



IONIC ADSORPTION CLAY DISCOVERY CONFIRMED AT AZIMUTH

Desorption test work undertaken on recent exceptional REE drilling results¹ has confirmed that the mineralisation at the Piracanjuba Prospect is an Ionic Adsorption Clay (IAC) REE system.

*The results demonstrate strong desorption under mild leaching conditions, with recoveries of up to **75% TREO** and up to **94% MREO**.*

At Piracanjuba North, the auger program will be expanded to delineate the lateral extent of the newly identified IAC mineralised system. The discovery lies within a broader ~85km² radiometric anomaly identified from airborne geophysical surveys, highlighting the potential to host a large-scale IAC system.

HIGHLIGHTS

- Desorption REE recoveries from the Piracanjuba Prospect confirms the mineralisation is **Ionic Adsorption Clay hosted**
- Recoveries of up to **75% TREO and 94% MREO** demonstrate the potential to **recover high-value strategic rare earth elements** under mild leaching conditions, enhancing the prospectivity of the Piracanjuba Prospects.

Significant recovered desorption intercepts include:

- AZ125-01-012:** 11.84m @ 45% TREO, **64% MREO**, **51% HREO** from 0m,
 - including 6m @ 63% TREO, **88% MREO**, **72% HREO** from 4m
 - including 1m @ 75% TREO, **94% MREO**, **76% HREO** from 5m
- AZ125-01-002:** 3m @ 26% TREO, **53% MREO**, **51% HREO** from 4m
- AZ125-01-010:** 11m @ 30% TREO, **40% MREO**, **42% HREO** from 0m,
 - including: 5m @ 40% TREO, **53% MREO**, **56% HREO** from 1m
- AZ125-01-005:** 14m @ 31% TREO, **37% MREO**, **54% HREO** from 0m
 - including: 8m @ 47% TREO, **57% MREO**, **58% HREO** from 6m
- AZ125-01-008:** 5m @ 20% TREO, **34% MREO**, **43% HREO** from 4m
- AZ125-01-013:** 8.18m @ 26% TREO, **31% MREO**, **47% HREO** from 0m
 - including: 2m @ 57% TREO, **71% MREO**, **62% HREO** from 5m
- AZ125-01-003:** 6m @ 14% TREO, **26% MREO**, **28% HREO** from 5m
- AZ125-01-004:** 14m @ 15% TREO, **23% MREO**, **31% HREO** from 0m
 - including: 1m @ 20% TREO, **35% MREO**, **51% HREO** from 11m
- AZ125-01-006:** 14m @ 23% TREO, **29% MREO**, **40% HREO** from 0m:
 - including 5m @ 42% TREO, **54% MREO**, **59% HREO** from 8m

¹ Refer to ASX release, "POTENTIAL LARGE-SCALE IONIC ADSORPTION CLAY REE DISCOVERY", 11 February 2026.

- Following exceptional assay results,² Auger drilling on the Piracanjuba North target has been expanded to map out the lateral extent of the new discovery.

Note: Total Rare Earth Oxides (TREO) is the sum of CeO₂, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, La₂O₃, Lu₂O₃, Nd₂O₃, Pr₆O₁₁, Sm₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃ assays. Magnetic rare Earth Oxides (MREO) is the sum of Dy₂O₃, Nd₂O₃, Pr₆O₁₁, and Tb₄O₇ assays. Heavy Rare Earth Oxides (HREO) is the sum of Dy₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃ assays.

Magnum's Chairman, Michael Davy, commented: "Confirming an ion-exchangeable component within the mineralisation at the Piracanjuba Prospect is a critical technical milestone. Without demonstrable desorption under mild leach conditions, rare earth mineralisation cannot be classified as a true Ionic Adsorption Clay system. These results follow our recent breakthrough drilling success at Azimuth and materially strengthens the pathway towards defining a large-scale IAC deposit.

Given the mild leach conditions applied, we see strong scope for further metallurgical optimisation. The preferential recovery of magnetic and heavy rare earth oxides by the data is also highly encouraging, as these are the most strategically important and highest-value elements in the rare earth suite.

We have accelerated plans to delineate the lateral continuity of Piracanjuba North Prospect, a 85km² geophysical anomaly which has already returned exceptional drilling results to date. Drilling will also remain ongoing across the 19 of our high-priority prospects at the Azimuth project and we look forward to reporting further results in due course."

Magnum Mining and Exploration Limited (ASX:MGU, OTCQB: MGUFF) (Magnum, or the Company), is pleased to announce that its recently announced Rare Earth Element (REE) discovery at its Piracanjuba, Piracanjuba North and Piracanjuba South (**Piracanjuba Prospect**) is consistent with Ionic Adsorption Clay (IAC) hosted mineralisation. It represents one of the few confirmed IAC occurrences identified along the Azimuth 125° trend in Goiás State, Brazil (Figure 1).

Desorption test work, undertaken by ALS (Brazil) returned outstanding recoveries of up to **75% Total Rare Earth Oxide (TREO)** and **94% Magnetic Rare Earth Oxide (MREO)** (Table 1). Current REE production from IAC style deposits typically show recoveries of around 25%. While publicly available data is scarce, the Serra Verde REE IAC, eg, has an estimated recovery of 24%³. Crucially, the results indicate very high desorption efficiency for both MREO and Heavy Rare Earth Oxide (HREO), a key feature of IAC deposits.

