METEORIC

High Grade discoveries with enriched MREOs at Agostinho highlight Caldeira's scale

Meteoric Resources NL **(ASX: MEI)** (**Meteoric** or the **Company**) is pleased to provide an update on recent drilling completed at the Agostinho Prospect (Figure 1), located in the north of its 100%-owned Caldeira Rare Earth Ionic Clay Project (**Caldeira Project** or **Project**), in the state of Minas Gerais, Brazil.

Highlights

- **Exceptional ionic clay intercepts up to 19,183ppm Total Rare Earth Oxides (TREO)**
- **Enriched Magnetic Rare Earth Oxide (MREO) up to 6,691ppm**
- **MREO peak zones up to 38%** with an average of 30.4%, an increase of 7.4% compared to the Global Resource average.
- **Elevated Heavy Magnetic Rare Earths (HREO) up to 2% of TREO**
- **Drilled 3,301m for 116 holes with outstanding intercepts:**
  - AGOAC0107 - 24m @ 6,918ppm TREO [0m] with 27% MREO
    - including 6m @ 19,183ppm TREO [2m] with 34.9% MREO
  - AGOAC0110 - 22m @ 4,422ppm TREO [0m] with 27.7% MREO
    - including 10m @ 7,831ppm TREO [0m] with 35.6% MREO
  - AGOAC0079 - 28m @ 3,183ppm TREO [0m] with 26.9% MREO
    - including 8m @ 7,462ppm TREO [0m] with 37.6% MREO
  - AGOAC0098 - 28m @ 5,315ppm TREO [0m] with 27.4% MREO
  - AGOAC0070 - 22m @ 4,890ppm TREO [0m] with 27% MREO
  - AGOAC0092 - 22m @ 4,323ppm TREO [0m] with 27.2% MREO
- **Mineralisation** averages 28.4m thickness from surface over of the entire License

Meteoric's Chairman, Andrew Tunks said: *"The exploration and drilling teams continue to identify additional high-grade areas across the Caldeira Project. These remarkable results confirm the extensive nature of mineralisation outside the current resource base. Further it highlights that there is considerable opportunity for Meteoric to target enriched zones of magnetic rare earths and heavy rare earths using our extensive database of project wide sampling which is unmatched inside the Caldera.*

It's important to remember that we have still only infill drilled eight of the 69 licenses available at the Project and continued identification of high-grade mineralisation creates greater optionality for the potential expansion of the Project, at the right time, to support the sustainable supply of rare earth materials to the western world."

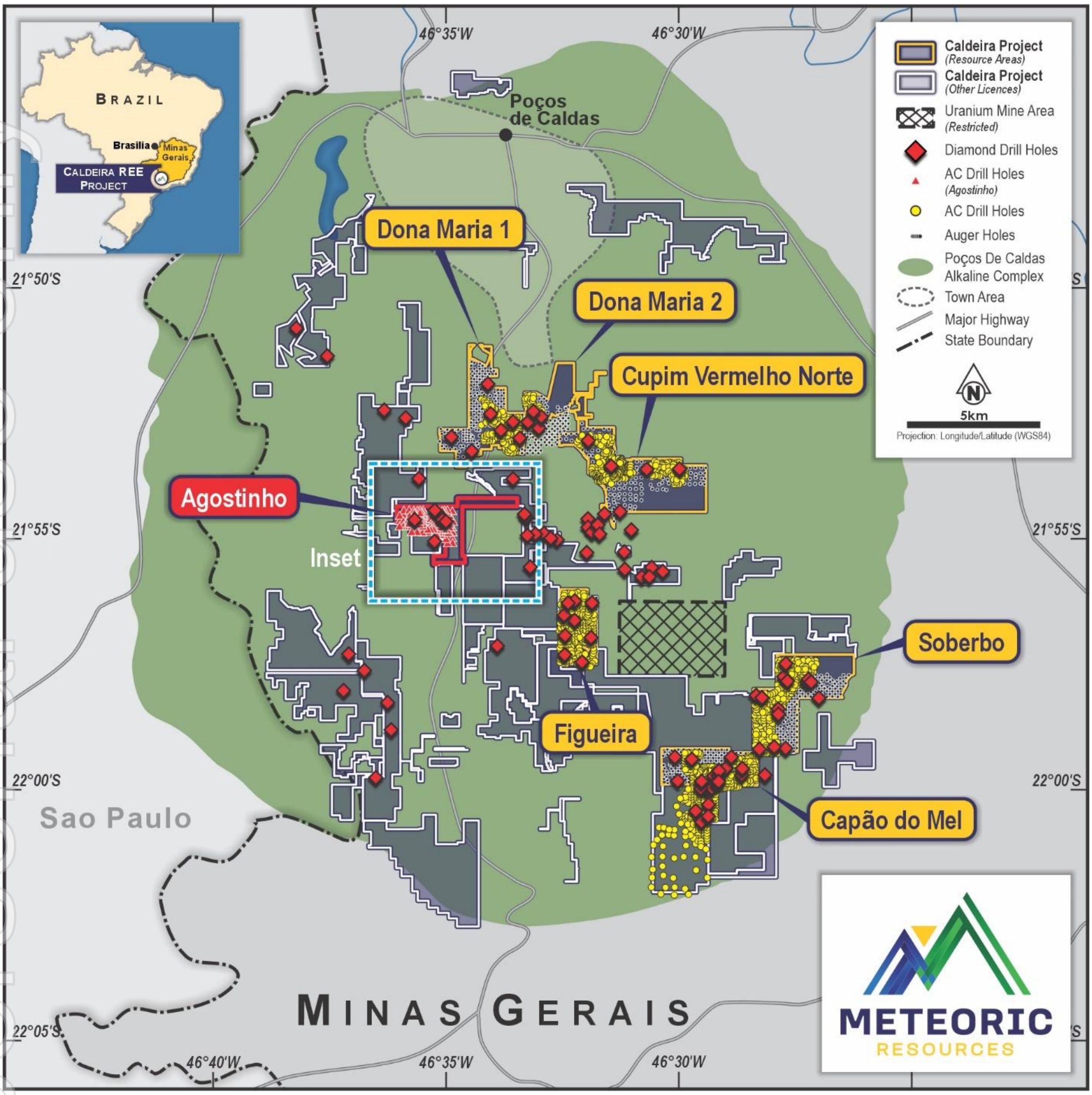

Figure 1: Licenses of the Caldeira Project showing the Agostinho license located southwest of Dona Maria 1 & 2 mining licenses. The figure shows the location of the discovery exploration diamond drill holes in the north of AGO.

