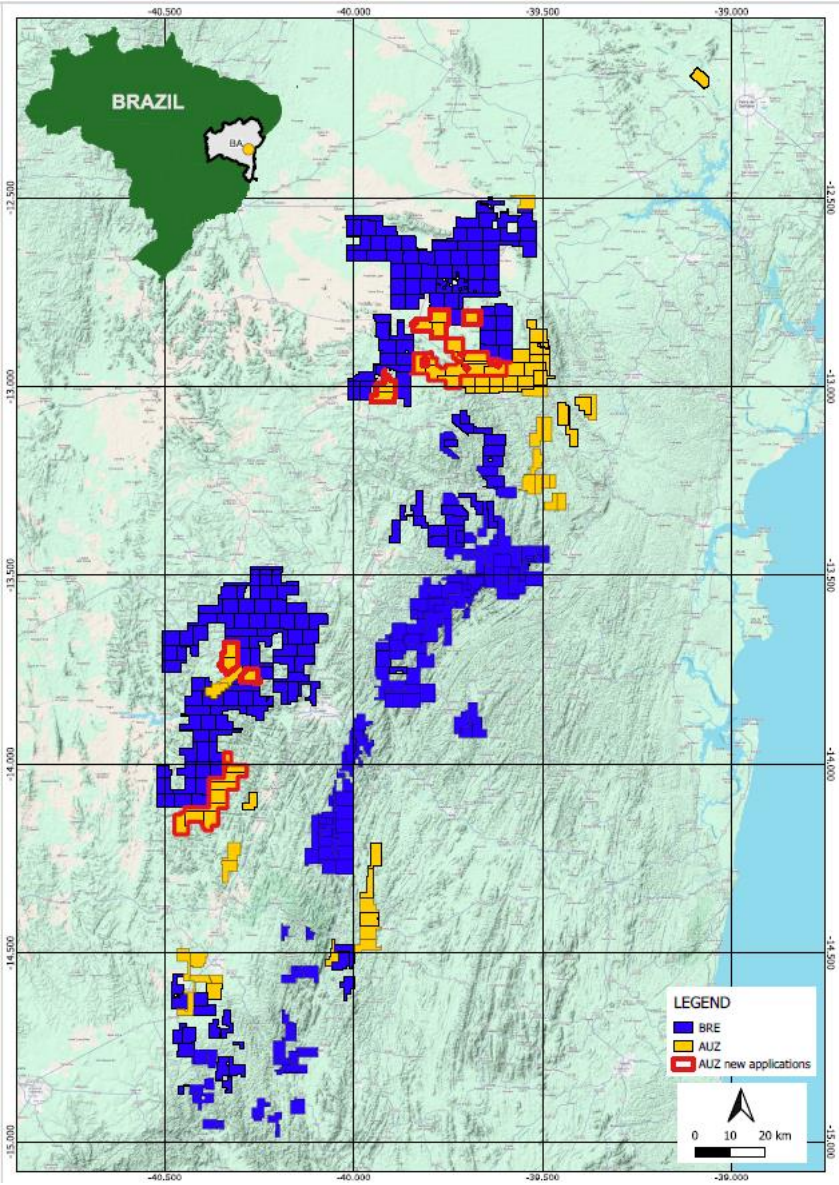

Figure 4: Location of Jequie Rare Earth Project[15] (Orange)

ENDS

[15] Jequie Rare Earth Project licenses granted to RTB Geologia E Mineracao LTDA and are in the process of transfer to AUZ as per ASX Announcement, 19 February 2024

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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 Jonathan Victor Hill, who is an advisor to Australian Mines Ltd. Mr. Hill 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. Hill 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.*	• In this press release results from a reconnaissance stream sediment sampling programme over the Resende Costa project area are reported. The stream sediment sampling procedures used are described below. • Sample collection was undertaken by a trained field technician overseen by a geologist, Sampling involved collecting approximately 3kg of -2mm sized sediment from the active stream bed. Where possible, the sampling medium consisted of clays with a significant fine sand/silt component or clay rich/silty sands. Any surficial layer of decomposing organic material was removed before sample collection. To obtain sufficient sample weight, it was often necessary to collect material from several points along a 10 to 50m length of the drainage. • The samples were collected using plastic shovels with the collected material being screened in the field to -2mm using screens constructed from nylon and PVC. This sampled material was homogenised manually in a plastic bucket, and excess water and fine organics were decanted before the final sample being transferred to the sample bag. After allowing the sample several minutes to settle, the excess water and fine organics were again decanted. All samples were labelled in the field, both with internal ID cards within plastic bags and using marker pens on the outside of the sample bags. The

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		sample bags are heavy duty clear plastic and were sealed using plastic ties. • The sample for analysis is sent to the laboratory and its GPS location and sampling conditions recorded,
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 occurred due to preferential loss/gain of fine/coarse material.*	• Not applicable as no drilling is reported nor has known drilling taken place on the project
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*	• At the laboratory the sample is dried, sieved and the fraction less than 80 mesh is split using a jones riffle splitter analysed by ICP Muti-Element Method.

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	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.*	
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.*	• The samples in this release were analysed by SGS Laboratory, Belo Horizonte, Brasil • METHOD ICM90A: determination by fusion with sodium peroxide – ICP OES/ICP MS. • This is considered a total analysis for the 55 elements determined by this ICP method.
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.

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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 stream sediment 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

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Section 2 Reporting of Exploration Results

(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
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

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Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade 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.*	• Not applicable to results reported in this release.
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 drilling has been undertaken on the project to date.
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.*	• All relevant information is presented in the release.
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. • All sample analytical results presented in the report.
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*	• All relevant information regarding geophysical and geological interpretation is presented in this announcement.

	method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further follow-up geochemical sampling (including soil, stream and rock chip sampling) and geological mapping is planned for the next phase of work.

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