ASX Announcement
17 March 2025

Expanded Exploration Program at High Grade Itinga Tin Project

HIGHLIGHTS

- **Expanded Tin Exploration Program:** Planning has commenced to undertake an extensive follow-up exploration program at the Itinga Project, in Brazil, focusing on previously identified high-grade tin mineralisation.
- **Recent Exceptional Tin Results:** Recent reconnaissance sampling in February 2025 returned outstanding tin grades exceeding 20% Sn, confirming significant mineralisation potential[1].
    - **PIZ092: >20%[2] Sn** *(Cassiterite)*
    - **PIZ093: >20%[2] Sn** *(Cassiterite)*
    - **PIZ094: >20%[2] Sn** *(Cassiterite)*

  These results complimented and built upon results from the July 2024 exploration program at Itinga which returned peak assay results of up to 7.3% Sn[3]:
    - **PECBT012: 7.3% Sn** *(Cassiterite)*
    - **PECBT054: >1%[2] Sn** *(Cassiterite)*
- **Favourable Market Conditions:** Global tin prices are rising strongly amid expected supply shortages and recent disruptions, which are estimated to have removed approximately 4% of global tin supply[12]. Tin has been one of the world's best performing metals in recent months, advancing 30% to almost US$36,000 per tonne since the beginning of December 2024,[4] with MIT researchers having ranked tin as the most critical tech metal on earth[5].
- **Potential for Significant Expansions of Known Mineralisation:** Itinga's large, underexplored pegmatite corridors offer significant upside, with modern exploration techniques showing potential to unlock further value.
- **Planned Exploration Activities at Itinga:** The planned program at Itinga will include additional review of known artisanal workings, soil and rock sampling, geological mapping and trenching over key areas of known mineralised pegmatites to delineate priority targets for a maiden drilling program.

Perpetual Resources Ltd ("Perpetual" or "the Company") (ASX: PEC) is pleased to announce the commencement of planning for an expanded exploration program at its Itinga Project, located in the highly prospective Jequitinhonha Valley region of Minas Gerais, Brazil. The program will focus on further delineating the recently identified high-grade tin

[1] Please refer to ASX announcement dated 17th February 2025
[2] Test returned a result for Sn above the detection limit
[3] Please refer to ASX announcement dated 22nd July 2024
[4] LME.com - https://www.lme.com/en/metals/non-ferrous/lme-tin#Price+graphs
[5] https://www.riotinto.com/-/media/Content/Documents/Invest/Presentations/2018/RT-Lithium-Battery-Metals-Conference-2018-slides.pdf?rev=04bf1cc6a2044a20b9aa9266ec636a14

Perpetual Resources Ltd
T: 08 6256 5390
E: info@perpetualresources.co
W: perpetualresources.co
ACN: 154 516 533
Principal & Registered Office:
Suite 2, 68 Hay Street, Subiaco, Western Australia 6008

mineralisation, which included multiple reconnaissance samples of >20% Sn (Cassiterite) that confirmed the potential of the Itinga Project which sits within a known historical tin production area.

Building on Outstanding Exploration Success

Recent reconnaissance sampling at Itinga returned exceptional tin grades, with multiple rock chip and coarse cassiterite samples assaying above 20% Sn[1], confirming the presence of high-grade cassiterite within mineralised pegmatite structures.

Perpetual is now expanding its exploration efforts, aiming to better define the extent and continuity of the high-grade tin mineralisation and better assess the potential for future resource delineation.

