

# Quarterly Report – December 2023

## Highlights

- Leading Australian Engineering firm Ausenco awarded Caldeira Project Scoping Study contract. A Scoping Study is underway focusing on the 3 Southern Mining Licences of Figuera, Capão do Mel and Soberbo and is scheduled for completion in Q1 2024
- Metallurgical testwork confirms outstanding results:
  - Recoveries at Caldeira had the highest Ionic Adsorption Clay recoveries recorded globally using a standard AMSUL wash
  - Metallurgical testwork for recoveries across all six deposits tested displayed consistent strong ionic behaviour over thick intervals
- Infill resource drilling continues at pace with:
  - Results from 277 aircore holes at Soberbo Deposit delivering remarkable REE mineralisation with MREO contents often well above the estimated project average of 24% in the Inferred Resource
  - Resource infill drilling at Soberbo averaged 16.2m, extending mineralisation in the clays by more than 7m (77% increase) with significant positive implications for the upcoming new resource estimate
- Appointment of leading REE expert Mr. Peter Gundy as Non-Executive Director
- Completion of sale of Juruena Gold Project in Brazil to Keystone Resources Ltd with balance of purchase price of AUD\$27,650,000 received
- Environmental permitting work with ALGER Consultoria continues to progress on Schedule for Q4 2025 Construction Permit target.

Meteoric Resources NL (**ASX: MEI**) (**Meteoric** or **the Company**) is pleased to provide its Quarterly Report for the three-month period ending 31<sup>st</sup> December 2023.

During the period, Meteoric continued to advance its Caldeira Rare Earth Ionic Clay Project in the State of Minas Gerais in Brazil, made a key board appointment of Non-Executive Director Mr. Peter Gundy, and completed the sale of the Juruena Gold Project.

## Caldeira Project Scoping Study

Early in the quarter, Meteoric advised it had awarded the Caldeira Project Scoping Study (Class 5 Engineering cost estimate) to the highly regarded international engineering group, Ausenco Services Pty Ltd (**Ausenco**). Meteoric appointed Ausenco to oversee the Scoping Study given their significant track record in the REE space, with Ausenco's Study team in Perth and Latin America being highly experienced with recent REE study and project engagements in both regions.

Working in concert with teams in Australia and Brazil, the Scoping Study is scheduled for completion in Q1 2024 and will comprise the review and assessment of:

- Plant location options

- Infrastructure and logistics options
- Mining options (base case being conventional Excavator and Truck)
  - Fleet and equipment sizing
  - Capital and Operating costs
  - Mining and backfilling Schedules
  - Backfilling options
  - Water management
- Processing options (with base case being Agitated tank leach)
  - Throughput and equipment sizing and sensitivity analysis
  - Capital and operating costs
- Project implementation schedule
- Project risk register and assessment
- Financial modeling.

The Study will focus only on the three Southern licences of Figuera, Capão do Mel and Soberbo. This follows the Meteoric development strategy of the initial MREC facility being sited to process IAC ore types from these three licenses only.

This Southern licence only strategy also aligns with:

- Alger Consulting EIA scope of work focusing on 3 Southern licences.
- The infill drilling program for the 200Mt resource upgrade to Measured and Indicated status.
- The ANSTO metallurgical testwork package, which will ultimately provide an optimised flowsheet for the three Southern licences.

Progress by Ausenco and subconsultants over the December Quarter remains on schedule for a Q1 completion date.

## Environmental Permitting

Environmental consultants Alger remain on track with ongoing emphasis on data collection and field studies for the EIS report, due to be tabled in Q2 2024.

Completed work from ALGER and subconsultants included:

- Social Governance Report
- Hydrogeologic review of surface water sources
- Ongoing Flora and Fauna fieldwork

The Environmental team continues to build with the key appointment of a Community Relations analyst.

## Metallurgical Testwork Delivers Outstanding Recoveries

Meteoric has engaged Australia's leading laboratory in ionic clay leaching – Australian Nuclear Science and Technology Organisation (**ANSTO**) to assist with its process flowsheet development. The metallurgical testwork program was designed to:

- Validate the results of previous testwork undertaken by JOGMEC in 2019 and reported by MEI to the ASX in December 2022; and
- Assess the metallurgical variability both laterally and at depth across each of the deposits, paying particular attention to the clay zone below known JOGMEC drilling, the current resource estimation boundary, and the previous SGS testwork.

Metallurgical testwork commenced at ANSTO in July 2023 on 3m composite samples from forty-one (41) diamond drill cores completed as part of the Company's metallurgical sampling program in March-July 2023. The program targeted the six deposits which currently define the Company's stated Inferred Resource Estimates: Capão Do Mel, Soberbo, Figueira, Cupim Vermelho Norte, Donna Maria 1, and Donna Maria 2 (Figure 1). For full Collar Table of holes reported see Appendix 1, ASX Release 8 December 2023 *"Metallurgical Testwork Confirms Outstanding Ionic Clay Recoveries for Caldeira REE Project"*.

As of 8<sup>th</sup> December 2023, standard AMSUL washes had been completed for 33 diamond drill holes for a total of 190 composite diagnostic leaches. The remaining results are pending and are expected in January 2024.

