



## TWO RIG DRILL PROGRAM COMMENCES OVER HIGH-GRADE FEIRINHA REE PROSPECT

Magnum Mining & Exploration Limited (ASX:MGU, OTCQB:MGUFF) (Magnum, or the Company) is pleased to advise that a Reverse Circulation (RC) drill programme with two drill rigs has commenced at the high-grade Feirinha Prospect (RC drill rigs shown in Figures 1 & 2), located at Magnum's wholly-owned Palmares Rare Earth Element (REE) Project in Brazil (Figures 3 and 4).



Figure 1 – 1<sup>st</sup> RC Drill rig to undertake drilling at Feirinha.

**Magnum's Chairman, Michael Davy, commented:** "Magnum now has two active drilling campaigns underway in Brazil, marking a significant acceleration in our exploration activity. Given the quality and setting of the prospects currently being drilled, we believe both programs offer meaningful potential for a new greenfield REE discovery.

At Feirinha, two RC drill rigs will test a large area that has demonstrated extensive high-grade REE anomalism at surface, ranging up to 1.69% TREO. Importantly, initial leach test work has

*already shown that REE from Feirinha is readily recoverable under ambient conditions, which is indicative of favourable metallurgical characteristics. In parallel, steady progress continues at our Azimuth REE Project, where auger drilling remains ongoing. I look forward to providing updates as both programs advance and as results come to hand.*



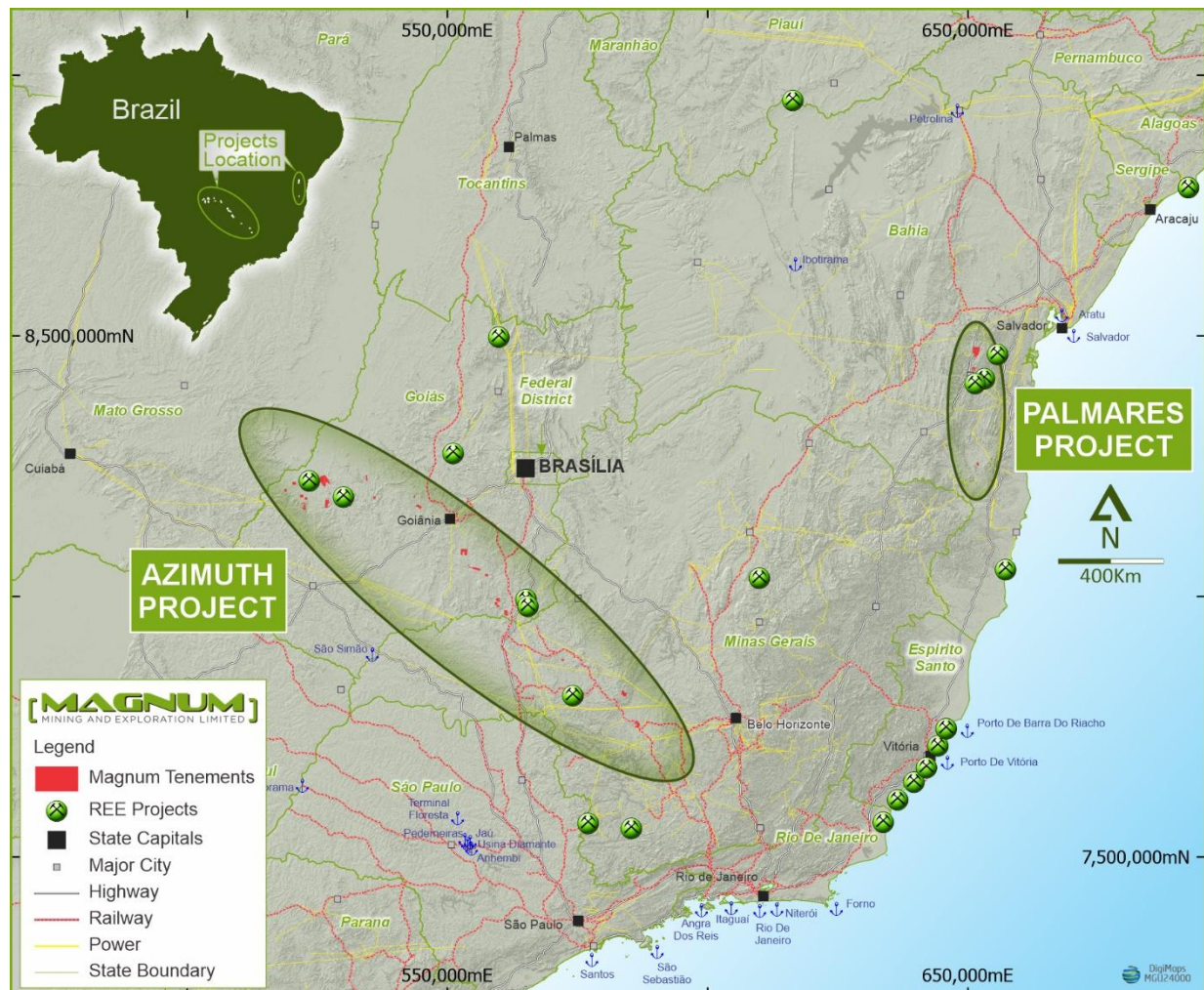
**Figure 2** – 2<sup>nd</sup> RC Drill rig to undertake drilling at Feirinha.