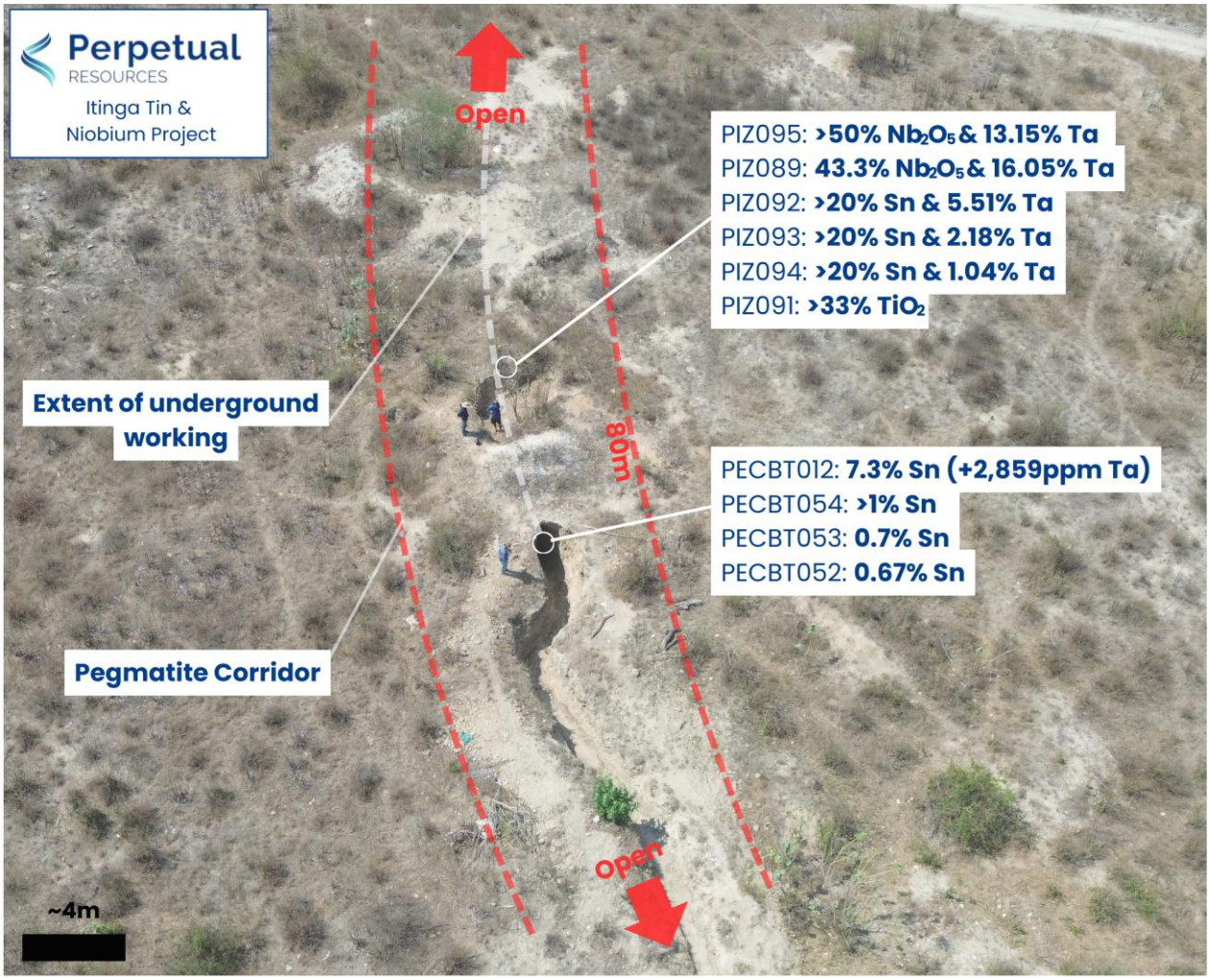

Figure 1: Artisanal mine (Garimpo) located within Itinga license 831542/2004. New results that have exceeded detection limit in testing have been sent for resampling[6].

[6] *See PEC Announcement 22nd July 2024 for previous results.*

Figure 2: Image A: Coarse Cassiterite. Image B Rock chip with associated Tin assay result at 831542/2004.[7]

(Refer Appendix A for rock type descriptions).