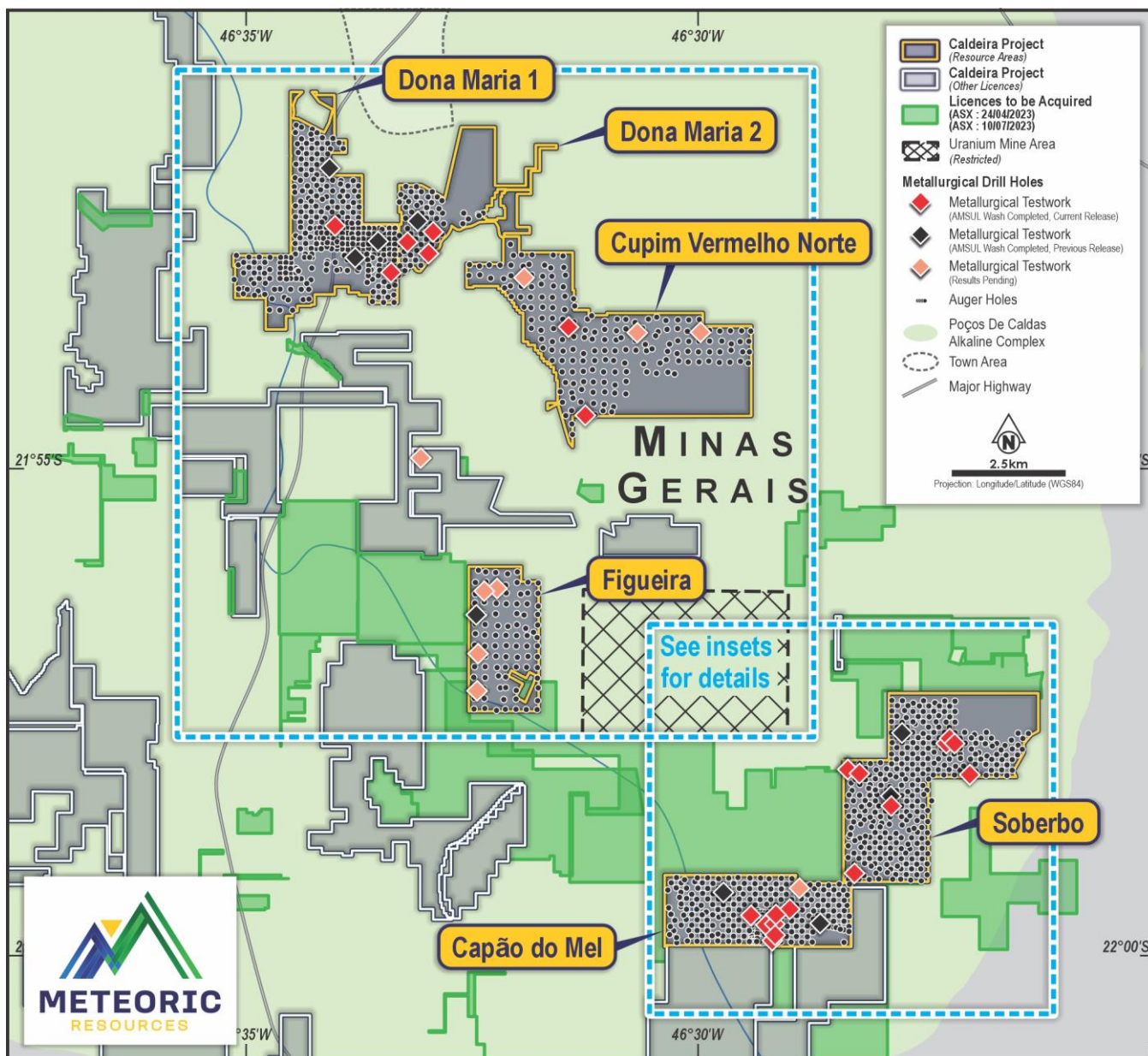


Figure 1: Metallurgical Drill Hole Location Plan, Caldeira Project.

During the quarter Meteoric advised that additional results of the metallurgical test work being undertaken at Caldeira continue to demonstrate excellent leach extractions for Ionic Clays<sup>1</sup> with Rare Earth Element recoveries across all six deposits tested displaying consistent strong ionic behaviour over thick intervals using a standard AMSUL wash test (unoptimised).

The testwork reported during the quarter was from diamond drill cores collected during a metallurgical sampling program completed by Meteoric across the six deposits with defined Inferred Resources. These results build on historical testwork from a single composite sample at the Capo do Mel deposit which produced outstanding results including leachability averaging 70%.

Importantly, these latest metallurgical results focused on de-risking the process recoveries for the Southern

<sup>1</sup> ASX:MEI 20/12/2023 Caldeira Confirmed as Ionic Adsorption Clay REE Project

Licences of Capão do Mel and Soberbo, which are both integral as near-term sources of ore feed for Meteoric's proposed Southern licence processing plant location and the ongoing focus for resource infill drilling, engineering and permitting packages.

## Results

Mineralisation across all deposits tested to date display strong ionic behaviour over thick intervals using a standard AMSUL wash test. The best results from each of the tenements include:

- 81% magnet metal extractions over 10.4m from CVNDD001 with a high of 88% including 90% for Nd, 86% for Pr, 79% for Tb and 84% for Dy.
- 73% magnet metal extractions over 8.4m from SBDD009 with a high of 75% including 76% for Nd, 73% for Pr, and 63% for Tb & Dy respectively.
- 80% magnet metal extractions over 5.6m from DM2DD001 with a high of 85% including 87% for Nd, 81% for Pr, 73% for Tb and 77% for Dy.
- 73% magnet metal extractions over 8.7m from CDMDD009 with a high of 75% including 77% for Nd, 74% for Pr, 55% Tb and 55% for Dy.
- 72% magnet metal extractions over 6.6m from CDMDD010 with a high of 78% including 80% for Nd, 77% for Pr, 47% Tb and 43% for Dy.

Significantly, 48 different metallurgical composites across ALL deposits had a TREO head grade of >4,000ppm and achieved average Magnetic REE leach extractions of 73% with 74% Nd, 71% Pr, 57% Tb and 56% Dy with a standard AMSUL wash (unoptimised) at pH4.

Typically, the holes that displayed the highest metallurgical recoveries are in the strongly weathered clay zone above the transition zone and the basement. Samples in the top part of the hole (from 2-4m) show a cerium enrichment zone where cerium has been oxidised from Ce+3 to Ce+4, which has resulted in significant precipitation of Cerianite (CeO<sub>2</sub>), whilst the remaining liberated rare earth elements travel down the profile until they physically adsorb onto the kaolinite clay surface. The zone of enrichment of rare earth elements is observed to be 5-30m thick and shows exceptional recoveries under standard ammonium sulphate leaching conditions.