Auger hole assays were previously announced⁵ (Table 2). **High desorption recoveries do not necessarily correlate with high assays, suggesting that the very high assays may include REEs in minerals in addition to REE ions attached to clay particles; this does not detract from the IAC component.**

² Refer to ASX release, "POTENTIAL LARGE-SCALE IONIC ADSORPTION CLAY REE DISCOVERY", 11 February 2026.

³ <https://minedocs.com/25/Serra-Verde-Geology-082016.pdf> and <https://svpm.com.br/en/our-operation/>

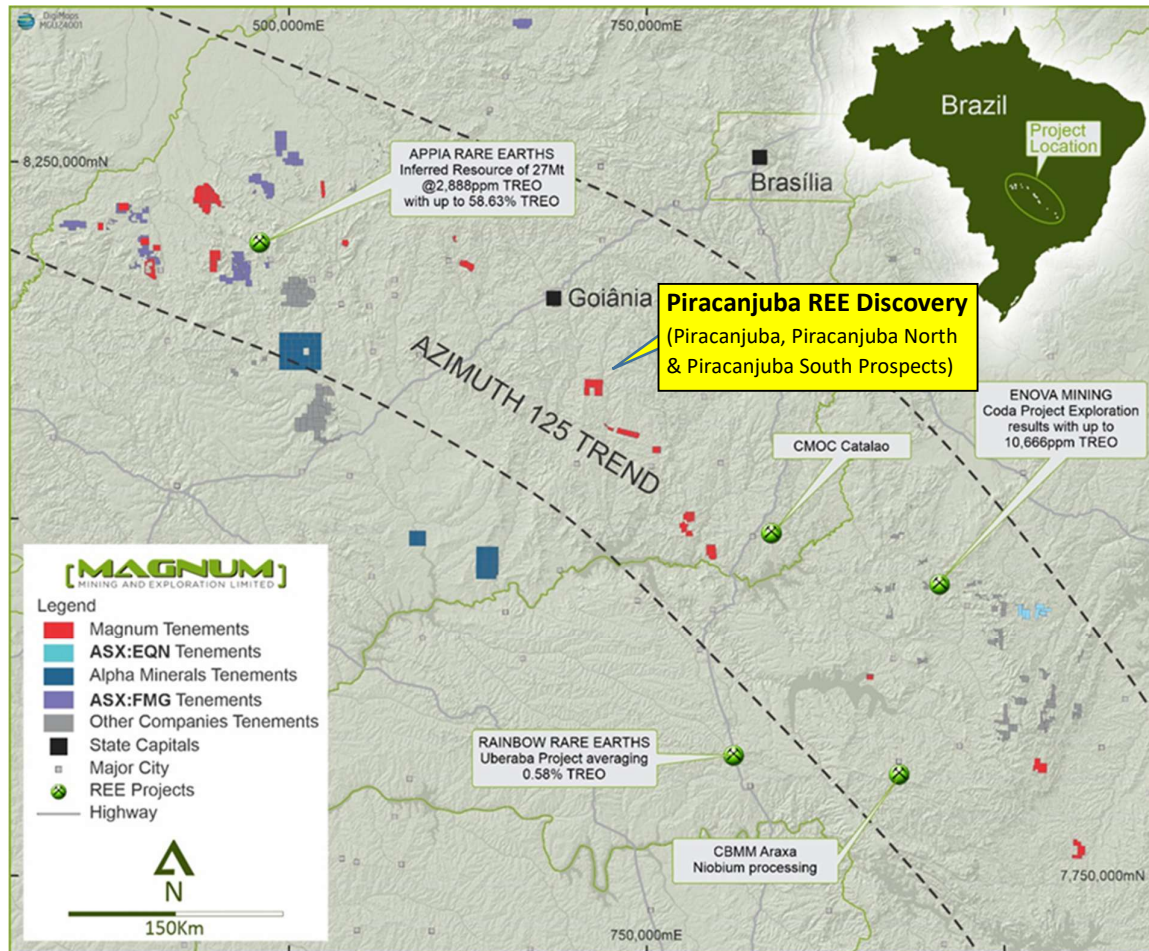


Figure 1 The Azimuth REE Project is centred on the Azimuth 125o Lineament. The lineament is associated with significant REE mineralisation with Appia, Enova, and Rainbow announcing exploration success. The tenements straddle the NNE trending TransBrazilian Line. The location of the REE discovery at the Piracanjuba Prospect, consisting of the Piracanjuba North, Piracanjuba, and Piracanjuba South targets, is highlighted in yellow.