For personal use only

## DRILL PROGRAM & SAMPLING DETAILS

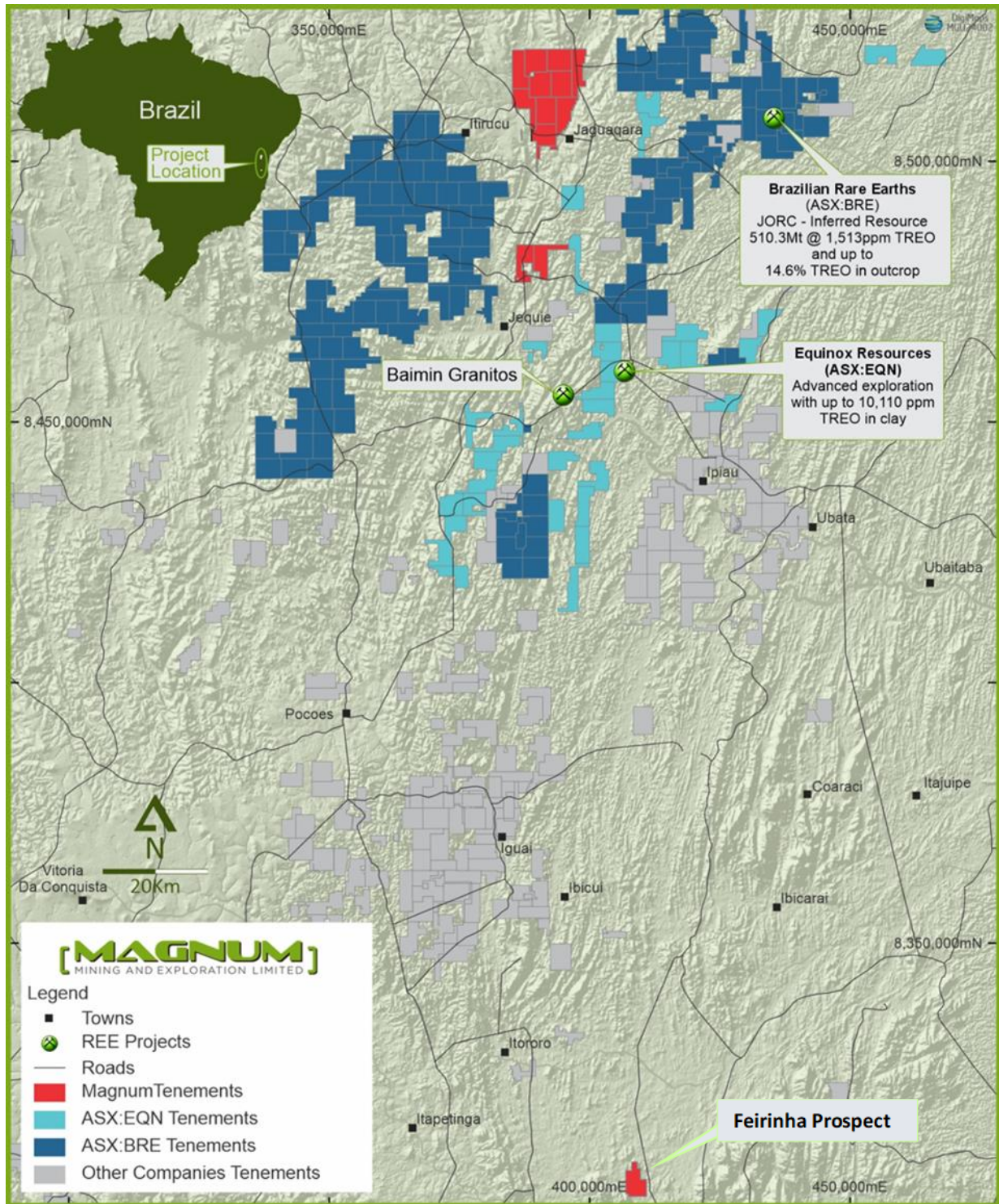
The RC drilling programme plans for **133** holes for a total of **2,000m**, with all permitting and land access previously finalised<sup>1</sup>. The program is scheduled to take approximately seven weeks to complete. Final assays are expected approximately four to six weeks after the completion of drilling (**the end of January**).