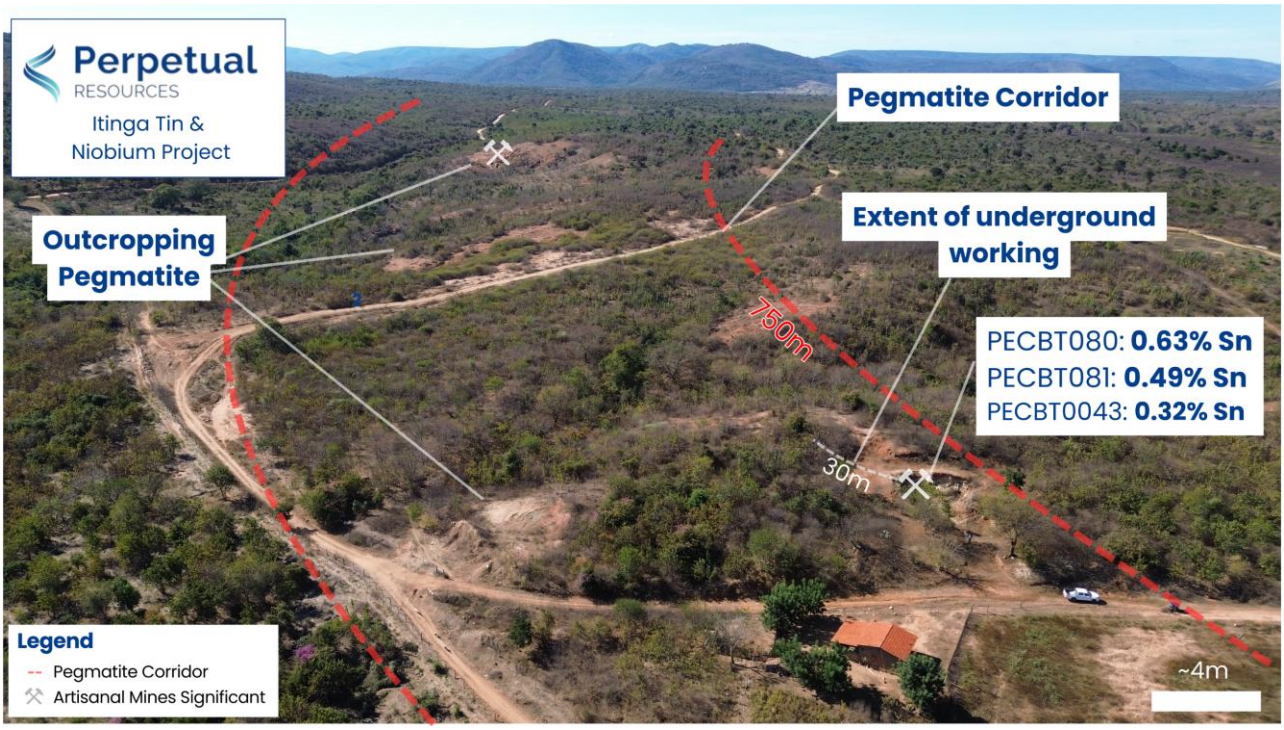

Figure 3: Interpreted pegmatite corridor at 'Pink Quartz Garimpo' on Itinga license 831542/2004.[8]