The results clearly show the rare earth extractions achieved from the six deposits evaluated under standard ammonium sulphate wash conditions (currently still unoptimised) respond extremely favourably, and unequivocally validate the historical recoveries that this is a true rare earth ionic clay deposit.

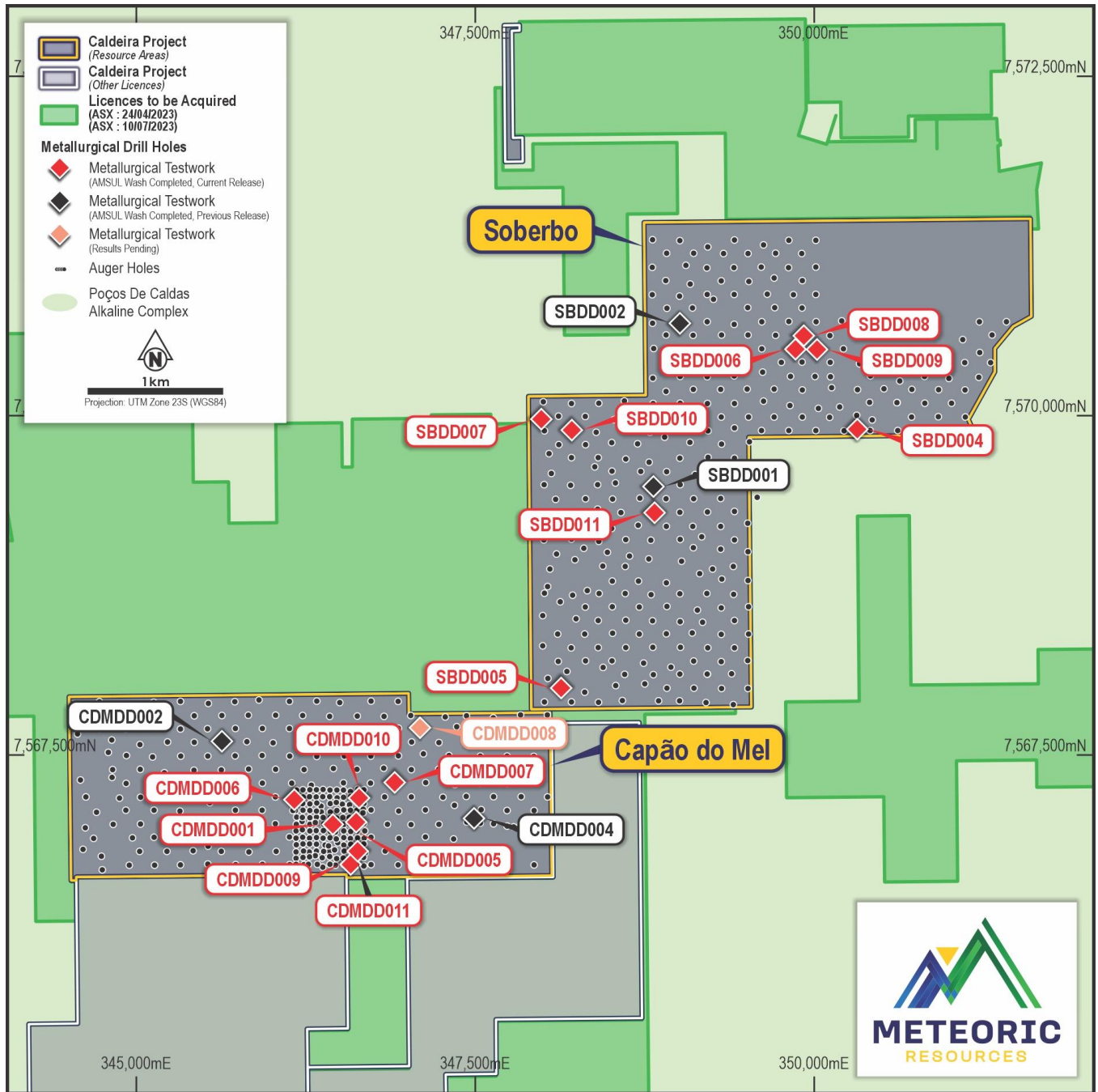
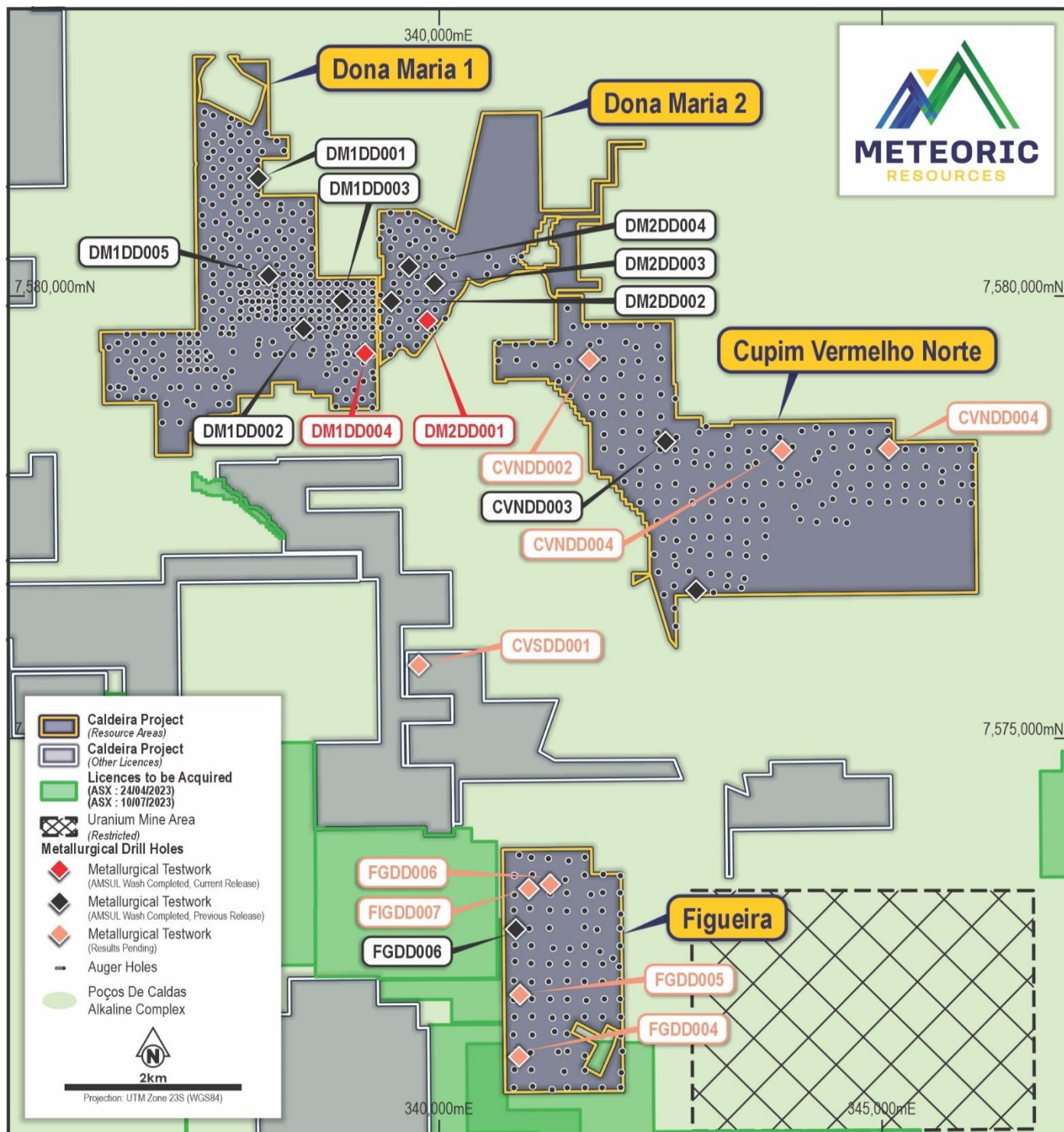