Hole	Interval (m)	From (m)	TREO (ppm)	MREO (ppm)	HREO (ppm)	MREO	Desorption recovery TREO%	Desorption recovery MREO%	Desorption recovery HREO%
AZ125-01-001	9.64	0	1034	235	81	23%	9	15	37
Including	5	4	1252	312	108	25%	11	21	24
AZ125-01-002	12.25	0	1730	395	92	22%	8	16	36
including	3	4	1710	393	93	19%	26	53	51
AZ125-01-003	13.5	0	2095	453	84	22%	8	14	28
including	6	5	2879	677	120	24%	14	26	28
AZ125-01-004	14	0	603	125	77	21%	15	23	31
including	1	11	1035	221	98	21%	20	35	51
AZ125-01-005	14	0	535	136	96	25%	31	37	54
including	8	6	538	137	132	26%	47	57	58
AZ125-01-006	14	0	460	114	66	25%	23	29	40
including	5	8	392	107	83	27%	42	54	59
AZ125-01-007	14	0	964	238	74	25%	6	10	18
AZ125-01-008	14	0	1225	261	80	21%	10	16	22
including	5	4	1413	319	199	22%	20	34	43

AZ125-01-009	9	0	721	175	69	24%	10	13	18
including	2	3	475	123	85	24%	41	54	65
AZ125-01-010	11	0	466	108	91	23%	30	40	43
including	5	1	571	150	103	26%	40	53	56
AZ125-01-011	10	0	496	77	49	16%	10	14	34
AZ125-01-012	11.8	0	364	87	93	23%	45	64	51
including	6	4	482	123	132	26%	63	88	72
including	1	5	482	123	132	26%	75	94	76
AZ125-01-013	8.2	0	401	107	88	37%	26	31	46
including	2	4	555	164	148	30%	57	71	62

Table 1 Summary of desorption recoveries from the Piracanjuba Prospect.

Hole	Interval (m)	From (m)	TREO (ppm)	MREO (ppm)	TREO desorption recovery (ppm)	MREO desorption recovery (ppm)
AZ125-01-001	9.64	0	1034	235	95	39
including	5	4	1252	313	137	61
AZ125-01-002	12.3	0	1730	395	155	60
including	2	7	3282	1011	73	27
AZ125-01-003	13.5	0	2165	464	200	83
including	3	7	3175	794	461	201
AZ125-01-004	14	0	603	125	89	31
including	1	11	1035	221	205	77
AZ125-01-005	14	0	545	136	163	50
AZ125-01-006	14	0	460	114	94	30
AZ125-01-007	14	0	964	238	53	21
including	5	8	1351	354	41	16
AZ125-01-008	14	0	1225	261	128	49
including	10	4	1408	312	169	66
AZ125-01-009	9	0	721	175	54	18
including	2	5	1473	371	39	13
AZ125-01-010	11	0	466	108	145	47
AZ125-01-011	10	0	496	77	37	10
including	1	2	1261	73	35	8
AZ125-01-012	11.8	0	385	92	196	70
AZ125-01-013	8.2	0	395	104	123	44

Table 2 Significant intercepts from the Piracanjuba Prospects auger drilling programme. The TREO total is a summation of CeO₂, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, La₂O₃, Lu₂O₃, Nd₂O₃, Pr₆O₁₁, Sm₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, and Yb₂O₃. HREO is a summation of Dy₂O₃, Er₂O₃, Gd₂O₃, Ho₂O₃, Lu₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃ and Yb₂O₃. MREO is a summation of: Dy₂O₃, Nd₂O₃, Pr₆O₁₁, and Tb₄O₇. All assays rounded to nearest integer.

THE SIGNIFICANCE OF IDENTIFYING AN IONIC ADSORPTION CLAY DEPOSIT

In Ionic Adsorption Clay (IAC) deposits the REEs are bound onto clay particle surfaces by weak ionic bonds (electrostatic adsorption). As a result, extraction of REEs from an IAC host can be “desorbed”, i.e. stripped from the clay surface, using mild salt solutions, such as ammonium sulphate. The REEs are then recovered from the ammonium sulphate leach solution by selective precipitation — typically as oxalates—after impurity removal, producing a mixed rare earth concentrate. This process is completed at ambient temperature and atmospheric pressure.

By contrast, in ordinary clay hosted deposits, the REE are locked in residual minerals (e.g., monazite, xenotime, and allanite). These clays need to be processed using more intensive methods, including high-temperature roasting and digestion by strong acids.

The difference in the processing method, together with the likelihood that IACs occur at or near surface with low mining costs, underpins the lower cost of producing REEs from an IAC deposit. Non-IAC or hard rock deposit typically require more expensive beneficiation methods and require much higher grades to be economic.

Table 3 compares the differences between IAC and ordinary clay REE deposits.

Feature	IAC REE Deposits	Ordinary Clay-Hosted REE Deposits
How REEs occur	Adsorbed as exchangeable ions	Locked in minerals or crystal lattices
Leaching chemistry	Mild salt solutions	Strong acids or roasting required
Processing cost	Low	Moderate to high
Environmental impact	Low	Higher due to aggressive reagents
Typical distribution	Enriched in MREO + HREO	Variable; often LREO-dominant
Economic viability	High	Poor unless grades are high
Global analogue	Southern China IAC deposits	Weathered hard-rock REE systems
Metallurgical trait	High desorption efficiency	Some REEs remain bound in minerals

Table 3 Comparison between IAC hosted and ordinary clay hosted REE deposits.