Agostinho Aircore follow-up drilling program

An Aircore (**AC**) drilling campaign of 3,301m (116 holes) was completed over Agostinho Prospect (**AGO**) in September of 2024 (Appendix 1 & Figures 1 & 2). The program was designed to follow up excellent results in discovery holes: AGDD0001 - 18m @ 3,628ppm TREO [0m] and AGDD0002 - 37m @ 3,143ppm TREO [0m] (ASX Release: 30 January 2024).

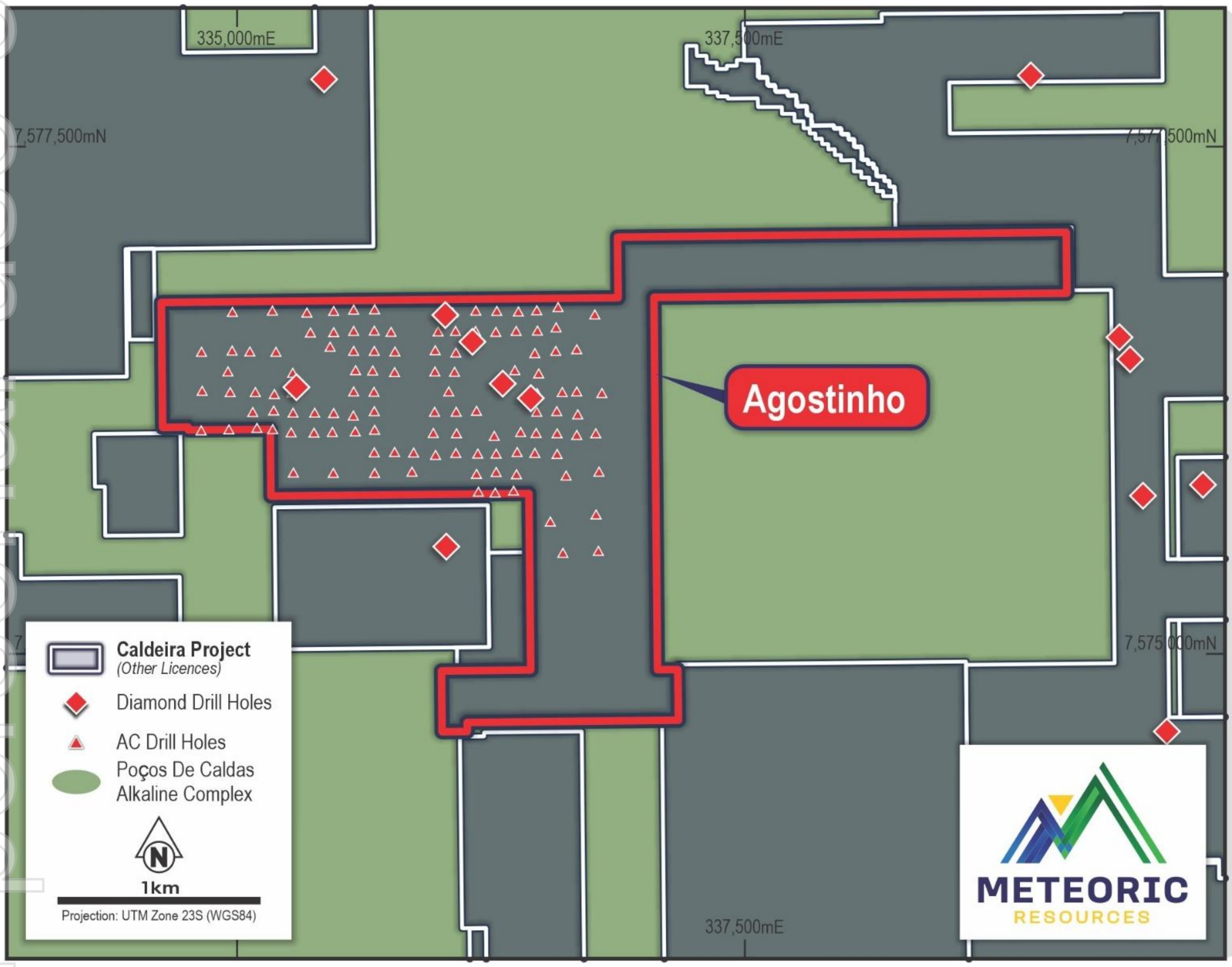

Figure 2: Agostinho drill hole location plan.

The 100m x 100m drill mesh in the central north and central northeastern areas of AGO confirms high-grade mineralisation intersected in AGODD001 and AGODD002. The mineralised Clay Zone averages 27m depth and is mineralised from the surface. All holes intersected mineralisation >1,000ppm TREO with an average grade and thicknesses across the deposit of 28.4m @ 2,771ppm TREO (Figure 3 & Appendix 2).