Figure 2: Metallurgical Drill Hole Location Plan, Capão do Mel and Soberbo tenements



**Figure 3: Metallurgical Drill Hole Location Plan, Dona Maria 1 & 2, Cupim Vermelho Norte and Figueira tenements**

For full tables of Metallurgical Drill Holes-REE Recoveries by depth see Tables 1-10 of ASX Announcement 8 December 2023 “*Metallurgical Testwork Confirms Outstanding Ionic Clay Recoveries for Caldeira REE Project*”.

This initial testwork has contributed significantly to MEI’s knowledge base on metallurgical performance laterally, at depth and across different lithologies. The new information will be built into a geometallurgical model for the Caldeira Project. Further leaching parameters will be investigated to further optimise recoveries.

## Leaching Program

Diagnostic leach tests have continued throughout December and January on the remaining metallurgical holes that sit outside the 10-year mine plan. Importantly, the CDM and Soberbo deposits that underpin the starter pits in the scoping study have been completed. A master composite of the CDM deposit is currently being constructed from all of the metallurgical drill holes that return satisfactory metallurgical performance. The leaching program will aim to optimise the extractions by evaluating different lixivants, lixiviant concentration, % solids and pH.

## Impurity Removal

Following the leaching program, impurity removal optimisations will be performed to improve the rejection of deleterious elements such as aluminium, iron, silica, calcium, thorium and uranium, whilst maximising the recovery of the rare earths. The testwork will aim to evaluate impurity removal conditions including pH, alkali type, temperature, residence time, % solids and solid liquid separation performance.

Meteoric notes it is customary in rare earth processing to conduct impurity removal post leaching by increasing the pH and performing selective precipitation with an alkali slurry. The diagnostic leach tests undertaken do not accurately quantify impurities such as Al, Fe, Th, U that may be present in the leach liquor. Impurity removal analysis will be undertaken on a larger master composite that can accurately quantify the impurities in the leach liquor.

## Rare Earth Precipitation

Following the impurity removal program, rare earth precipitation tests will be performed to generate a saleable rare earth product. The testwork will evaluate the type of precipitation agent, pH, temperature, residence time, % solids and solid liquid separation performance.

## Schedule

The metallurgical scope is comprehensive and will run until the end of April 2024, to enable adequate characterisation of each of the prospects. Some delays have been experienced with assay turnaround times which is currently a problem all over Australia. As milestone results come to hand, they will be reported to the market. The precipitation of MREC from the CDM master composite is targeted in late January – early February.

## Drilling Extends High-Grade REEs Beneath Soberbo Resource

In December, Meteoric announced that assay results received from 277 AC drill holes (for 4,409.5m completed in from September to November 2023) at the Soberbo Deposit continued to highlight remarkable REE mineralisation, with MREO contents often well above the estimated project average of 24% in the Inferred Resource, including:

- 18m @ 4902ppm TREO [0m], 28% MREO - SBBAC0020
- 15m @ 5977ppm TREO [0m], 32% MREO - SBBAC0056
- 28m @ 3300ppm TREO [0m], 27% MREO *including 16m @ 4276ppm TREO, 33% MREO* - SBBAC0075
- 11.2m @ 4607ppm TREO [0m], 31% MREO - SBBAC0076
- 18m @ 5192ppm TREO [6m], 29% MREO - SBBAC0084
- 19m @ 5106ppm TREO [0m], 25% MREO *including 10m @ 8218ppm TREO, 30% MREO* - SBBAC0088
- 22.4m @ 4025ppm TREO [0m], 25% MREO *including 12m @ 5673ppm TREO 29% MREO* - SBBAC0124
- 13.5m @ 5084ppm TREO [0m], 30% MREO *including 8m @ 7074ppm TREO, 32% MREO* - SBBAC0135