APPLICATION OF STANDARD PROCESS

Samples from the recently announced discovery auger drilling⁴ were tested by ALS (Brazil) for desorption characteristics. All 128 samples from the completed 13 auger holes were processed. The procedure entails:

- Digestion/leach step: sample is bathed in a 0.5 Mole ammonium sulphate solution at pH4.
- The leachate's cations (e.g., NH_4^+) exchange with the REE ions that are bonded to the clay particle's surface by selectively desorbing exchangeable REE^{3+} ions.
- The leaching time was 20 minutes.
- The leaching was done at ambient (room) temperature.
- The resulting leachate is analysed by ICP-MS for the full REE suite.
- Results are reported as leachable REE concentrations.

The test work was undertaken to screen for ion-exchangeable REEs to determine if the samples represent a true IAC or an ordinary clay-hosted REE system. Confirming the mineralisation style of the REE discovery at the Piracanjuba Prospect is fundamental to evaluating its prospectivity.

Crucially, the test was undertaken at a pH4, rather than the pH2 that is often used for non-IAC REE mineralisation. The practical implications are that a leaching agent of lower acidity will be both more economic and give rise to low environmental implications.

This test work is a **partial leach**, not a total digestion process, so represents the minimum recoveries expected from an optimised metallurgical test. The TREO desorption recoveries at the Piracanjuba Prospects appear to be similar to, or better than, those seen at the Serra Verde REE Mine where an estimated 50% of the REE are actually sorbed onto clays⁵. **Serra Verde is the only IAC REE producer outside of China⁶.**

⁴ Refer to ASX release, "Potential Large-Scale Ionic Adsorption Clay REE Discovery", 11 February 2026

⁵ Serra Verde lateritic REE deposit, www.nhm.ac.uk

⁶ Serra Verde begins rare earth production in Brazil, www.mining-technology.com, 12 January, 2024

Further drilling, assaying, metallurgical testing, will be undertaken. In particular, test work at a higher pH and a shorter leaching residence time are planned.

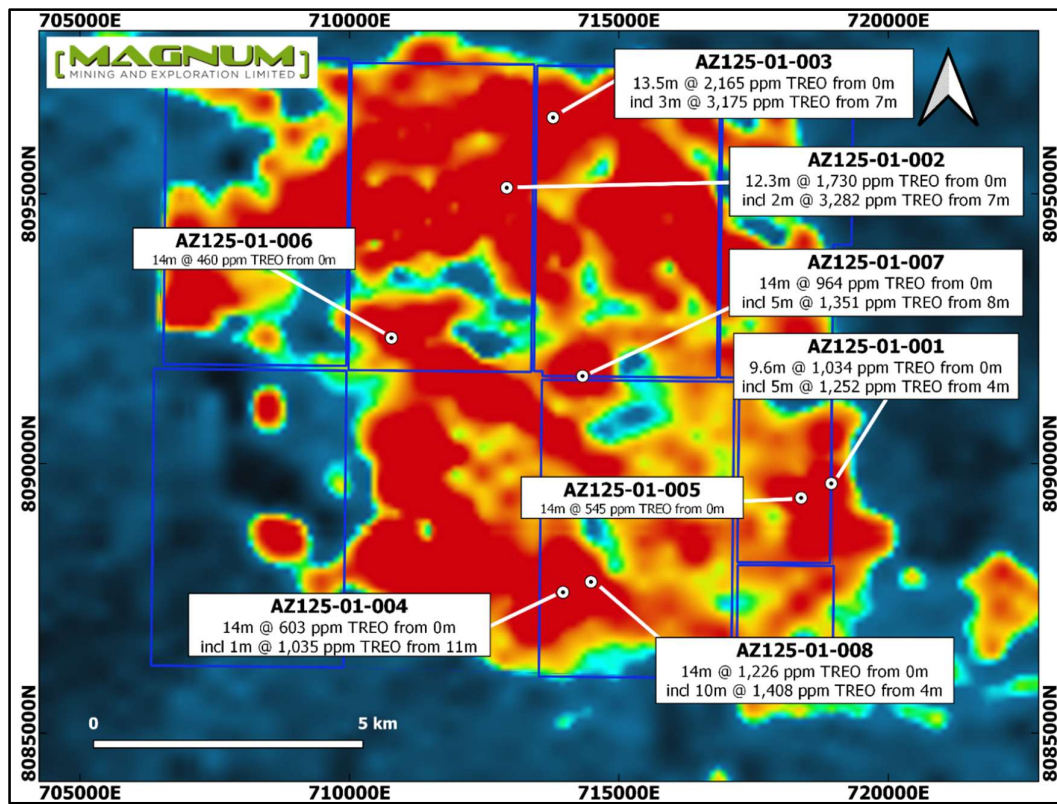


Figure 2 Piracanjuba North Target auger hole locations and intercepts. Blue outline are Magnum's leases. Background is an image of the thorium channel of an airborne geophysical survey.⁷

⁷ Refer to ASX release, "POTENTIAL LARGE-SCALE IONIC ADSORPTION CLAY REE DISCOVERY", 11 February 2026.



Figure 3 19 high priority REE prospects identified on Magnum's Azimuth REE Project (yellow dots). The local road network provides easy access to these prospects. The area hosts notable REE deposits. The Piracanjuba North, Piracanjuba, and Piracanjuba South targets (collectively "Piracanjuba Prospect") are located near the centre of the image.