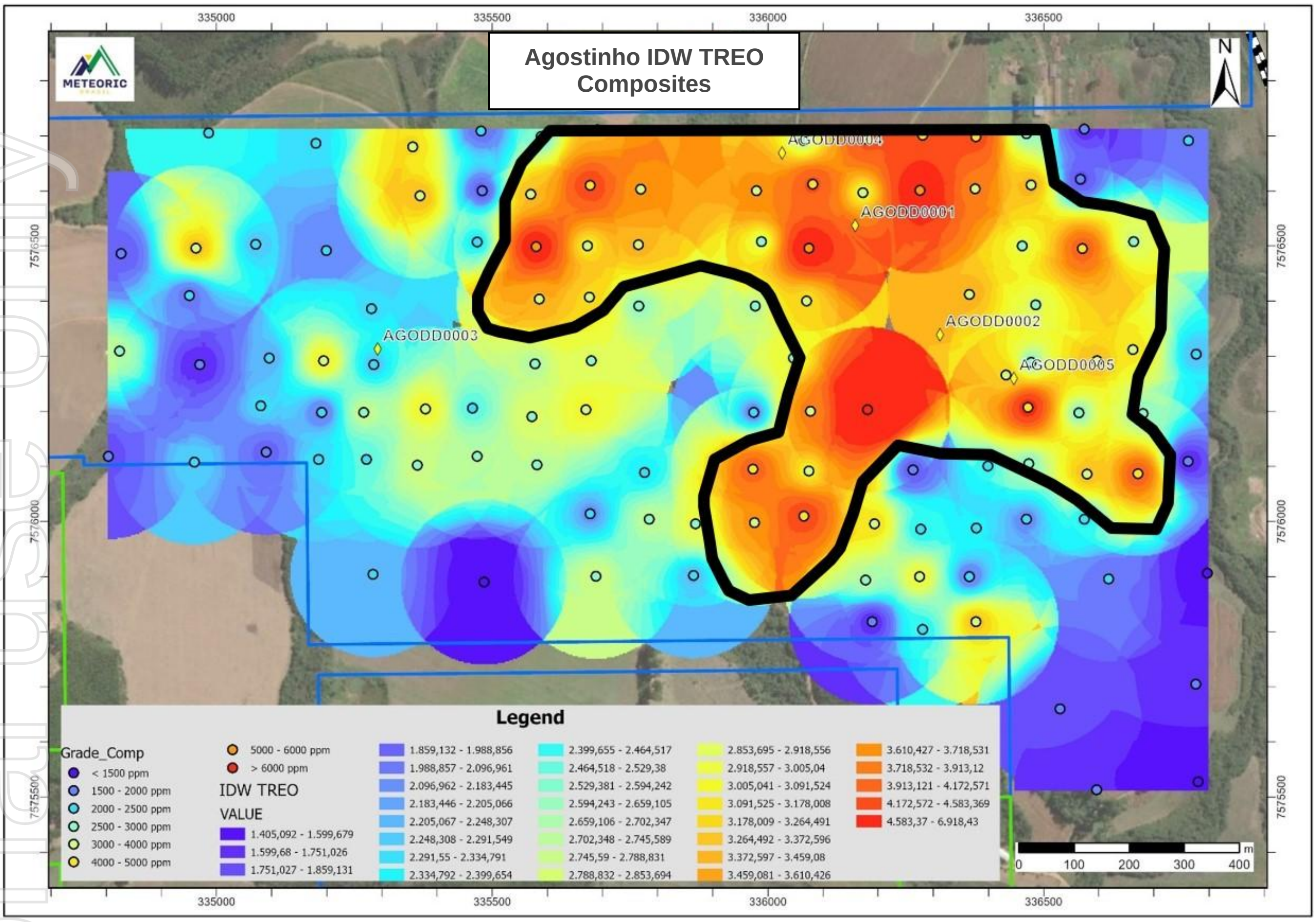

Figure 3: Mineralised TREO intercept data defining a contiguous, high-grade zone approximately 1,300m x 500m, averaging 28m thickness, grading >3,000ppm TREO (yellow-orange-red regions inside BLACK outline).

The most outstanding TREO grades and MREO contents include:

- AGOAC0107 - 24m @ 6,918ppm TREO [0m] with 27% MREO
  - *including 6m @ 19,183 ppm TREO [2m] with 34.9% MREO*
- AGOAC0110 - 22m @ 4,422ppm TREO [0m] with 27.7% MREO
  - *including 10m @ 7,831 ppm TREO [0m] with 35.6% MREO*
- AGOAC0079 - 28m @ 3,183ppm TREO [0m] with 26.9% MREO
  - *including 8m @ 7,462 ppm TREO [0m] with 37.6% MREO*
- AGOAC0114 - 50m @ 3,039ppm TREO [0m] with 22.3% MREO
- AGOAC0090 - 44m @ 3,435ppm TREO [0m] with 23.2% MREO
- AGOAC0098 - 28m @ 5,315ppm TREO [0m] with 27.4% MREO
- AGOAC0083 - 33m @ 3,452ppm TREO [0m] with 23.2% MREO
- AGOAC0091 - 31m @ 3,735ppm TREO [0m] with 23.8% MREO
- AGOAC0108 - 28m @ 4,066ppm TREO [0m] with 25.7% MREO
- AGOAC0106 - 30m @ 3,761ppm TREO [0m] with 24% MREO
- AGOAC0070 - 22m @ 4,890ppm TREO [0m] with 27% MREO
- AGOAC0062 - 31m @ 3,351ppm TREO [0m] with 22.1% MREO
- AGOAC0005 - 23m @ 4,484ppm TREO [0m] with 26.9% MREO

