

Caldeira Project Pilot Plant Delivering Exceptional Performance

Highlights

- Optimisation has achieved outstanding MREO **recoveries of 80%** during May
- Magnet rare earth oxide (**MREO**) recoveries **averaging 71%** in Mixed Rare Earth Carbonate (**MREC**)
- More than **200 kilograms of MREC produced** to date have been provided to:
 - **existing and potential offtake partners** in the United States, Europe and Asia for product qualification
 - Magbras in Brazil for **further downstream** development
 - used in studies for **development of oxide separation** in Brazil
- **MREC impurities are trending lower** while recycling of water and ammonium sulphate has **consistently achieved target**

Meteoric Resources NL (**Meteoric**) is pleased to provide an update on the performance of the Pilot Plant at the Caldeira Rare Earth Project (**Caldeira** or **Project**) in Minas Gerais, Brazil.

The Pilot Plant was commissioned in late 2025 and, inclusive of a ramp-up period, performance results for the first five months of operations are now available.

Ore from the Capão do Mel (**CDM**) starter pit has been processed during this period to assess the impact of deposit variability on process plant performance. Approximately 43 tonnes of CDM ore has been processed at the targeted throughput rate of 600kg per day. MREC production from this throughput has consistently averaged higher than the forecast 2kg per day.

Recoveries to MREC for the lite MREO - neodymium and praseodymium (**NdPr**) and heavy MREO - dysprosium and terbium (**DyTb**) have averaged 71% over the operational period. This is in line with the May 2025 Pre-Feasibility Study estimate which was based on detailed testwork and piloting completed at the Australian Nuclear Science and Technology Organisation (**ANSTO**). Total rare earth oxide (**TREO**) recovery of 61% is materially above the PFS estimate.

Exceptional recoveries of 80% for MREO and 74% for TREO were achieved over the last month, reflecting ongoing process optimisation, iterative flowsheet improvements and ore quality.

In addition, recoveries of other critical rare earths listed on the US Defence Industrial Base Consortium Supply List have averaged: Yttrium 58%, Samarium 66%, Gadolinium 62% and Ytterbium 31%. Treatment of these elements has also been optimised over the operating period and recoveries have increased by approximately 10%.

Other important benchmarks that have been met or exceeded, include:

- MREC impurities below 2%
- MREC output above 2kg per day

- MREC is not classified as radioactive as Uranium and Thorium remain well below legislated levels of 10Bq/g per gram
- Water recovery for recycling 85%
- Ammonium sulfate recovery for recycling 90%
- Plant availability of 95%

Costs of operations continue to track in line with budget.

Bulk MREC samples have been provided to a range of groups for separation testwork and product qualification, including existing partners Neo Performance Materials in Europe, Ucore and MTM in the United States. Other potential offtake partners in these regions and Asia have also received samples of MREC for product qualification. Feedback received from these groups supports the results which Meteoric has received from its independent technical analysis and validates the quality of the Caldeira product which is being produced at the Pilot Plant.

The operating data generated to date provides a strong basis to support the development of the Definitive Feasibility Study and delivers a high level of confidence for the scale-up of selected equipment packages at the commercial plant. To this extent supplier performance guarantees have already been secured and further vendor engagement is underway to finalise additional guarantees as the Project progresses into detailed engineering.

Commenting on the Pilot Plant, Meteoric Managing Director and CEO Stuart Gale said:

“Results from our first five months of Pilot Plant operation have been excellent and exceed our expectations. It has validated the investment Meteoric has made in metallurgical and process testwork, along with the assumptions made in our studies to date.

“The exceptionally high NdPr and DyTb combined recovery of 80% in the past month gives us encouragement that we may ultimately be able to exceed our targeted MREO recoveries by applying the learnings of the piloting program and capitalising on our +4,000ppm reserve material. In addition to the strong MREO recoveries, rare earths on the United States critical minerals list like yttrium, samarium, gadolinium and ytterbium are all recovering well.