DRILLING AT AZIMUTH CONTINUES

- The Company is recasting its budget to accelerate the full assessment of the new discovery at the Piracanjuba Prospect, in particular the Piracanjuba North target.
- Planning is underway to map out the anomalous area of Piracanjuba North with auger drilling.
- Auger drilling continues across remaining untested greenfields REE targets and is intended to continue across all 19 high-priority targets.
- Scheduling of the Piracanjuba North drilling and the continued reconnaissance drilling of the other targets will be dependent on equipment and personnel availability.
- ALS (Brazil) is receiving a steady stream of auger samples for assaying, with current turnaround times estimated to be between two to four weeks.
- Planning for a bulk sample for full metallurgical test work on the REE mineralisation from the Piracanjuba North target is underway, but will be responsive to the auger drilling map out of the REE zone.
- Additional desorption testing of the IAC REE mineralisation from Piracanjuba will be undertaken to determine if a high pH and a shorter leachate residence time can be used. The use of higher pH and lower residence times may enhance the business case for any proposed operation.

ABOUT THE AZIMUTH REE PROJECT⁸

The Azimuth REE Project is a green field exploration project highly prospective for REE. It consists of 72 granted tenements (refer to JORC Table 1) covering ~1,201km² of highly prospective ground. The project extends over 900km of the regional Azimuth 125° (Az125°) Lineament across the states of Goiás and Minas Gerais, Brazil. The leases are 100% controlled by Magnum.

The Az125° Lineament is a crustal trans-Brazilian feature that reflects the deep plumbing system in the region. Diamond bearing lamprophyres and kimberlites have been the historic exploration targets. The lineament is now recognised as a major source of other metal mineralisation due to the exotic intrusives that occur along it. The Azimuth REE Project's leases cover granitic and alkaline intrusives lithologies that are a primary source of REEs, including monazite, xenotime, allanite, titanite, and apatite. Intrusive alkaline rocks typically host REE minerals eudialyte and loparite. These minerals may be weathered, and adsorbed and concentrated into surficial ionic clay deposits. The geophysical signatures of the source rocks are key to the exploration for REE deposits along this lineament.

Aeromagnetic data is used extensively to focus in on permissive lithologies for REE, while radiometric data is used to prioritise those targets.

The region has attracted major REE explorers, which include those with both announced REE resources and significant exploration results, as well as Fortescue Metals Group whom have secured a landholding close to some of the Azimuth Project granted claims.

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.

⁸ Refer to ASX release, "Greenlight Received to Drill Test Brazil REE Targets", 7 October 2025.

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

- *"POTENTIAL LARGE-SCALE IONIC ADSORPTION CLAY REE DISCOVERY"*, released on the ASX on the 11th February 2026 and available to view on <https://www.mmel.com.au/site/investor-information/asx-announcements-and-financial-reports>
- *"Greenlight Received to Drill Test Brazil REE Targets"*, released on the ASX on the 7th 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