Sampling is planned to be done on a one metre of the RC chips. Assaying has been arranged to be completed by the globally recognised ALS laboratories in Brazil. Duplicates, blanks, and geochemical standards will be used for QA/QC. A subset of samples will be sent to a second laboratory for referee assaying once all results are delivered.



**Figure 3** - Magnum's Azimuth 125 and Palmares REE Projects are located across the states of Bahia, Minas Gerais and Goiás states in south-central Brazil.

<sup>1</sup> Refer to ASX release, "Green Light Received to Drill Test Brazil Ree Targets", 7 October 2025



**Figure 4** - The Palmares Project covers part of the Jequié Belt of metamorphosed intrusives in Bahia State, a highly mineralised belt that is an emerging REE province. The Feirinha Prospect is highlighted.

The drilling programme is designed to test a large area indicated by extensive high-grade REE anomalism<sup>2</sup> (Figure 5). Drilling is being done on a grid to a notional depth of 15m to map out and assess the grade of potentially REE-bearing ionic clays associated with REE bearing pegmatite dykes.

<sup>2</sup> Refer to ASX release “Palmares Delivers up to 1.69% TREO Grades (Revised)”, 20 December 2024

For personal use only

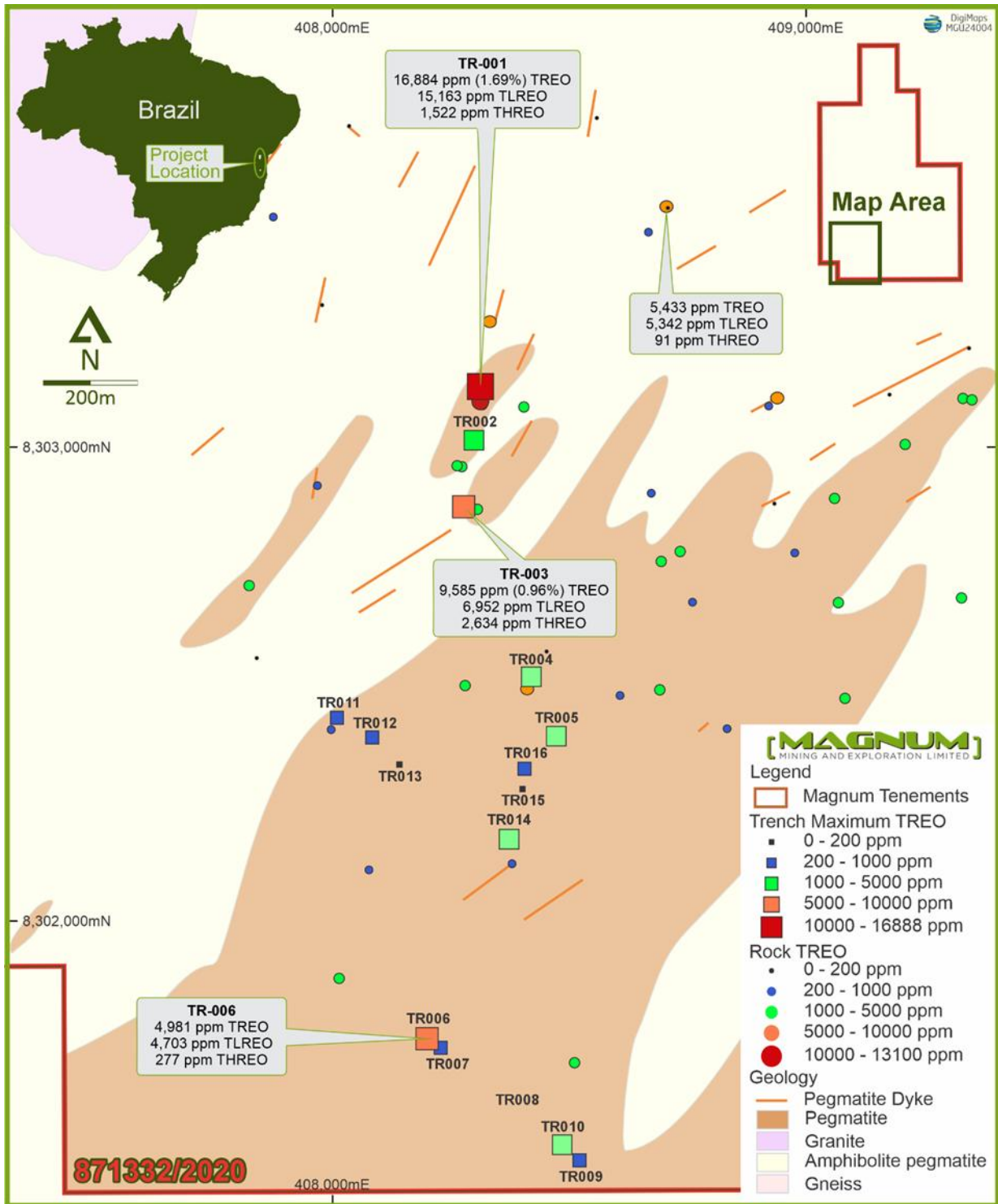


Figure 5 - Summary of geochemistry results from the Feirinha Prospect. "TR" designation shows trench locations.

## COMPELLING REE TARGETS AT THE FEIRINHA PROSPECT

The advanced Feirinha Prospect has had widespread surface geochemical surveys completed.<sup>3</sup> Identified sub cropping pegmatite dykes have returned assays of up to **1.69% TREO** and **2,633ppm THREO** (Total Heavy Rare Earth Oxides) in trench sampling and **1.31% TREO** in rock chip sampling (Figure 5). Consistent grades are seen across the prospect: averages of **1,166 ppm TREO** for the trench sampling and **1,827ppm** for the rock chip sampling have been obtained. In addition, Cerium (Ce) values of up to **6,507ppm** suggests the mineralisation is similar to ionic clay deposits seen elsewhere in the district (e.g., Brazilian Rare Earths' Monte Alto REE Project).<sup>4</sup>

While the earlier focus has been on the pegmatite dykes (example shown in Figure 6), a relatively thick overburden of possibly ionic clays has been recognised. The RC drilling will test the thickness, continuity, and grade of these clays. It is specifically targeted for mineralisation at or near surface, providing a pathway to a potential low-cost REE discovery.