[7] *See PEC Announcement 22nd July 2024 for previous results.*

[8] *See PEC Announcement 22nd July 2024 for previous results.*

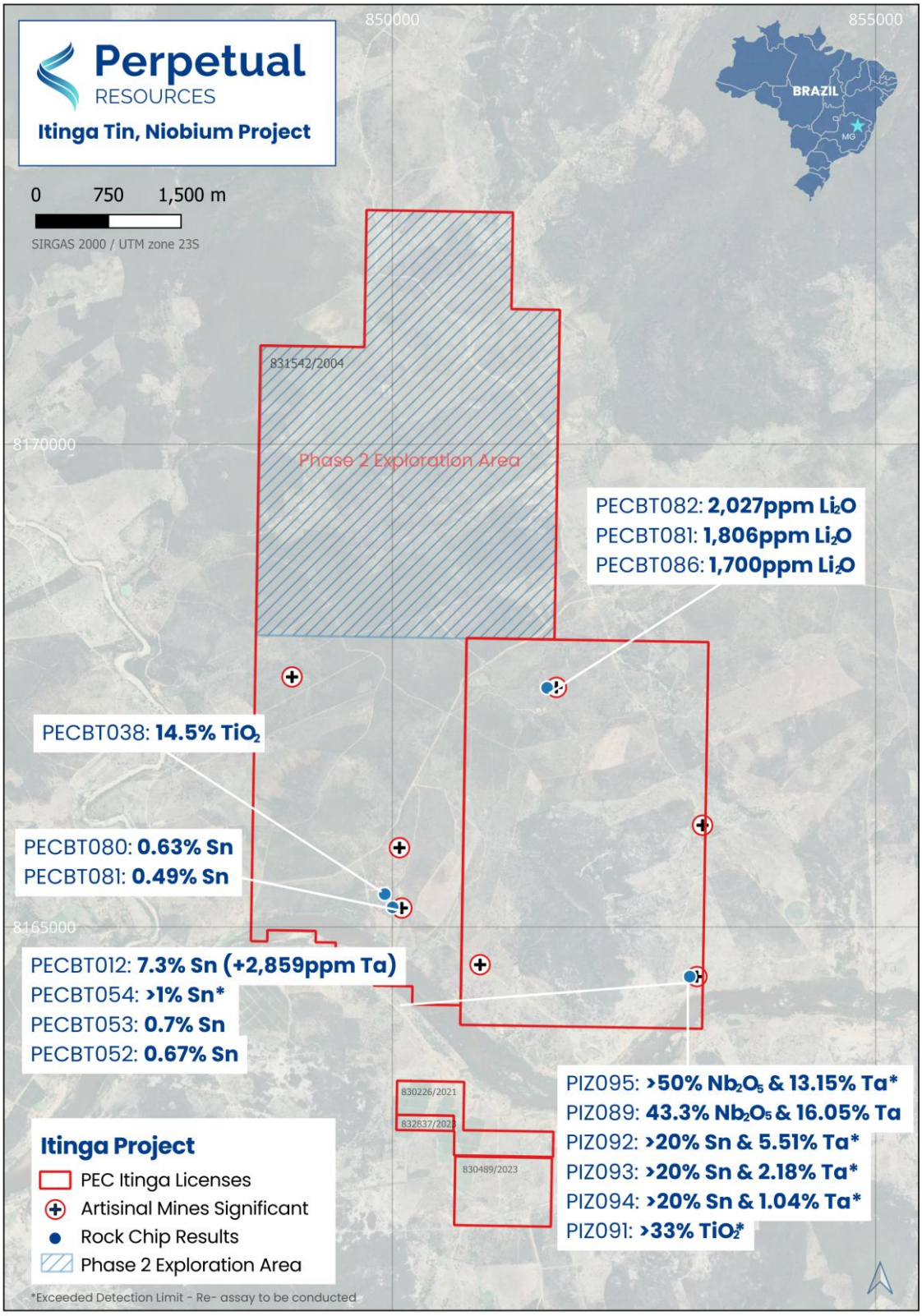

Figure 4: Itinga Project area (license 831542/2004) showing location of high-grade niobium, tin and tantalum mineralisation. [9]

[9] *See PEC Announcement 22nd July 2024 for previous results.*

** Conversion factors applied to elemental values.*

Tin Market Opportunity

During the 1980s, Brazil was a significant global tin producer and explorer (22% of world production in 1989[10]), but the industry declined with falling tin prices. Renewed interest in tin as a critical mineral has recently emerged, driven by its importance in new technologies. A 2018 study commissioned by Rio Tinto and conducted by MIT indicated that tin is the most likely critical mineral to be impacted by technological advancements. MIT researchers have ranked tin as the most critical tech metal on Earth[11].