Phone: +61 9682 2966

Erik Bergseng

Investor Relations

Email: eberg seng@nrinvestor.com.au

Phone: +61 2 8350 0882

JORC Code, 2012 Edition – Table 1 report

SECTION 1 – SAMPLING TECHNIQUES AND DATA

CRITERIA	COMMENTARY																																																																																				
Sampling techniques	• Samples were recovered by motorised auger. • Sample integrity was maintained by the sample being clay dominant, so not falling apart easily. • Samples were laid out on a ground sheet marked out by metrage and sampled in 1 metre intervals. • An aliquot is taken in the field for assaying and desorption test work																																																																																				
Drilling techniques	• Drilling is been undertaken by motorised auger to a nominal depth of 5m. • The auger bit diameters are 3" and 4" (two rigs used) • Holes are vertical • Hole collars are: <table><tr><th>Hole ID</th><th>Easting</th><th>Northing</th><th>RL</th><th>Total Depth, m</th><th>Incl</th></tr><tr><td>AZ125-01-001</td><td>718941</td><td>8089631</td><td>739</td><td>9.64</td><td>-90</td></tr><tr><td>AZ125-01-002</td><td>712919</td><td>8095115</td><td>775</td><td>12.25</td><td>-90</td></tr><tr><td>AZ125-01-003</td><td>713778</td><td>8096416</td><td>774</td><td>13.53</td><td>-90</td></tr><tr><td>AZ125-01-004</td><td>713963</td><td>8087614</td><td>797</td><td>14</td><td>-90</td></tr><tr><td>AZ125-01-005</td><td>718382</td><td>8089364</td><td>761</td><td>14</td><td>-90</td></tr><tr><td>AZ125-01-006</td><td>710779</td><td>8092329</td><td>769</td><td>14</td><td>-90</td></tr><tr><td>AZ125-01-007</td><td>714325</td><td>8091622</td><td>835</td><td>14</td><td>-90</td></tr><tr><td>AZ125-01-008</td><td>714482</td><td>8087807</td><td>801</td><td>14</td><td>-90</td></tr><tr><td>AZ125-01-009</td><td>741363</td><td>8058610</td><td>706</td><td>9</td><td>-90</td></tr><tr><td>AZ125-01-010</td><td>740329</td><td>8058917</td><td>714</td><td>11</td><td>-90</td></tr><tr><td>AZ125-01-011</td><td>719512</td><td>8067611</td><td>681</td><td>10</td><td>-90</td></tr><tr><td>AZ125-01-012</td><td>731936</td><td>8060107</td><td>735</td><td>11.84</td><td>-90</td></tr><tr><td>AZ125-01-013</td><td>721384</td><td>8064738</td><td>650</td><td>8.18</td><td>-90</td></tr></table>	Hole ID	Easting	Northing	RL	Total Depth, m	Incl	AZ125-01-001	718941	8089631	739	9.64	-90	AZ125-01-002	712919	8095115	775	12.25	-90	AZ125-01-003	713778	8096416	774	13.53	-90	AZ125-01-004	713963	8087614	797	14	-90	AZ125-01-005	718382	8089364	761	14	-90	AZ125-01-006	710779	8092329	769	14	-90	AZ125-01-007	714325	8091622	835	14	-90	AZ125-01-008	714482	8087807	801	14	-90	AZ125-01-009	741363	8058610	706	9	-90	AZ125-01-010	740329	8058917	714	11	-90	AZ125-01-011	719512	8067611	681	10	-90	AZ125-01-012	731936	8060107	735	11.84	-90	AZ125-01-013	721384	8064738	650	8.18	-90
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Drill sample recovery	• Samples are being collected every 1m down hole. • 100% of the sample is recovered. • The clay rich nature of the drilled material results in a cohesive sample being recovered. • Auger samples are less controlled than other methods and downhole contamination may occur.																																																																																				
Logging	• Geological logging is being done on site.																																																																																				
Sub-sampling techniques and sample preparation	• The entire auger sample is being sampled at one metre intervals • The auger hole length sample is laid out and divided into metres • Aliquots of the drilled material are taken for assaying and desorption testing. • Samples were Dried and crushed to 70% <2mm (ALS code CRU-31) • Crushed sample was riffle split (ALS code SPL-21) • Pulverisation of 250g of the sample to 85% <75µm was done and a duplicate taken (ALS codes PUL-31 and SPL-21)																																																																																				
Quality of assay data and laboratory tests	• Samples were assayed by ALS (Brazil) using and ICP scan (ALS code ME-ICP06 and ME=MS81 (Li-Borate fusion) • QA/QC is accomplished in three ways: • Insertion of Certified reference Material into the sample stream , • Inclusions of blanks into the sample stream, and • Assaying duplicate samples • A second aliquot of the sample is tested for desorption under ALS method ME-MS19a: • The sample is subjected to leaching with ammonium sulphate at a strength of 0.5M and pH4 • It is then agitated by tumbling, at room temperature for 20 minutes • After leaching, the mixture is centrifuged • The resultant sample is analysed using a combination of ICP-AES (Inductively Coupled Plasma Atomic Emission Spectroscopy) and ICP-MS (Inductively Coupled Plasma Mass Spectrometry) to detect low-level, soluble rare earths • The REEs assayed for are: La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y (typically 0.002-1000 ppm range).																																																																																				

CRITERIA	COMMENTARY																																																
	Other elements assayed for are:: Al, Fe, Nb, Ta, B, Ba, Hf, Ni, Th, Be, P, Ti, Ca, K, Pb, U, Co, Li, Rb, V, Cs, Sc, W, Cu, Mg, Si, Mn, Mo, Sn, Zr, Na, Sr.																																																
Verification of sampling and assaying	- No verification of sampling and assaying has been done at this early stage of exploration other than the processes outlined above. - REE assay data have been converted to equivalent oxides using the following factors: <table><tr><th>Element</th><th>Factor</th><th>Oxide</th></tr><tr><td>La</td><td>1.1728</td><td>La2O3</td></tr><tr><td>Ce</td><td>1.2284</td><td>Ce2O3</td></tr><tr><td>Pr</td><td>1.2082</td><td>Pr6O11</td></tr><tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td></tr><tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td></tr><tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td></tr><tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td></tr><tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td></tr><tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td></tr><tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td></tr><tr><td>Er</td><td>1.1435</td><td>Er2O3</td></tr><tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td></tr><tr><td>Yb</td><td>1.1387</td><td>Yb2O3</td></tr><tr><td>Lu</td><td>1.1372</td><td>Lu2O</td></tr><tr><td>Y</td><td>1.2699</td><td>Y2O3</td></tr></table>	Element	Factor	Oxide	La	1.1728	La2O3	Ce	1.2284	Ce2O3	Pr	1.2082	Pr6O11	Nd	1.1664	Nd2O3	Sm	1.1596	Sm2O3	Eu	1.1579	Eu2O3	Gd	1.1526	Gd2O3	Tb	1.1762	Tb4O7	Dy	1.1477	Dy2O3	Ho	1.1455	Ho2O3	Er	1.1435	Er2O3	Tm	1.1421	Tm2O3	Yb	1.1387	Yb2O3	Lu	1.1372	Lu2O	Y	1.2699	Y2O3
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Location of data points	- Auger collars are recorded using as a hand held GPS unit with an accuracy of sub ±5m. - Data is collected using the UTM SIRGAS2000 UTM zone 23S projection.																																																
Data spacing and distribution	- Auger collars are located on the maxima of airborne radiometric anomalies. - Data spacing is irregular to take advantage of easy access.																																																
Orientation of data in relation to geological structure	- Collars are located on radiometric anomalies with no reference to underlying geology or structures. - This is considered adequate in the early stages of exploration.																																																
Sample security	Samples are in the possession of contract geologists at all times until delivered to the assaying laboratory.																																																
Audits or reviews	No audits have been done at this stage.																																																