- 24m @ 3365ppm TREO [0m], 25% MREO including 12m @ 5149ppm TREO, 30% MREO - SBBAC0139
- 40.8m @ 2394ppm TREO [0m], 22% MREO including 10m @ 5519ppm TREO, 30% MREO - SBBAC0142
- 17m @ 6686ppm TREO [0m], 31% MREO including 13m @ 8306ppm TREO, 35% MREO - SBBAC0153
- 14m @ 4661ppm TREO [0m], 30% MREO including 10m @ 5734ppm TREO, 33% MREO - SBBAC0157
- 21.4m @ 4896ppm TREO [0m], 27% MREO including 18m @ 5586ppm TREO, 29% MREO - SBBAC0161
- 12m @ 6220ppm TREO [0m], 30% MREO - SBBAC0162
- 26.1m @ 3700ppm TREO [0m], 24% MREO including 10m @ 6084ppm TREO, 29% MREO - SBBAC0189
- 22m @ 3201ppm TREO [0m], 27% MREO including 14m @ 4023ppm TREO, 30% MREO - SBBAC0197
- 18m @ 4389ppm TREO [0m], 30% MREO - SBBAC0206
- 27m @ 3195ppm TREO [0m], 25% MREO including 12m @ 4910ppm TREO, 31% MREO - SBBAC0257
- 14.4m @ 4489ppm TREO [0m], 28% MREO - SBBAC0262
- 10m @ 7022ppm TREO [0m], 31% MREO - SBBAC0274

A full list of mineralised intercepts can be found in Appendix 1, ASX Announcement 14<sup>th</sup> December 2023, “High-Grade REEs Extend Beneath Soberbo Resource, Caldeira Project”.

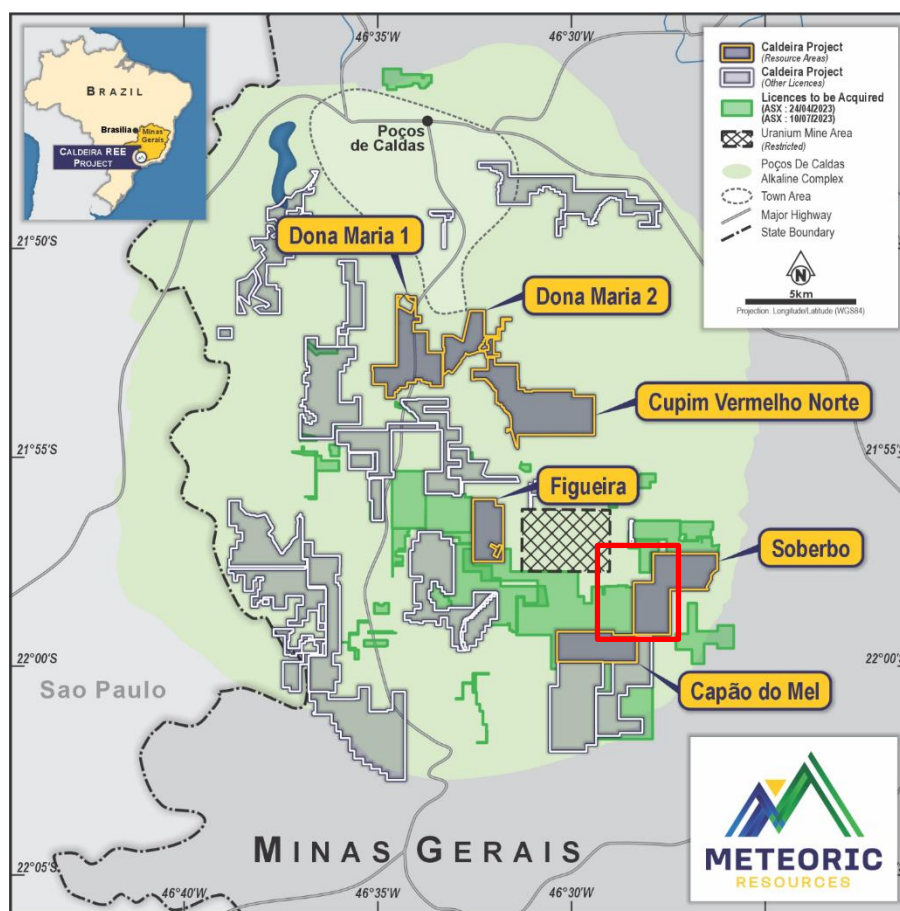


Figure 4. Location of the Soberbo Mining Licence within the Caldeira Project. (Red Box shows Location of Fig 5)

The infill aircore drilling program at Soberbo was designed to delineate the depth extent of the mineralised clays below the Maiden Inferred Resource, to infill the current 200m x 200m auger sampling at sufficient spacing to enable Measured and/or Indicated Resources to be estimated, and to subsequently use these Measured & Indicated Resources to support pending economic studies.

Infill drilling was located on the western half of the deposit on a nominal 100m x 100m drill spacing, targeting several contiguous higher-grade portions of mineralisation that were defined in the historic JOGMEC auger drilling and subsequently in the 1 May 2023 Resource Estimate. A collar table for all drilling is available in Appendix 2, ASX Announcement 14<sup>th</sup> December 2023, "High-Grade REEs Extend Beneath Soberbo Resource, Caldeira Project", and a collar location plan is presented in Figure 5.