- AGOAC0094 - 22m @ 4,575ppm TREO [0m] with 29.8% MREO
- AGOAC0009 - 19m @ 5,232ppm TREO [0m] with 30.6% MREO
- AGOAC0084 - 24m @ 4,095ppm TREO [0m] with 26.2% MREO
- AGOAC0030 - 31m @ 3,113ppm TREO [0m] with 24.6% MREO
- AGOAC0092 - 22m @ 4,323ppm TREO [0m] with 27.2% MREO
- AGOAC0018 - 28m @ 3,336ppm TREO [0m] with 30.1% MREO
- AGOAC0111 - 23m @ 3,638ppm TREO [0m] with 26.6% MREO
- AGOAC0099 - 20m @ 4,248ppm TREO [0m] with 23.7% MREO
- AGOAC0093 - 16m @ 5,271ppm TREO [0m] with 27.2% MREO
- AGOAC0096 - 28m @ 3,011ppm TREO [0m] with 27.5% MREO
- AGOAC0101 - 23m @ 3,687ppm TREO [0m] with 24% MREO
- AGOAC0066 - 19m @ 4,163ppm TREO [0m] with 30.4% MREO
- AGOAC0014 - 22m @ 3,393ppm TREO [0m] with 24.2% MREO
- AGOAC0072 - 20m @ 3,246ppm TREO [0m] with 23.4% MREO
- AGOAC0008 - 19m @ 3,443ppm TREO [0m] with 26.4% MREO
- AGOAC0004 - 19m @ 3,427ppm TREO [0m] with 23.9% MREO
- AGOAC0050 - 19m @ 3,147ppm TREO [0m] with 25.3% MREO
- AGOAC0109 - 19m @ 3,083ppm TREO [0m] with 25.6% MREO
- AGOAC0095 - 13m @ 4,234ppm TREO [0m] with 27.3% MREO
- AGOAC0022 - 14m @ 3,384ppm TREO [0m] with 23.2% MREO
- AGOAC0021 - 13m @ 3,200ppm TREO [0m] with 23.6% MREO

Significantly, AGO contains enriched zones of MREO averaging up to 30.4%, with peak zones up to 38% (see intercepts below) compared to an average MREO content of 23.1% for the existing Caldeira Global Resource Estimate.

There exists a large area of enriched MREO content in the central northern and eastern area of the prospect. These areas have a strong correlation with the contiguous, high-grade zone approximately 1,300m x 500m, averaging 28m thickness, grading >3,000ppm TREO in Figure 3. This results in some ultra-high grade intercepts of MREO including:

- 6m @ 19,183 ppm TREO [2m] with 6,691ppm MREO,
- 8m @ 7,462 ppm TREO [0m] with 2,807ppm MREO, and
- 10m @ 7,831 ppm TREO [0m] with 2,786ppm MREO.

These zones of enriched MREO generally occur from surface (0m) and include enriched HREOs (Tb-Dy) up to 2.0%.

Future work programs

Data validation and geologic modelling for the Agostinho and Barra do Pacu deposits (ASX Release 12 December 2024) has commenced and Resource Estimations are expected in the June quarter of 2025.

For further information, please contact:

Stuart Gale
Managing Director
Meteoric Resources NL
E sgale@meteoric.com.au
T +61 437 900 175

Michael Vaughan
Investor and Media Relations
Fivemark Partners
E michael.vaughan@fivemark.com.au
T +61 422 602 720

Mineral Resource Statement – Caldeira Project

Table 1: Caldeira REE Project 2024 Mineral Resource Estimate– by license at 1,000ppm TREO cut-off (refer MEI Announcements dated 1 May 2023, 14 May 2024, 13 June 2024, 5 August 2024 and 22 October 2024). Differences may occur due to rounding.

License	JORC Category	Material Type	Tonnes	TREO ppm	Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	MREO ppm	MREO /TREO
Capão do Mel	Measured	Clay	11	3,888	222	586	6	28	842	21.7%
Total	**Measured**		**11**	**3,888**	**222**	**586**	**6**	**28**	**842**	**21.7%**
Capão do Mel	Indicated	Clay	74	2,908	163	449	5	23	640	22.0%
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%
Total	**Indicated**		**298**	**2,827**	**155**	**436**	**5**	**26**	**622**	**22.0%**
Total	**Measured + Indicated**		**308**	**2,864**	**158**	**441**	**5**	**26**	**629**	**22.0%**
Capão do Mel	Inferred	Clay	32	1,791	79	207	2	13	302	16.9%
Capão do Mel	Inferred	Transition	25	1,752	86	239	3	14	341	19.5%
Soberbo	Inferred	Clay	89	2,713	167	478	5	24	675	24.9%
Soberbo	Inferred	Transition	54	2,207	138	395	4	20	558	25.3%
Figueira	Inferred	Clay	9	3,105	139	379	5	28	551	17.7%
Figueira	Inferred	Transition	24	2,174	115	328	4	21	468	21.5%
Cupim Vermelho Norte[3]	Inferred	Clay	104	2,485	152	472	5	26	655	26.4%
Dona Maria 1 & 2	Inferred	Clay	94	2,320	135	404	5	25	569	24.5%
Total	**Inferred**		**431**	**2,363**	**138**	**406**	**4**	**23**	**571**	**24.0%**
Total	**Measured + Indicated + Inferred**		**740**	**2,572**	**146**	**420**	**5**	**24**	**595**	**23.1%**

Competent Person Statement

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.

This release includes exploration results and estimates of Mineral Resources. The Company has previously reported these results and estimates in ASX announcements dated 16 December 2022, 1 May 2023, 27 June 2023, 24 July 2023, 31 August 2023, 27 September 2023, 8 December 2023, 14 December 2023, 30 January 2024, 29 February 2024, 14 May 2024, 13 June 2024, 8 July 2024, 5 August 2024 and 22 October 2024. The Company confirms that it is not aware of any new information or data that materially affects the information included in previous announcements (as may be cross referenced in the body of this announcement) and that all material assumptions and technical parameters underpinning the exploration results and Mineral Resource estimates continue to apply and have not materially changed.

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.