SECTION 2 – REPORTING OF EXPLORATION RESULTS

Criteria listed in the preceding section also apply to this section

CRITERIA	COMMENTARY												
Mineral tenement and land tenure status	- The Azimuth REE Project is 100% owned and controlled by Magnum Mining and Exploration Ltd, an Australian ASX listed public company. - The project consists of 72 granted mineral exploration permits covering ~1,201km² on the Azimuth 125° Lineament, Minas Gerais and Goiás states, Brazil. - All permits are in good standing. - The permits are registered at Agencia Nacional de Mineracao (ANM). - Permits held in the Azimuth REE Project are: <table><tr><th>#</th><th>TENEMENT</th><th>HA</th><th>COUNTY STATE</th><th>STATUS</th><th>COMMODITY</th></tr><tr><td>1</td><td>830284/2024</td><td>1765.35</td><td>PATROCINIO /MG</td><td>GRANTED</td><td>REE</td></tr></table>	#	TENEMENT	HA	COUNTY STATE	STATUS	COMMODITY	1	830284/2024	1765.35	PATROCINIO /MG	GRANTED	REE
#	TENEMENT	HA	COUNTY STATE	STATUS	COMMODITY								
1	830284/2024	1765.35	PATROCINIO /MG	GRANTED	REE								

CRITERIA	COMMENTARY					
	2	830285/2024	1978.36	SANTA ROSA DA SERRA /MG	GRANTED	REE
	3	830286/2024	1711.35	SANTA ROSA DA SERRA /MG	GRANTED	REE
	4	830287/2024	1731.35	SANTA ROSA DA SERRA /MG	GRANTED	REE
	5	830288/2024	1478.97	SANTA ROSA DA SERRA /MG	GRANTED	REE
	6	830289/2024	1604.16	IGUATAMA /MG	GRANTED	REE
	7	830290/2024	1815.11	IGUATAMA /MG	GRANTED	REE
	8	830291/2024	1882.06	IGUATAMA /MG	GRANTED	REE
	9	830281/2024	1531.83	IGUATAMA /MG	GRANTED	REE
	10	860.248/2024	1758.56	PIRACANJUBA /GO	GRANTED	REE
	11	860247/2024	1028.19	PIRACANJUBA /GO	GRANTED	REE
	12	860219/2024	1964.55	PIRACANJUBA /GO	GRANTED	REE
	13	860220/2024	1963.93	PIRACANJUBA /GO	GRANTED	REE
	14	860221/2024	1932.79	PIRACANJUBA /GO	GRANTED	REE
	15	860222/2024	1932.53	PIRACANJUBA /GO	GRANTED	REE
	16	860227/2024	1976.42	PIRACANJUBA /GO	GRANTED	REE
	17	860226/2024	1899.26	PIRACANJUBA /GO	GRANTED	REE
	18	860225/2024	396.81	PIRACANJUBA /GO	GRANTED	REE
	19	860224/2024	1889.61	PIRACANJUBA /GO	GRANTED	REE
	20	860223/2024	1954.28	PIRACANJUBA /GO	GRANTED	REE
	21	860190/2024	1894.43	BOM JARDIM DE GOIÁS /GO	GRANTED	REE
	22	860191/2024	1972.35	PIRANHAS /GO	GRANTED	REE
	23	860192/2024	1066.45	PIRANHAS /GO	GRANTED	REE
	24	860246/2024	1972.35	PIRANHAS /GO	GRANTED	REE
	25	860198/2024	1448.05	PIRANHAS /GO	GRANTED	REE
	26	860196/2024	1916.3	PIRANHAS /GO	GRANTED	REE
	27	860194/2024	1897.74	PIRANHAS /GO	GRANTED	REE
	28	860197/2024	1597.89	PIRANHAS /GO	GRANTED	REE
	29	860195/2024	1975.17	PIRANHAS /GO	GRANTED	REE
	30	860241/2024	1965.49	PIRANHAS /GO	GRANTED	REE
	31	860193/2024	1798.77	CÓRREGO DO OURO /GO	GRANTED	REE
	32	860189/2024	1951.59	BOM JARDIM DE GOIÁS /GO	GRANTED	REE
	33	860187/2024	1933.25	BOM JARDIM DE GOIÁS /GO	GRANTED	REE
	34	860199/2024	1993.41	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	35	860202/2024	1997.22	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	36	860200/2024	1295.98	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	37	860203/2024	1949.28	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	38	860204/2024	1851.99	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	39	860205/2024	1999.62	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	40	860207/2024	1999.68	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	41	860208/2024	1923.15	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	42	860206/2024	1999.65	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	43	860209/2024	1969.44	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	44	860210/2024	1963.35	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	45	860211/2024	442.5	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	46	860243/2024	1977.68	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	47	860242/2024	1854.61	MONTES CLAROS DE GOIÁS /GO	GRANTED	REE
	48	860212/2024	1919.77	JUSSARA /GO	GRANTED	REE
	49	860213/2024	958.19	NOVO BRASIL /GO	GRANTED	REE
	50	860217/2024	1907.76	ANICUNS /GO	GRANTED	REE
	51	860218/2024	751.18	ANICUNS /GO	GRANTED	REE
	52	860215/2024	745.7	ANICUNS /GO	GRANTED	REE
	53	860216/2024	1970.98	ANICUNS /GO	GRANTED	REE
	54	860229/2024	1953.94	CALDAS NOVAS /GO	GRANTED	REE
	55	860228/2024	1972.11	CALDAS NOVAS /GO	GRANTED	REE
	56	860231/2024	552.95	CALDAS NOVAS /GO	GRANTED	REE
	57	860230/2024	1894.26	CORUMBAIBA /GO	GRANTED	REE
	58	860232/2024	1862.56	CORUMBAIBA /GO	GRANTED	REE
	59	860236/2024	1600.2	CORUMBAIBA /GO	GRANTED	REE
	60	860234/2024	1961.99	CORUMBAIBA /GO	GRANTED	REE
	61	860235/2024	1063.27	CORUMBAIBA /GO	GRANTED	REE
	62	860233/2024	821.25	CORUMBAIBA /GO	GRANTED	REE
	63	860239/2024	1902.73	CUMARI /GO	GRANTED	REE
	64	860240/2024	505.19	CUMARI /GO	GRANTED	REE
	65	860238/2024	1860.12	ANHANGUERA /GO	GRANTED	REE
	66	860237/2024	1852.56	ANHANGUERA /GO	GRANTED	REE
	67	860384/2020	1997.33	Block Arenopolis GOIAS	GRANTED	Au
	68	860385/2020	1670.48		GRANTED	Au
	69	860386/2020	1906.42		GRANTED	Au
	70	860397/2020	1698.09		GRANTED	Au
	71	860398/2020	1800.17		GRANTED	Au
	72	860519/2020	212.7		GRANTED	Au
	TOTAL		120,144.76			