“Feedback from current and potential offtake partners has been very supportive, particularly with MREC impurities consistently falling below 2%. In parallel to the separation testwork of these groups, Meteoric will be conducting its own studies to support the long-term objective of conducting rare earth separation in Brazil.”

This release has been approved by the Board of Meteoric Resources NL.

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Some statements in this document may be forward-looking statements. Such statements include, but are not limited to, statements with regard to capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for minerals prices, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as “will”, “expect”, “anticipate”, “believe” and “envisage”.

By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside Meteoric’s control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation.

The information in this announcement that relates to exploration results is based on information reviewed, collated and fairly represented by Dr Carvalho a Competent Person and a Member of the Australasian Institute of Mining and Metallurgy and an Executive Director of Meteoric Resources NL. Dr. Carvalho has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, 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. Dr. Carvalho consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this announcement that relates to the metallurgical results were compiled by Tony Hadley who is an employee of Meteoric resources and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Hadley has sufficient experience that is relevant to the metallurgical testwork which was undertaken to qualify as a Competent Person as defined in the 2012 JORC Code. Mr. Hadley consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the Ore Reserves in this publication and originally released to ASX on 21 July 2025. The Company confirms that all material assumptions and technical parameters underpinning the probable ore reserve estimates continue to apply and have not materially changed. The Company confirms that the form and context in which Interline Engineering Consultants’ findings are presented have not been materially modified.

The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources in this publication and previously released to ASX on 12 March 2025 and 15 April 2025. The Company confirms 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 BNA Mining Solutions findings are presented have not been materially modified.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> For powered Auger drill holes, tarpaulins were placed on either side of the hole and samples of soil and saprolite were collected every 1m of advance, logged, photographed with subsequent bagging of the sample in plastic bags. For Aircore drill holes, two (2) metre composite samples are collected from the cyclone of the rig in plastic buckets. The material from the plastic buckets is passed through a single tier, riffle splitter which generates a 50/50 split. One half is bagged and numbered for submission to the laboratory, and the other half bagged and given the same number, then stored as a duplicate at the core facility in Poços de Caldas.
Drilling techniques	<ul style="list-style-type: none"> Powered auger drilling employed a motorised post hole digger with a 4 inch diameter. All holes were drilled vertical. The maximum depth achievable was 20m, providing the hole did not encounter fragments of rocks/boulders within the weathered profile and/or excessive water. Final depths were recorded according to the length of rods in the hole. Aircore drilling was completed using a HANJIN 8D Multipurpose Track Mounted Drill Rig, configured to drill 3-inch Aircore holes. The rig is supported by an Atlas Copco XRHS800 compressor which supplies sufficient air to keep the sample dry down to the current deepest depth of 73m. Drilling is stopped at 'blade refusal' when the rotating bit is unable to cut the ground any further. This generally occurs in the transition zones (below clay zone and above fresh rock). All holes are drilled vertical.
Drill sample recovery	<ul style="list-style-type: none"> For powered Auger, recovery was estimated visually based on the amount of sample recovered per 1m interval drilled. Recoveries were generally in a range from 75% - 100%. If estimates dropped below 75% recovery in a 1m interval, the field crew aborted the drill hole and redrilled the hole. For Aircore, every 2m composite sample is collected in plastic buckets and weighed. Each sample averages approximately 12kg. This is considered acceptable given the hole diameter and specific density of the material.
Logging	<ul style="list-style-type: none"> For powered Auger, material is described in a drilling bulletin every 1m and photographed. The description is made according to the tactile-visual characteristics, such as material (soil, colluvium, saprolite, rock fragments); material color; predominant particle size; presence of moisture; indicator minerals; extra observations. For Aircore, material is logged at the drill rig by a geologist. Logging focused on soil (humic) horizon, saprolite/clay zones and transition boundaries. Other parameters recorded includes: grainsize, texture and colour, which can help to identify the parent rock before weathering. The chip trays of all drilled holes have a digital photographic record and are retained at a Core facility in Poços de Caldas.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Plant feed composite material (ROM) is generated at several-day intervals by applying cone-and-quartering of selected Aircore and powered Auger samples, comingled using shovels and rakes, ensuring the final blend met the target head grade of 4,000–5,000 ppm TREE. Only clay material was considered.
Quality of assay data and laboratory tests	<p><u>Pilot Plant Samples</u></p> <ul style="list-style-type: none"> Laboratory used: All samples were analysed by SGS Geosol (Brazil), an ISO/IEC 17025-accredited facility listed in the Inmetro RBLLE laboratory accreditation register. Analytical methods: SGS operates under globally standardized geochemistry procedures, including validated analytical methods, SOPs, and consistent workflows enforced through the SGS Laboratory Information Management System (SLIM). Internal laboratory QA/QC: The lab applies routine internal quality controls, including certified reference materials (CRMs), blanks, preparation duplicates, reagent blanks, and statistical process-control