APPENDIX 1: Agostinho – Aircore drill collar information

Target	Drill Type	Hole ID	Easting	Northing	Elevation	Depth (m)	Dip	Azimuth
Agostinho	AC	AGOAC0001	335,776	7,576,398	1,313	22.0	-90	360
Agostinho	AC	AGOAC0002	335,778	7,576,500	1,308	17.4	-90	360
Agostinho	AC	AGOAC0003	335,759	7,576,596	1,309	19.0	-90	360
Agostinho	AC	AGOAC0004	335,679	7,576,707	1,307	19.0	-90	360
Agostinho	AC	AGOAC0005	335,677	7,576,603	1,311	22.6	-90	360
Agostinho	AC	AGOAC0006	335,676	7,576,502	1,316	18.3	-90	360
Agostinho	AC	AGOAC0007	335,669	7,576,406	1,320	15.0	-90	360
Agostinho	AC	AGOAC0008	335,584	7,576,408	1,315	19.0	-90	360
Agostinho	AC	AGOAC0009	335,574	7,576,503	1,312	19.0	-90	360
Agostinho	AC	AGOAC0010	335,459	7,576,523	1,289	25.0	-90	360
Agostinho	AC	AGOAC0011	335,477	7,576,595	1,290	13.0	-90	360
Agostinho	AC	AGOAC0012	335,476	7,576,699	1,286	17.0	-90	360
Agostinho	AC	AGOAC0013	335,575	7,576,705	1,297	27.0	-90	360
Agostinho	AC	AGOAC0014	335,574	7,576,601	1,305	22.0	-90	360
Agostinho	AC	AGOAC0015	335,674	7,576,300	1,323	36.5	-90	360
Agostinho	AC	AGOAC0016	335,064	7,576,499	1,290	37.5	-90	360
Agostinho	AC	AGOAC0017	334,956	7,576,401	1,279	37.0	-90	360
Agostinho	AC	AGOAC0018	334,976	7,576,504	1,281	28.0	-90	360
Agostinho	AC	AGOAC0019	334,978	7,576,695	1,274	24.0	-90	360
Agostinho	AC	AGOAC0020	335,174	7,576,702	1,289	28.0	-90	360
Agostinho	AC	AGOAC0021	335,345	7,576,691	1,279	13.0	-90	360
Agostinho	AC	AGOAC0022	335,361	7,576,593	1,286	14.0	-90	360
Agostinho	AC	AGOAC0023	335,193	7,576,497	1,305	45.6	-90	360
Agostinho	AC	AGOAC0024	335,275	7,576,394	1,315	25.0	-90	360
Agostinho	AC	AGOAC0025	334,828	7,576,306	1,279	23.0	-90	360
Agostinho	AC	AGOAC0026	334,825	7,576,497	1,277	15.0	-90	360
Agostinho	AC	AGOAC0027	334,966	7,576,300	1,280	35.0	-90	360
Agostinho	AC	AGOAC0028	335,090	7,576,300	1,301	34.0	-90	360
Agostinho	AC	AGOAC0029	335,272	7,576,297	1,317	37.0	-90	360
Agostinho	AC	AGOAC0030	335,184	7,576,290	1,306	31.2	-90	360
Agostinho	AC	AGOAC0031	335,077	7,576,201	1,288	31.0	-90	360
Agostinho	AC	AGOAC0032	334,960	7,576,116	1,282	16.0	-90	360
Agostinho	AC	AGOAC0033	334,823	7,576,111	1,281	26.0	-90	360
Agostinho	AC	AGOAC0034	335,098	7,576,123	1,283	50.0	-90	360
Agostinho	AC	AGOAC0035	335,176	7,576,117	1,291	46.0	-90	360
Agostinho	AC	AGOAC0036	335,267	7,576,102	1,296	37.0	-90	360
Agostinho	AC	AGOAC0037	335,276	7,576,198	1,309	34.0	-90	360
Agostinho	AC	AGOAC0038	335,180	7,576,209	1,306	31.0	-90	360
Agostinho	AC	AGOAC0039	335,477	7,576,196	1,321	34.0	-90	360
Agostinho	AC	AGOAC0040	335,382	7,576,199	1,319	50.0	-90	360
Agostinho	AC	AGOAC0041	335,379	7,576,099	1,305	36.0	-90	360
Agostinho	AC	AGOAC0042	335,470	7,576,102	1,314	31.0	-90	360
Agostinho	AC	AGOAC0043	335,582	7,576,106	1,321	35.2	-90	360
Agostinho	AC	AGOAC0044	335,676	7,576,003	1,320	37.8	-90	360
Agostinho	AC	AGOAC0045	335,776	7,576,004	1,331	33.0	-90	360
Agostinho	AC	AGOAC0046	335,862	7,575,907	1,338	38.0	-90	360
Agostinho	AC	AGOAC0047	335,678	7,575,901	1,321	44.0	-90	360
Agostinho	AC	AGOAC0048	335,474	7,575,900	1,302	25.0	-90	360
Agostinho	AC	AGOAC0049	335,277	7,575,903	1,293	22.0	-90	360
Agostinho	AC	AGOAC0050	336,673	7,576,303	1,260	19.0	-90	360
Agostinho	AC	AGOAC0051	336,797	7,576,295	1,256	22.0	-90	360
Agostinho	AC	AGOAC0052	336,767	7,576,097	1,258	32.0	-90	360
Agostinho	AC	AGOAC0053	336,783	7,575,907	1,256	16.0	-90	360
Agostinho	AC	AGOAC0054	336,769	7,575,697	1,258	25.5	-90	360
Agostinho	AC	AGOAC0055	336,779	7,575,517	1,256	11.0	-90	360
Agostinho	AC	AGOAC0056	336,605	7,575,507	1,260	16.1	-90	360
Agostinho	AC	AGOAC0057	336,544	7,575,662	1,270	50.0	-90	360
Agostinho	AC	AGOAC0058	336,272	7,575,804	1,300	33.0	-90	360
Agostinho	AC	AGOAC0059	336,362	7,575,813	1,291	19.4	-90	360
Agostinho	AC	AGOAC0060	336,376	7,575,895	1,297	27.0	-90	360
Agostinho	AC	AGOAC0061	336,621	7,575,888	1,270	20.0	-90	360
Agostinho	AC	AGOAC0062	336,576	7,576,097	1,290	31.0	-90	360
Agostinho	AC	AGOAC0063	336,575	7,576,206	1,282	31.0	-90	360
Agostinho	AC	AGOAC0064	336,602	7,576,300	1,270	27.5	-90	360
Agostinho	AC	AGOAC0065	336,679	7,576,189	1,264	31.7	-90	360
Agostinho	AC	AGOAC0066	336,672	7,576,089	1,275	18.8	-90	360