Exploration done by other parties

- The area remains poorly explored with no recorded historic exploration.
- Servico Geologico do Brasil (Geological Survey of Brazil) has undertaken regional geological field mapping and regional airborne geophysical surveying.

CRITERIA	COMMENTARY
Geology	- The basement rocks underlying Brazil formed during the Precambrian and include the São Francisco Craton which outcrops in Minas Gerais and Bahia. - The Azimuth 125 REE Project is located within the Tocantins Structural Province in the Brasília Fold Belt, which is part of the Goiás Magmatic Arc. The Tocantins Province is composed of a series of SSW-NNE trending terranes of mainly Proterozoic ages which stabilised in the Neoproterozoic in the final collision between the Amazon and São Francisco cratons. The Tocantins Province is divided into an eastern and western section. The eastern section is located in a N-S arc-shaped folded belt known as the Brasília Folded Belt (BFB), which extends northwards to the state of Tocantins and southwards to the state of Minas Gerais. The Brasília Fold Belt consists of a deformed mobile belt deposited during the Meso to Neoproterozoic in the western margin of the São Francisco Craton over a basement of Paleoproterozoic granitic-gneissic terrane affected by Mesoproterozoic deformation. The Azimuth REE Project lies at the centre of the BFB on the western margin of the belt and extends from adjacent to Appia's PCH deposit to \ near CBMM's Araxa REE deposit. It lies in the Goiás Alkaline Province of the BFB, an area dominated by Upper Cretaceous alkaline magmatism. - The area is transected by the Azimuth 125° (AZ125°) Lineament. This is crustal scale feature that cuts across the whole of Brazil. It is associated with basic dyke swarms and intrusives. The Azimuth REE Project has claims over the area where the AZ125° intersects the NE trending Transbrasiliano Lineament. - The northern permits are underlain by Iporá Granite with carbonatite (phosphate intrusion) and detrital-alluvial cover. The southern permits are underlain by gabbros of the Goiás Alkaline Province with overlying detrital-alluvial cover. - The mineralisation sought falls into two categories: - Carbonatite hosted REE - Rare earth ionic adsorption clay-(IAC) style deposits - IAC is the focus of exploration at the Project. Ionic clay-style deposits are especially important because they are rich in heavy rare earth elements (HREEs), which are more valuable and less abundant than the light rare earth elements (LREEs). These include elements like dysprosium and terbium, which are essential for many high-tech applications, including wind turbines, hybrid vehicles, and defence technologies.
Drill hole information	- No historic drilling exists. - All auger holes were drilled vertically - Hole information is tabulated in the body of the announcement.
Data aggregation methods	Not applicable.
Relation between mineralisation widths and intercept lengths	It is assumed the mineralised horizon is horizontal, but is yet to be confirmed by RC drilling.
Diagrams	See diagrams included in this announcement.
Balanced reporting	All data points are presented.
Other substantive exploration data	No substantive exploration data exists for the permit areas other than the airborne geophysical surveys.
Further work	Pattern drilling will be considered once the current work programme is completed.