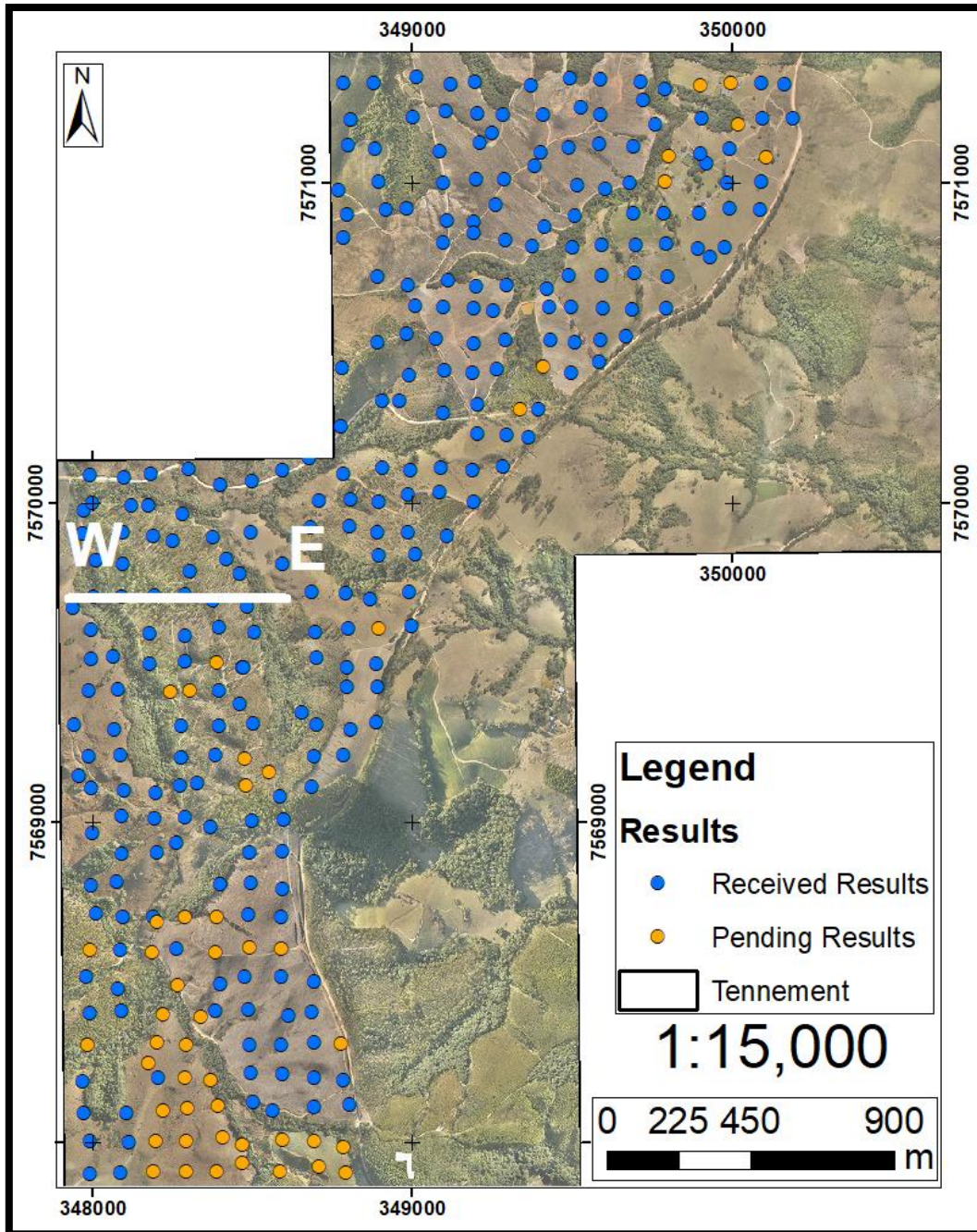


Figure 5. Soberbo AC drill hole location plan.

Aircore drilling at the Soberbo Deposit intersected a varying and sometimes extremely deep clay profile. Holes ranged from 1m on/around outcropping/sub-cropping areas to >70m in several holes. A total of 98 holes (35%) were deeper than 20m, and 27 holes (10%) were deeper than 30m.

Table 1 below shows the average depths of clay observed in historic auger drilling versus the average depth of clay observed in the AC drilling at Soberbo. The depth of the Clay Zone was observed to increase by an average of 77% across the Deposit, at similar TREO grades and MREO percentages. This is highly encouraging for the upcoming Soberbo Resource Update expected in Q1 2024.

**Table 1. Observed depth of mineralised Clay Zone (AUGER v AC Drilling).**

Target	No. AUGER holes	Ave. Depth Clay in AUGER	No. AC holes	Ave. Depth Clay in AC	Increased Depth of Clay (m)	Increased Depth of Clay (%)
Soberbo	323	9.3	277	16.5	7.2	+ 77 %

Notably, these are the first results from Meteoric's owned and operated aircore drill rig. Remaining assay results for the Soberbo Deposit from ALS (Belo Horizonte) will be reported once they have been received and interpreted.

## Mineral Resource Statement – Caldeira Project (ASX: MEI 1/5/2023)

**Table 2. Caldeira REE Project 2023 Mineral Resource Estimate– by licence at 1,000ppm TREO cut-off**

Licence	JORC	Tonnes	TREO	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	MREO	MREO/TREO
	Category	Mt	ppm	ppm	ppm	ppm	ppm	ppm	%
Capão do Mel	Inferred	68	2,692	148	399	4	22	572	21.3%
Cupim Vermelho Notre	Inferred	104	2,485	152	472	5	26	655	26.4%
Dona Maria 1 & 2	Inferred	94	2,320	135	404	5	25	569	24.5%
Figueira	Inferred	50	2,811	135	377	5	26	542	19.3%
Soberbo	Inferred	92	2,948	190	537	6	27	759	25.8%
<b>Total</b>	<b>Inferred</b>	<b>409</b>	<b>2,626</b>	<b>154</b>	<b>447</b>	<b>5</b>	<b>25</b>	<b>631</b>	<b>24.0%</b>

TREO = La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Tm<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub>  
 MREO = Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub>

## Other Projects

### Juruena Gold Project, Brazil

In October, MEI announced it had completed the sale of the Juruena Gold Project in Brazil to Keystone Resources Ltd.

The parties agreed to a US\$20m sale of the Juruena Gold Project in June 2022 (ASX:MEI 03/06/2022), with the first tranche of US\$2.5m having been received by Meteoric in October 2022 (ASX:MEI 05/10/2022).