Target	Drill Type	Hole ID	Easting	Northing	Elevation	Depth (m)	Dip	Azimuth
Agostinho	AC	AGOAC0067	336,576	7,575,994	1,286	25.0	-90	360
Agostinho	AC	AGOAC0068	336,467	7,575,999	1,296	32.0	-90	360
Agostinho	AC	AGOAC0069	336,474	7,576,099	1,293	50.0	-90	360
Agostinho	AC	AGOAC0070	336,476	7,576,202	1,283	21.8	-90	360
Agostinho	AC	AGOAC0071	336,478	7,576,294	1,265	25.0	-90	360
Agostinho	AC	AGOAC0072	336,445	7,576,266	1,268	20.2	-90	360
Agostinho	AC	AGOAC0073	336,397	7,576,103	1,285	50.0	-90	360
Agostinho	AC	AGOAC0074	336,379	7,576,004	1,299	50.0	-90	360
Agostinho	AC	AGOAC0075	336,276	7,575,906	1,314	22.0	-90	360
Agostinho	AC	AGOAC0076	336,276	7,575,996	1,302	36.8	-90	360
Agostinho	AC	AGOAC0077	336,179	7,575,897	1,317	27.4	-90	360
Agostinho	AC	AGOAC0078	336,189	7,575,809	1,317	50.0	-90	360
Agostinho	AC	AGOAC0079	336,186	7,575,996	1,300	28.0	-90	360
Agostinho	AC	AGOAC0080	336,267	7,576,083	1,286	37.8	-90	360
Agostinho	AC	AGOAC0081	336,487	7,576,391	1,263	17.8	-90	360
Agostinho	AC	AGOAC0082	336,467	7,576,491	1,276	35.0	-90	360
Agostinho	AC	AGOAC0083	336,368	7,576,407	1,280	33.2	-90	360
Agostinho	AC	AGOAC0084	336,570	7,576,503	1,265	24.0	-90	360
Agostinho	AC	AGOAC0085	336,674	7,576,511	1,257	12.0	-90	360
Agostinho	AC	AGOAC0086	336,762	7,576,683	1,254	6.0	-90	360
Agostinho	AC	AGOAC0087	336,571	7,576,618	1,266	30.0	-90	360
Agostinho	AC	AGOAC0088	336,581	7,576,718	1,263	40.1	-90	360
Agostinho	AC	AGOAC0089	336,476	7,576,703	1,271	19.2	-90	360
Agostinho	AC	AGOAC0090	336,479	7,576,602	1,275	43.5	-90	360
Agostinho	AC	AGOAC0091	336,374	7,576,601	1,289	30.5	-90	360
Agostinho	AC	AGOAC0092	336,385	7,576,697	1,288	22.0	-90	360
Agostinho	AC	AGOAC0093	336,275	7,576,597	1,303	16.0	-90	360
Agostinho	AC	AGOAC0094	336,279	7,576,699	1,303	22.0	-90	360
Agostinho	AC	AGOAC0095	336,177	7,576,701	1,304	13.0	-90	360
Agostinho	AC	AGOAC0096	336,175	7,576,602	1,307	28.0	-90	360
Agostinho	AC	AGOAC0097	336,072	7,576,399	1,313	50.0	-90	360
Agostinho	AC	AGOAC0098	336,078	7,576,494	1,309	28.0	-90	360
Agostinho	AC	AGOAC0099	336,077	7,576,602	1,300	20.0	-90	360
Agostinho	AC	AGOAC0100	336,063	7,576,692	1,288	35.2	-90	360
Agostinho	AC	AGOAC0101	335,990	7,576,598	1,291	22.8	-90	360
Agostinho	AC	AGOAC0102	335,977	7,576,505	1,298	17.0	-90	360
Agostinho	AC	AGOAC0103	335,975	7,576,402	1,306	26.0	-90	360
Agostinho	AC	AGOAC0104	336,043	7,576,303	1,314	40.0	-90	360
Agostinho	AC	AGOAC0105	335,974	7,576,202	1,316	37.0	-90	360
Agostinho	AC	AGOAC0106	336,080	7,576,203	1,310	30.0	-90	360
Agostinho	AC	AGOAC0107	336,179	7,576,207	1,289	24.2	-90	360
Agostinho	AC	AGOAC0108	335,966	7,576,098	1,325	28.0	-90	360
Agostinho	AC	AGOAC0109	336,082	7,576,096	1,304	19.2	-90	360
Agostinho	AC	AGOAC0110	336,078	7,575,999	1,310	22.0	-90	360
Agostinho	AC	AGOAC0111	335,978	7,575,990	1,327	23.4	-90	360
Agostinho	AC	AGOAC0112	335,871	7,576,001	1,336	33.0	-90	360
Agostinho	AC	AGOAC0113	335,677	7,576,114	1,330	34.4	-90	360
Agostinho	AC	AGOAC0114	335,676	7,576,206	1,327	50.0	-90	360
Agostinho	AC	AGOAC0115	335,573	7,576,184	1,322	40.0	-90	360
Agostinho	AC	AGOAC0116	335,575	7,576,302	1,311	25.0	-90	360
Total		***116***				***3,300.6***		