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	<p>checks to monitor accuracy, precision, and contamination throughout sample preparation and analysis.</p> <ul style="list-style-type: none"> ▪ Appropriateness of methods: All analytical methods used by SGS are internationally recognised and appropriate for the sample matrix and target analytes. ▪ Head and Leach Residue (REE extractions) were determined by Lithium metaborate fusion followed by inductively coupled plasma mass spectrometry (ICPMS) or ICP optical emission spectrometry (ICPOES), as appropriate. ▪ Sulfate levels in the Spent Clay were determined by a hydrochloric acid digest followed by ICP-OES. <p><u>MREC Samples</u></p> <ul style="list-style-type: none"> ▪ The concentrations of the rare earth elements (REE) and impurity elements were determined using an aqua regia digest followed by inductively coupled plasma mass spectrometry (ICPMS) or ICP optical emission spectrometry (ICPOES), as appropriate. ▪ Loss on ignition was determined on the sample by, firstly, drying slowly over 48 hours at 70°C followed by slow heating to 1000°C with a hold time at temperature of two hours. 																																																			
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> ▪ All data is in digital format and stored in a cloud server, also the company maintains a backup in a desktop computer to assure that the data could be restored if any problem occurs with the cloud or with the desktop server. ▪ Raw assays that are received as Elemental data (ppm) from SGS Geosol laboratories are converted to Element Oxide data using the following conversion factors: <table border="1" data-bbox="695 1081 1211 1821"> <thead> <tr> <th>Symbol</th> <th>Conversion Factor</th> <th>Oxide Species</th> </tr> </thead> <tbody> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Ce</td><td>1.2284</td><td>CeO₂</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>Lu₂O₃</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y₂O₃</td></tr> <tr><td>Sc</td><td>1.5338</td><td>Sc₂O₃</td></tr> </tbody> </table>	Symbol	Conversion Factor	Oxide Species	La	1.1728	La ₂ O ₃	Ce	1.2284	CeO ₂	Pr	1.2082	Pr ₆ O ₁₁	Nd	1.1664	Nd ₂ O ₃	Sm	1.1596	Sm ₂ O ₃	Eu	1.1579	Eu ₂ O ₃	Gd	1.1526	Gd ₂ O ₃	Tb	1.1762	Tb ₄ O ₇	Dy	1.1477	Dy ₂ O ₃	Ho	1.1455	Ho ₂ O ₃	Er	1.1435	Er ₂ O ₃	Tm	1.1421	Tm ₂ O ₃	Yb	1.1387	Yb ₂ O ₃	Lu	1.1372	Lu ₂ O ₃	Y	1.2699	Y ₂ O ₃	Sc	1.5338	Sc ₂ O ₃
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<p>Location of data points</p>	<ul style="list-style-type: none"> ▪ The ROM material comes from powered Auger and Aircore samples from the Capão do Mel deposit. 																																																			
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> ▪ Samples were selected from >100 drill holes to be representative of optimised Pits at Capão do Mel, which represent the first 3-5 years of processing in the Caldera Prefeasibility Study (PFS). Material >4,000ppm TREO was targeted. 																																																			
<p>Orientation of data in relation to</p>	<ul style="list-style-type: none"> ▪ The mineralisation is flat lying and occurs within the saprolite/clay zone of a deeply developed regolith (reflecting topography and weathering). Vertical sampling from the drilling is appropriate. 																																																			