Following issues with the sale in April 2023, leading to a termination of the transaction (ASX:MEI 03/04/2023) the parties subsequently collaborated privately and amicably towards a resolution and brought about a successful Completion on the original terms, with payment of the balance of US\$17.5m to Meteoric and smooth transition of the Project to Keystone control.

The sale was otherwise on materially the same terms as previously announced to the ASX (ASX:MEI 03/06/2022).

## Palm Springs Gold Project, WA

There was no activity reported at Palm Springs during the December Quarter.

## Webb Diamond JV (Ownership 13.87% MEI / 86% CGN Resources)

The Webb Diamond JV is focused on the evaluation of a large kimberlite field comprising 280 nulls-eye targets and covers an area of 400km<sup>2</sup>. About 23% of the targets have been drill tested with 51 kimberlite bodies identified. There was no activity reported by CGN during the quarter.

## Corporate

### Director Appointment

During the Quarter, MEI made the major board appointment of Mr. Peter Gundy as Non-Executive Director of the Company.

Mr. Gundy brings significant experience within the Rare Earth space to MEI, having previously been the Chairman, CEO and Founder of Neo Material Technologies Inc ("NEM"). From a start-up in 1992, Mr. Gundy created one of world's most successful rare earth companies. With manufacturing plants in China and Thailand, it manufactured a full suite of advanced rare earths used in the global electronics industries and automotive sector. NEM also became #1 in the world in powerful high-tech bonded magnetic materials for the world's electronic industries.

Peter has held executive and non-executive roles on the Boards of several successful companies including Banro Corporation, Canna Royalty Corp and the Potash Corporation of Saskatchewan, which for a time was Canada's largest mining company.

Peter's long history of corporate success and REE knowledge, particularly in the downstream processing and sales areas will no doubt assist the Company greatly as it progresses the Caldeira Project towards development and ultimately, production.

### Change of Address

The Company's Registered Office and Principal Place of Business has changed to:

Level 1, 35 Ventnor Avenue West Perth WA 6005.

The contact telephone number has been updated to +61 8 6166 9112.

### Annual General Meeting

Meteoric's Annual General Meeting was held on Friday, 17 November 2023 where all resolutions were duly passed. For full details of resolutions put to the AGM please see ASX Announcement 17<sup>th</sup> November 2023.

### ASX Additional Information

Meteoric provides the following information pursuant to ASX Listing Rule requirements:

1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure spend during the December Quarter was \$6.77M. Full details of exploration activity during the December 2023 quarter are set out in this report.
2. ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the Quarter.
3. ASX Listing Rule 5.3.5: Payment to related parties of the Company and their associates during the Quarter was \$288,000 cash.

## End Notes

The information contained in this announcement related to the Company's past exploration results is extracted from, or was set out in, the following ASX announcements which are referred to in this Quarterly Activities Report:

- The report released 6 October 2023, "Ausenco Awarded Caldeira REE Project Scoping Study Contract"
- The report released 31 October 2023, "Sale of Juruena Gold Project Completed"
- The report released 13 November 2023, "Director Appointment"
- The report released 17 November 2023, "Results of Meeting"
- The report released 7 December 2023, "Outstanding Ionic Clay Recoveries for Caldeira REE Project" and updated on 8 December 2023
- The report released 14 December 2023, "High-Grade REEs Extend Beneath Soberbo Resource"

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

### For further information, please contact:

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The information in this announcement that relates to mineral resource estimates and exploration results is based on information reviewed, collated and fairly represented by Dr Andrew Tunks who is a Member of the Australasian Institute of Geoscientists and a consultant to Meteoric Resources NL. Dr Tunks 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 Tunks consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Additionally, Dr Tunks confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report. The Company confirms that all material assumptions and technical parameters underpinning the mineral resource estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the mineral resource estimates are presented have not been materially modified.

## Appendix 1 Tenement Holdings

TENEMENT HOLDINGS AS AT 31 DECEMBER 2023				
Tenement	Status	Project	Ownership %	Change in Quarter
E80/4407	Granted	Webb JV	11.5%	(2.37%)
E80/4815	Granted	Webb JV	11.5%	(2.37%)
E80/5121	Granted	Webb JV	11.5%	(2.37%)
E80/5471	Granted	Webb JV	11.5%	(2.37%)
E80/5496	Granted	Webb JV	11.5%	(2.37%)
E80/5499	Granted	Webb JV	11.5%	(2.37%)
E80/5573	Granted	Webb JV	11.5%	(2.37%)
E80/5573	Application	Webb JV	11.5%	(2.37%)
EL23764	Granted	WARREGO NORTH	49%	-
M80/0106	Granted	PALM SPRINGS	97%	-
M80/0315	Granted	PALM SPRINGS	97%	-
M80/0418	Granted	PALM SPRINGS	100%	-
P80/1766	Granted	PALM SPRINGS	100%	-
P80/1768	Granted	PALM SPRINGS	100%	-
P80/1839	Granted	PALM SPRINGS	100%	-
P80/1854	Granted	PALM SPRINGS	100%	-
P80/1855	Granted	PALM SPRINGS	100%	-
E80/4856	Granted	PALM SPRINGS	100%	-
E80/4874	Granted	PALM SPRINGS	100%	-
E80/4976	Granted	PALM SPRINGS	100%	-
E80/5059	Granted	PALM SPRINGS	100%	-
E80/5584	Granted	PALM SPRINGS	100%	-
<b>BRAZIL</b>				
Claim No.	Status	City	Ownership %	Change in Quarter
<b>Juruena Project</b>				
866.079/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)

866.081/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	(100%)
866.082/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	(100%)
866.084/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.778/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.085/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.080/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.086/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.247/2011	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.578/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.105/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.934/2012	Granted Exploration Permit	COTRIGUAÇU/MT	100%	(100%)
866.632/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.633/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.294/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)
866.513/2013	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	(100%)
<b>Novo Astro Project</b>				
867.246/2005	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	(100%)