*Geographic Datum SIRGAS 2000 / UTM z23S

APPENDIX 2: Mineralised Intercept Table - Agostinho Aircore Drilling

Target	Hole ID	From	To	Interval (m)	TREO (ppm)	MREO (ppm)	MREO/TREO	Mineralised Intercept
Agostinho	AGOAC0001	0.0	22.0	22.0	2,612	542	21%	22m @ 2612ppm TREO [0m]
Agostinho	AGOAC0002	0.0	17.4	17.4	3,428	700	20%	17.4m @ 3428ppm TREO [0m]
Agostinho	AGOAC0003	0.0	19.0	19.0	3,622	803	22%	19m @ 3622ppm TREO [0m]
Agostinho	AGOAC0004	0.0	19.0	19.0	3,427	820	24%	19m @ 3427ppm TREO [0m]
Agostinho	AGOAC0005	0.0	22.6	22.6	4,484	1,208	27%	22.6m @ 4484ppm TREO [0m]
Agostinho	AGOAC0006	0.0	18.3	18.3	3,078	617	20%	18.3m @ 3078ppm TREO [0m]
Agostinho	AGOAC0007	0.0	15.0	15.0	3,238	616	19%	15m @ 3238ppm TREO [0m]
Agostinho	AGOAC0008	0.0	19.0	19.0	3,443	910	26%	19m @ 3443ppm TREO [0m]
Agostinho	AGOAC0009	0.0	19.0	19.0	5,232	1,601	31%	19m @ 5232ppm TREO [0m]
Agostinho	AGOAC0010	0.0	25.0	25.0	2,328	505	22%	25m @ 2328ppm TREO [0m]
Agostinho	AGOAC0011	0.0	13.0	13.0	1,896	377	20%	13m @ 1896ppm TREO [0m]
Agostinho	AGOAC0012	0.0	17.0	17.0	2,005	393	20%	17m @ 2005ppm TREO [0m]
Agostinho	AGOAC0013	0.0	27.0	27.0	2,502	574	23%	27m @ 2502ppm TREO [0m]
Agostinho	AGOAC0014	0.0	22.0	22.0	3,393	823	24%	22m @ 3393ppm TREO [0m]
Agostinho	AGOAC0015	0.0	36.5	36.5	2,882	536	19%	36.5m @ 2882ppm TREO [0m]
Agostinho	AGOAC0016	0.0	37.5	37.5	2,257	497	22%	37.5m @ 2257ppm TREO [0m]
Agostinho	AGOAC0017	0.0	37.0	37.0	2,045	397	19%	37m @ 2045ppm TREO [0m]
Agostinho	AGOAC0018	0.0	28.0	28.0	3,336	1,004	30%	28m @ 3336ppm TREO [0m]
Agostinho	AGOAC0019	2.0	24.0	22.0	2,430	597	25%	22m @ 2430ppm TREO [2m]
Agostinho	AGOAC0020	0.0	28.0	28.0	2,305	447	19%	28m @ 2305ppm TREO [0m]
Agostinho	AGOAC0021	0.0	13.0	13.0	3,200	754	24%	13m @ 3200ppm TREO [0m]
Agostinho	AGOAC0022	0.0	14.0	14.0	3,384	785	23%	14m @ 3384ppm TREO [0m]
Agostinho	AGOAC0023	0.0	45.6	45.6	2,121	480	23%	45.6m @ 2121ppm TREO [0m]
Agostinho	AGOAC0024	0.0	25.0	25.0	2,308	386	17%	25m @ 2308ppm TREO [0m]
Agostinho	AGOAC0025	0.0	23.0	23.0	2,703	627	23%	23m @ 2703ppm TREO [0m]
Agostinho	AGOAC0026	0.0	15.0	15.0	1,864	308	17%	15m @ 1864ppm TREO [0m]
Agostinho	AGOAC0027	0.0	35.0	35.0	1,640	337	21%	35m @ 1640ppm TREO [0m]
Agostinho	AGOAC0028	0.0	34.0	34.0	2,207	436	20%	34m @ 2207ppm TREO [0m]
Agostinho	AGOAC0029	0.0	37.0	37.0	2,249	416	19%	37m @ 2249ppm TREO [0m]
Agostinho	AGOAC0030	0.0	31.2	31.2	3,113	767	25%	31.2m @ 3113ppm TREO [0m]
Agostinho	AGOAC0031	0.0	31.0	31.0	2,314	513	22%	31m @ 2314ppm TREO [0m]
Agostinho	AGOAC0032	0.0	16.0	16.0	2,289	453	20%	16m @ 2289ppm TREO [0m]
Agostinho	AGOAC0033	0.0	26.0	26.0	1,832	386	21%	26m @ 1832ppm TREO [0m]
Agostinho	AGOAC0034	0.0	50.0	50.0	1,930	382	20%	50m @ 1930ppm TREO [0m]
Agostinho	AGOAC0035	0.0	46.0	46.0	2,330	523	22%	46m @ 2330ppm TREO [0m]
Agostinho	AGOAC0036	0.0	37.0	37.0	2,468	515	21%	37m @ 2468ppm TREO [0m]
Agostinho	AGOAC0037	0.0	34.0	34.0	2,779	646	23%	34m @ 2779ppm TREO [0m]
Agostinho	AGOAC0038	0.0	31.0	31.0	2,054	359	17%	31m @ 2054ppm TREO [0m]
Agostinho	AGOAC0039	0.0	34.0	34.0	2,440	423	17%	34m @ 2440ppm TREO [0m]
Agostinho	AGOAC0040	0.0	50.0	50.0	3,067	628	20%	50m @ 3067ppm TREO [0m]
Agostinho	AGOAC0041	0.0	36.0	36.0	2,765	632	23%	36m @ 2765ppm TREO [0m]
Agostinho	AGOAC0042	0.0	31.0	31.0	2,702	541	20%	31m @ 2702ppm TREO [0m]
Agostinho	AGOAC0043	0.0	35.2	35.2	2,741	531	19%	35.2m @ 2741ppm TREO [0m]
Agostinho	AGOAC0044	0.0	37.8	37.8	2,154	453	21%	37.8m @ 2154ppm TREO [0m]
Agostinho	AGOAC0045	0.0	33.0	33.0	2,751	565	21%	33m @ 2751ppm TREO [0m]
Agostinho	AGOAC0046	0.0	38.0	38.0	2,230	530	24%	38m @ 2230ppm TREO [0m]
Agostinho	AGOAC0047	0.0	44.0	44.0	2,787	774	28%	44m @ 2787ppm TREO [0m]
Agostinho	AGOAC0048	0.0	25.0	25.0	1,449	309	21%	25m @ 1449ppm TREO [0m]
Agostinho	AGOAC0049	0.0	22.0	22.0	2,218	508	23%	22m @ 2218ppm TREO [0m]
Agostinho	AGOAC0050	0.0	19.0	19.0	3,147	796	25%	19m @ 3147ppm TREO [0m]
Agostinho	AGOAC0051	0.0	22.0	22.0	2,237	485	22%	22m @ 2237ppm TREO [0m]
Agostinho	AGOAC0052	0.0	32.0	32.0	1,622	308	19%	32m @ 1622ppm TREO [0m]
Agostinho	AGOAC0053	0.0	16.0	16.0	1,499	281	19%	16m @ 1499ppm TREO [0m]
Agostinho	AGOAC0054	0.0	25.5	25.5	1,718	318	19%	25.5m @ 1718ppm TREO [0m]
Agostinho	AGOAC0055	0.0	11.0	11.0	1,405	215	15%	11m @ 1405ppm TREO [0m]
Agostinho	AGOAC0056	0.0	16.1	16.1	1,605	300	19%	16.1m @ 1605ppm TREO [0m]
Agostinho	AGOAC0057	0.0	50.0	50.0	1,810	376	21%	50m @ 1810ppm TREO [0m]
Agostinho	AGOAC0058	0.0	33.0	33.0	2,409	560	23%	33m @ 2409ppm TREO [0m]
Agostinho	AGOAC0059	0.0	19.4	19.4	3,324	967	29%	19.4m @ 3324ppm TREO [0m]
Agostinho	AGOAC0060	0.0	27.0	27.0	2,049	486	24%	27m @ 2049ppm TREO [0m]
Agostinho	AGOAC0061	0.0	20.0	20.0	2,039	458	22%	20m @ 2039ppm TREO [0m]
Agostinho	AGOAC0062	0.0	31.0	31.0	3,351	740	22%	31m @ 3351ppm TREO [0m]
Agostinho	AGOAC0063	0.0	31.0	31.0	2,586	549	21%	31m @ 2586ppm TREO [0m]
Agostinho	AGOAC0064	0.0	27.5	27.5	3,386	737	22%	27.5m @ 3386ppm TREO [0m]
Agostinho	AGOAC0065	0.0	31.7	31.7	2,601	566	22%	31.7m @ 2601ppm TREO [0m]