This acceptance of tin as a growth commodity has led to a 30% increase in the tin price since the December 2024, with an expectation of potential additional price increases due to increased demand. The recent cessation of operations at the Alphamin Resources-owned Bisie tin mine in the Democratic Republic of the Congo (estimated at 4% of global supply) has created supply disruptions within the global tin industry[12], and has further exacerbated the tightening market conditions, enhancing the strategic value of Perpetual's tin-rich assets at Itinga.

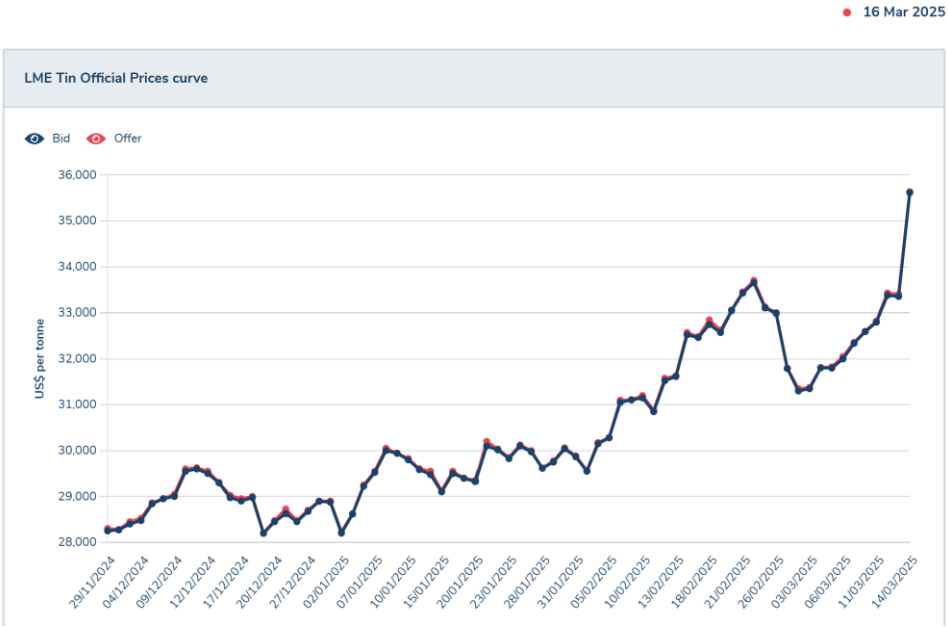

Figure 5: Tin price chart (source: LME.com)

Tin's extensive use in solders makes it essential to the technology revolution, and its applications are expanding, particularly in emerging lithium-ion batteries. This presents a significant opportunity to develop Brazil's tin resources, particularly given its economic coexistence with lithium-bearing pegmatites and the ongoing exploration focus in Brazil's Lithium Valley region.

---

[10] *Larsson, R., & Söderholm, P. (1996). International tin agreements & the rise of Brazilian tin mining industry. Minerals & Energy - Raw Materials Report, 12(2), 12–16. https://doi.org/10.1080/14041049609409433*

[11] *https://www.riotinto.com/-/media/Content/Documents/Invest/Presentations/2018/RT-Lithium-Battery-Metals-Conference-2018-slides.pdf?rev=04bf1cc6a2044a20b9aa9266ec636a14*

[12] https://www.mining.com/web/tin-price-jumps-after-alphamin-temporarily-ceases-operations-at-bisie-mine-in-congo/

Exploration Strategy and Next Steps

Perpetual's expanded exploration program at Itinga will be finalised in coming weeks, but is planned to include:

- **Artisanal Workings Review** – Initial research focused on lithium lenses has now expanded to include known occurrences of cassiterite and niobium. A review of over 20 artisanal workings is underway, with high potential identified.
- **Detailed Sampling (Soil & Rock)** – Systematic geochemical analysis along and near known cassiterite-hosting pegmatites to refine targets and assess the extent of potential mineralisation.
- **Mapping** – Enhanced structural interpretation of cassiterite-bearing pegmatites to refine exploration targeting.
- **Trenching Program** – Targeted trenching designed to crosscut broad pegmatite zones adjacent to confirmed cassiterite and niobium occurrences, further assessing high-grade tin mineralisation potential.