Caldeira Project Claim No.	Status	Owner	Ownership <sup>2</sup>	Change in the Quarter
814.251/1971	Mining Concession	Mineração Perdizes Ltda	100%	-
814.860/1971	Mining Concession	Mineração Zelândia Ltda	100%	-
815.006/1971	Mining Concession	Mineração Perdizes Ltda	100%	-
815.274/1971	Mining Request	Companhia Geral de Minas	100%	-
815.645/1971	Mining Concession	Companhia Geral de Minas	100%	-
815.681/1971	Mining Concession	Mineração Zelândia Ltda	100%	-
815.682/1971	Mining Concession	Companhia Geral de Minas	100%	-
816.211/1971	Mining Concession	Mineração Perdizes Ltda	100%	-
817.223/1971	Mining Concession	Mineração Daniel Togni Loureiro Ltda	100%	-
820.352/1972	Mining Concession	Mineração Zelândia Ltda	100%	-
820.353/1972	Mining Concession	Mineração Zelândia Ltda	100%	-
820.354/1972	Mining Concession	Mineração Zelândia Ltda	100%	-
813.025/1973	Mining Request	Mineração Perdizes Ltda	100%	-
808.556/1974	Mining Concession	Mineração Perdizes Ltda	100%	-
811.232/1974	Mining Concession	Mineração Perdizes Ltda	100%	-
809.359/1975	Mining Concession	Companhia Geral de Minas	100%	-
803.459/1975	Mining Concession	Mineração Perdizes Ltda	100%	-
804.222/1975	Mining Request	Mineração Perdizes Ltda	100%	-
807.899/1975	Mining Request	Companhia Geral de Minas	100%	-
808.027/1975	Mining Concession	Companhia Geral de Minas	100%	-
809.358/1975	Mining Concession	Companhia Geral de Minas	100%	-
830.391/1979	Mining Request	Mineração Perdizes Ltda	100%	-
830.551/1979	Mining Request	Togni S A Materiais Refratários	100%	-
830.000/1980	Mining Request	Mineração Perdizes Ltda	100%	-
830.633/1980	Mining Request	Mineração Zelândia Ltda	100%	-
831.880/1991	Mining Request	Mineração Zelândia Ltda	100%	-
835.022/1993	Mining Concession	Mineração Perdizes Ltda	100%	-
835.025/1993	Mining Concession	Mineração Perdizes Ltda	100%	-

<sup>2</sup> Meteoric owns 100% of the exclusive rights to explore for and develop all rare earth elements located on the 51 mining leases that comprise the Caldeira Project.



831.092/1983	Mining Concession	Mineração Perdizes Ltda	100%	-
830.513/1979	Mining Request	Mineração Monte Carmelo Ltda	100%	-
830.443/2018	Exploration Licence	Fertimax Fertilizantes Orgânicos Ltda.	100%	-
830.444/2018	Exploration Licence	Fertimax Fertilizantes Orgânicos Ltda.	100%	-
833.655/1996	Mining Application	Minas Rio Mineradora Ltda.	100%	-
833.656/1996	Mining Application	Minas Rio Mineradora Ltda.	100%	-
833.657/1996	Mining Application	Minas Rio Mineradora Ltda.	100%	-
834.743/1995	Mining Application	Minas Rio Mineradora Ltda.	100%	-
833.486/1996	Mining Application	Minas Rio Mineradora Ltda.	100%	-
002.349/1967	Mining Licence	Varginha Mineração e Loteamentos Ltda.	100%	-
833.176/2008	Exploration Application	Varginha Mineração e Loteamentos Ltda.	100%	-
830.955/2006	Exploration Application	Varginha Mineração e Loteamentos Ltda.	100%	-
830.461/2018	Exploration Application	Fertimax Fertilizantes Orgânicos Ltda.	100%	-
832.193/2012	Exploration Licence	Varginha Mineração e Loteamentos Ltda.	100%	-
831.686/2012	Exploration Licence	Varginha Mineração e Loteamentos Ltda.	100%	-
831.269/1992	Mining Licence	Varginha Mineração e Loteamentos Ltda.	100%	-
832.572/2003	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-
833.551/1993	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-
833.553/1993	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-
830.697/2003	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-
832.252/2001	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-

830.416/2001	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-
832.146/2002	Mining Application	Varginha Mineração e Loteamentos Ltda.	100%	-

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

METEORIC RESOURCES NL

ABN

64 107 985 651

Quarter ended ("current quarter")

31 DECEMBER 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(6,771)	(13,898)
(b) development	-	-
(c) production	-	-
(d) staff costs	(311)	(772)
(e) administration and corporate costs	(573)	(1,205)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	104	104
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(7,551)</b>	<b>(15,771)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(246)	(527)
(d) exploration & evaluation *	-	-
(e) investments	-	-
(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	27,690	27,690
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>27,444</b>	<b>27,163</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	4,946	4,946
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	290
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>4,946</b>	<b>5,236</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	9,079	17,290
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(7,551)	(15,771)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	27,444	27,163
4.4	Net cash from / (used in) financing activities (item 3.10 above)	4,946	5,236

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	(1,617)	(1,617)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>32,301</b>	<b>32,301</b>

\* Prior quarter amounts have been re-positioned for consistency with current quarter disclosures.

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	32,251	9,079
5.2	Call deposits	50	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>32,301</b>	<b>9,079</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	288
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<p><i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i></p>		
<p>Payments of Directors fees and salaries</p>		

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
<b>7.4 Total financing facilities</b>	<b>-</b>	<b>-</b>
<b>7.5 Unused financing facilities available at quarter end</b>		<b>-</b>
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(7,551)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(7,551)
8.4 Cash and cash equivalents at quarter end (item 4.6)	32,301
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	32,301
<b>8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	<b>4.3</b>
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer:	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer:	

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2024

Authorised by: the Board  
(Name of body or officer authorising release – see note 4)

**Notes**

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.