**Figure 6** - Exposed pegmatite dyke in trench TR-001. This is one dyke of a swarm of similar dykes mapped at the Feirinha Prospect.<sup>5</sup>

<sup>3</sup> Refer to ASX release “Palmares Delivers up to 1.69% TREO Grades (Revised)”, 20 December 2024

<sup>4</sup> ASX:BRE “Ultra-High Grade Rare Earth Assays at Monte Alto Project”, 1 February 2024

<sup>5</sup> Refer to ASX release, “Magnum Funded Corporate Strategy Presentation”, 23 October 2025

### **IN-COUNTRY TEAM TO DRIVE EXPLORATION**

Lead investigator and major Magnum shareholder, Antonio Vitor, has been instrumental in pegging the Brazilian REE ground for Magnum. Antonio's experience in managing field operations and his wide network of contacts drives Magnum's confidence in the execution of a successful field campaign.

### **EARLY METALLURGICAL TEST WORK PROVIDES CONFIDENCE**

Initial leach test work has shown that REE from the Feirinha Prospect are readily recoverable at ambient temperatures and pressures.<sup>6</sup> This initial leach test work, along with further planned metallurgical studies, will be essential when assessing the prospectivity of the mineralisation drilled (subject to exploration success).

### **THE PALMARES REE PROJECT**

The Palmares REE Project is located in the Jequié Complex, a terrain of the north-eastern São Francisco Craton. This craton includes the Volta do Rio Plutonic Suite of high-K ferroan ("A-type") granitoids, subordinate mafic to intermediate rocks; and thorium rich monazitic leucogranites with associated REE. The region is affected by intense NE-SW regional shearing which may be associated with a REE enriched hydrothermal system. The style of mineralisation being explored for is an REE enriched lateritic zone at surface. This may grade into an REE-bearing hard rock source. The mineralisation is classified as Ionic Adsorption Clay (IAC) and regolith hosted deposits of monazite mineral grains, and primary in-situ REE-Nb-Sc mineralisation. At the Feirinha Propect, REEs are hosted in a series of pegmatite dykes. The emplacement of these dykes, and their possible subsequent oxidation and erosion may have shed REEs into the regolith that now presents as overlying clays.

---

<sup>6</sup> Refer to ASX release, "Breakthrough REE Test Work Delivers Exceptional Results", 2 October 2025

### CAUTIONARY STATEMENTS

This release contains “forward-looking information” that is based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as ‘outlook’, ‘anticipate’, ‘project’, ‘target’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

Neither the Company, nor any other person, gives any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. Except as required by law, and only to the extent so required, none of the Company, its subsidiaries or its or their directors, officers, employees, advisors or agents or any other person shall in any way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

### COMPETENT PERSON'S STATEMENT

The information in this announcement is based on information compiled by Mr Marcus Flis, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full time employee of Rountree Pty Ltd. Mr Flis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.” Mr Flis consents to the inclusion of the matters outlined in this announcement the form and context in which they appear.

The information in this announcement as footnoted throughout the release and as noted below relates to exploration results that have been released previously on the ASX. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that, all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s finding is presented have not been materially modified from the original market announcements.

### ASX ANNOUNCEMENTS REFERENCED DIRECTLY IN THIS RELEASE

- “Green Light Received to Drill Test Brazil Ree Targets”, 7 October 2025 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>

- “Palmares Delivers up to 1.69% TREO Grades (Revised)”, 20 December 2024 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>
- “Ultra-High Grade Rare Earth Assays at Monte Alto Project”, 1 February 2024 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>
- “Magnum Funded Corporate Strategy Presentation”, 23 October 2025 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>
- “Breakthrough REE Test Work Delivers Exceptional Results”, 2 October 2025 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>

**BY ORDER OF THE BOARD****Mark Pryn**

Company Secretary

Email: [info@mmel.com.au](mailto:info@mmel.com.au)

Phone: +61 3 9682 2966

**Erik Bergseng**

Investor Relations

ebergseng@nrinvestor.com.au

Phone: +61 2 8350 0882

For personal use only