This next phase of exploration will help assess advanced exploration potential of the Itinga Project and guide further development activities. The Company remains committed to advancing the project through a structured and results-driven approach, leveraging its strong position in this tier-1 mining jurisdiction.

Commenting on the Program, Perpetual's Executive Director, Robert Benussi, said:

> *"With tin prices remaining strong and recent results confirming high-grade mineralization at Itinga, we believe now is the ideal time to expand our exploration efforts. The Itinga Project represents an exciting, underexplored opportunity, and we are eager to unlock its full potential through targeted exploration activities."*

The expanded exploration program is expected to delineated in coming weeks, with results to be progressively reported as they become available in coming months.

This announcement has been approved for release by the Board of Perpetual.

- ENDS -

KEY CONTACT
Julian Babarczy
Executive Chairman
E info@perpetualresources.co

About Perpetual Resources Limited

Perpetual Resources Limited (Perpetual) is an ASX listed company pursuing exploration and development of critical minerals essential to the fulfillment of global new energy requirements.

Perpetual is active in exploring for lithium and other critical minerals in the Minas Gerais region of Brazil, where it has secured approximately 12,000 hectares of highly prospective lithium exploration permits, within the pre-eminent lithium (spodumene) bearing region that has become known as Brazil's "Lithium Valley".

Perpetual also operates the Beharra Silica Sand development project, which is located 300km north of Perth and is 96km south of the port town of Geraldton in Western Australia.

Perpetual continues to review complementary acquisition opportunities to augment its growing portfolio of exploration and development projects consistent with its critical minerals focus.

COMPLIANCE STATEMENTS

Forward-looking statements

This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

Cautionary Statement on Visual Estimates

This announcement references visual observations and estimates of mineralisation. The Company emphasises the inherent uncertainty associated with reporting visual results. Visual estimates of mineral content should not be considered a substitute for laboratory analyses, which are essential for determining concentrations or grades of economic significance. Additionally, visual estimates do not account for potential impurities or deleterious physical properties that could impact valuation. The mere presence of pegmatite rock does not confirm the existence of lithium, caesium, or tantalum (LCT) mineralization. Laboratory chemical assays are necessary to accurately determine the grade and economic potential of the mineralisation.

Disclaimer

No representation or warranty, express or implied, is made by Perpetual that the material contained in this document will be achieved or proved correct. Except for statutory liability and the ASX Listing Rules which cannot be excluded, Perpetual and each of its directors, officers, employees, advisors and agents expressly disclaims any responsibility for the accuracy, correctness, reliability or completeness of the material contained in this document and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person through use or reliance on any information contained in or omitted from this document.

Competent Person Statement

The information in this announcement related to Geological Data and Exploration Results is based on data compiled by Mr. Allan Harvey Stephens. Mr. Stephens is an Exploration Manager at Perpetual Resources Limited and is a member of both the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). He possesses sound experience that is relevant to the style of mineralisation and type of deposit under consideration, as well as the activities he is currently undertaking. Mr. Stephens qualifies as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves.' He provides his consent for the inclusion of the matters based on his information, as well as information presented to him, in the format and context in which they appear within this report.

Previous disclosure

This announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements, and that all material assumptions and technical parameters underpinning those results continue to apply and have not materially changed.

Appendix A – Rock Type Descriptions

Table 1 –Sample Descriptions and Locations

Figure	Easting	Northing	Lithology	Commentary
2a	8164459.6	853145.5	Cassiterite Nuggets (100%)	Tuca's Garimpo
2b	8164459.6	853145.5	Miarolitic Pegmatite Clast – Fspar (60%), Mica (30%), Qtz (5%), Opaque minerals unknown (~5%)	Tuca's Garimpo