Criteria	Commentary
geological structure	
Sample security	<ul style="list-style-type: none"> ▪ Samples were recovered from Core Shed or the Meteoric sample farm and transported to the Pilot Plant facility to be prepared.
Audits or reviews	<ul style="list-style-type: none"> ▪ No independent audit of mixing techniques used in the Pilot Plant has been completed.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> ▪ No change since reported in Quarterly Activities Report on 30 April 2026. ▪ Given the rich history of mining and current mining activity in the Poços de Caldas there appears to be no impediments to obtaining a License to operate in the area.
Exploration done by other parties	<ul style="list-style-type: none"> ▪ Licenses under the TOGNI Agreement: significant previous exploration exists in the form of surface geochem across 30 granted mining concessions, plus: geologic mapping, topographic surveys, and powered auger (1,396 holes for 12,963 samples). ▪ MEI performed Due Diligence on historic exploration and are satisfied the data is accurate and correct (refer ASX Release 13 March 2023 for a discussion). ▪ Licenses under VAGINHA and RAJ Agreements: no previous exploration exists for REEs.
Geology	<ul style="list-style-type: none"> ▪ The Alkaline Complex of Poços de Caldas represents in Brazil one of the most important geological terrain which hosts deposits of ETR, bauxite, clay, uranium, zirconium, rare earths and leucite. The different types of mineralization are products of a history of post-magmatic alteration and weathering, in the last stages of its evolution (Schorscher & Shea, 1992; Ulbrich et al., 2005), The REE mineralisation discussed in this release is of the Ionic Clay type as evidenced by development within the saprolite/clay zone of the weathering profile of the Alkaline syenite basement as well as enriched HREE composition.
Drill hole Information	<ul style="list-style-type: none"> ▪ Samples were selected from more than 100 powered Auger and Aircore drill holes, determined to be representative of Clay ore material from optimised Pits at Capão do Mel. This Clay material represent the first 3-5 years of processing in the Caldera Prefeasibility Study (PFS).
Data aggregation methods	<ul style="list-style-type: none"> ▪ Mineralised Intercepts are reported with a minimum of 4m width, lower cut-off 1000ppm TREO, with a maximum of 2m internal dilution. ▪ High-Grade Intercepts reported as “including” are reported with a minimum of 2m width, lower cut-off 3000 ppm TREO, with a maximum of 1m internal dilution. ▪ Ultra High-Grade Intercepts reported as “with” are reported with a minimum of 2m width, lower cut-off 10,000 ppm TREO, with a maximum of 1m internal dilution.
Mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ▪ All holes are vertical and mineralisation is developed in a flat lying clay and transition zone within the regolith. As such, reported widths are considered to equal true widths.
Diagrams	<ul style="list-style-type: none"> ▪ Photos provided in the body of the text.
Balanced reporting	<ul style="list-style-type: none"> ▪ The results discussed cover a period of 5 months production and as such are considered representative of Pilot Plant performance.
Other substantive exploration data	<ul style="list-style-type: none"> ▪ A maiden Inferred resource was published to the ASX on May 1st 2023 estimated from 1,379 drill holes for 13,309m to a maximum depth of 20m. ▪ Subsequent updated resources were published to the ASX for Soberbo, Capão do Mel and Figueira deposits on 13 May 2024, 12 June 2024, and 04 August 2024 respectively. Updated resources were published to the ASX for Dona Maria 1 & 2 and Cupim Vermelho Norte deposits on 12 March 2025. A maiden resource estimate at Barra do Pacu was published on ASX on 15 April 2025.
Further work	<ul style="list-style-type: none"> ▪ Proposed work is discussed in the body of the text.

APPENDIX 2: Caldeira Project Mineral Resource Estimate

Table 1: Global Caldeira Project MRE by license at 1,000ppm TREO cut-off (refer MEI Announcements dated 1 May 2023, 14 May, 13 June 2024, 5 August 2024, 12 March 2025 and 15 April 2025). Differences may occur due to rounding.

Licence	JORC Category	Material Type	Tonnes Mt	TREO ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	MREO ppm	MREO /TREO
Capão do Mel	Measured	Clay	11	3,888	222	586	6	28	842	21.7%
Cupim Vermelho Norte	Measured	Clay	26	2,607	156	477	5	25	663	25.4%
Total	Measured		37	2,983	176	509	5	26	715	24.0%
Capão do Mel	Indicated	Clay	74	2,908	163	449	5	23	640	22.0%
Barra do Pacu	Indicated	Clay	77	2,917	143	376	4	21	545	18.7%
Soberbo	Indicated	Clay	86	2,730	165	476	5	23	669	24.5%
Figueira	Indicated	Clay	138	2,844	145	403	5	28	582	20.5%
Cupim Vermelho Norte	Indicated	Clay	90	2,658	163	489	5	26	683	25.7%
Dona Maria 1	Indicated	Clay	111	2,253	128	376	4	23	531	23.6%
Dona Maria 2	Indicated	Clay	53	2,303	132	390	4	22	548	23.8%
Total	Indicated		629	2,668	148	422	5	24	599	22.4%
Total	Measured + Indicated		666	2,685	150	427	5	25	605	22.5%
Capão do Mel	Inferred	Clay	32	1,791	79	207	2	13	302	16.9%
Barra do Pacu	Inferred	Clay	190	2,153	112	296	3	18	429	19.9%
Soberbo	Inferred	Clay	89	2,713	167	478	5	24	675	24.9%
Figueira	Inferred	Clay	9	3,105	139	379	5	28	551	17.7%
Cupim Vermelho Norte	Inferred	Clay	78	2,237	126	377	4	23	530	23.8%
Dona Maria 1	Inferred	Clay	49	2,225	121	383	5	25	534	24.0%
Dona Maria 2	Inferred	Clay	29	2,324	130	397	4	21	552	23.8%
Capão do Mel	Inferred	Transition	25	1,752	86	239	3	14	341	19.5%
Barra do Pacu	Inferred	Transition	122	1,837	95	253	3	15	355	19.9%
Soberbo	Inferred	Transition	54	2,207	138	395	4	20	558	25.3%
Figueira	Inferred	Transition	24	2,174	115	328	4	21	468	21.5%
Cupim Vermelho Norte	Inferred	Transition	67	1,665	92	281	3	17	393	23.6%
Dona Maria 1	Inferred	Transition	42	1,703	95	275	3	17	390	22.9%
Dona Maria 2	Inferred	Transition	21	1,615	86	251	3	15	355	22.0%
Total	Inferred		832	2,097	115	325	4	19	462	22.0%
Total	Measured + Indicated + Inferred		1,497	2,359	130	370	4	21	526	22.3%

Table 2: Caldeira JORC Ore Reserves (ASX Release 21 July 2025)

Classification	Tonnes (Mt)	TREO ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Cont. REO kt
Capão do Mel (CDM)					
Proved	-	-	-	-	-
Probable	37.1	3,925	243	667	146

Total	37.1	3,925	243	667	146
Figueira (FIG)					
Proved	-	-	-	-	-
Probable	16.1	4,951	450	938	75
Total	16.1	4,951	450	938	75
Soberbo (SOB)					
Proved	-	-	-	-	-
Probable	24.3	3,735	256	736	91
Total	24.3	3,735	256	736	91
Barra do Pacu (BDP)					
Proved	-	-	-	-	-
Probable	25.5	4,130	234	621	105
Total	25.5	4,130	234	621	105
Total Caldeira Project					
Proved	-	-	-	-	-
Probable	103.0	4,091	276	714	416
Total	103.0	4,091	276	714	416

1. Ore Reserve estimates are not precise calculations, being dependent on the underlying Mineral Resource and based on limited information in respect to modifying factors. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate.
2. Only material that is CLAY and has a resource classification of Measured or Indicated have been included.
3. Measured and Indicated have been converted to Probable only.
4. Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).