Target	Hole ID	From	To	Interval (m)	TREO (ppm)	MREO (ppm)	MREO/TREO	Mineralised Intercept
Agostinho	AGOAC0066	0.0	18.8	18.8	4,163	1,266	30%	18.8m @ 4163ppm TREO [0m]
Agostinho	AGOAC0067	0.0	25.0	25.0	2,369	558	24%	25m @ 2369ppm TREO [0m]
Agostinho	AGOAC0068	0.0	32.0	32.0	2,138	474	22%	32m @ 2138ppm TREO [0m]
Agostinho	AGOAC0069	0.0	50.0	50.0	2,587	564	22%	50m @ 2587ppm TREO [0m]
Agostinho	AGOAC0070	0.0	21.8	21.8	4,890	1,321	27%	21.8m @ 4890ppm TREO [0m]
Agostinho	AGOAC0071	0.0	25.0	25.0	2,564	604	24%	25m @ 2564ppm TREO [0m]
Agostinho	AGOAC0072	0.0	20.2	20.2	3,246	759	23%	20.2m @ 3246ppm TREO [0m]
Agostinho	AGOAC0073	0.0	50.0	50.0	2,430	571	23%	50m @ 2430ppm TREO [0m]
Agostinho	AGOAC0074	0.0	50.0	50.0	2,350	550	23%	50m @ 2350ppm TREO [0m]
Agostinho	AGOAC0075	0.0	22.0	22.0	3,052	645	21%	22m @ 3052ppm TREO [0m]
Agostinho	AGOAC0076	0.0	36.8	36.8	2,385	560	23%	36.8m @ 2385ppm TREO [0m]
Agostinho	AGOAC0077	0.0	27.4	27.4	2,713	673	25%	27.4m @ 2713ppm TREO [0m]
Agostinho	AGOAC0078	0.0	50.0	50.0	1,625	292	18%	50m @ 1625ppm TREO [0m]
Agostinho	AGOAC0079	0.0	28.0	28.0	3,183	857	27%	28m @ 3183ppm TREO [0m]
Agostinho	AGOAC0080	0.0	37.8	37.8	1,864	443	24%	37.8m @ 1864ppm TREO [0m]
Agostinho	AGOAC0081	0.0	17.8	17.8	2,878	671	23%	17.8m @ 2878ppm TREO [0m]
Agostinho	AGOAC0082	0.0	35.0	35.0	2,952	578	20%	35m @ 2952ppm TREO [0m]
Agostinho	AGOAC0083	0.0	33.2	33.2	3,452	801	23%	33.2m @ 3452ppm TREO [0m]
Agostinho	AGOAC0084	0.0	24.0	24.0	4,095	1,075	26%	24m @ 4095ppm TREO [0m]
Agostinho	AGOAC0085	0.0	12.0	12.0	2,823	689	24%	12m @ 2823ppm TREO [0m]
Agostinho	AGOAC0086	0.0	6.0	6.0	2,004	398	20%	6m @ 2004ppm TREO [0m]
Agostinho	AGOAC0087	0.0	30.0	30.0	1,793	387	22%	30m @ 1793ppm TREO [0m]
Agostinho	AGOAC0088	0.0	40.1	40.1	1,682	346	21%	40.1m @ 1682ppm TREO [0m]
Agostinho	AGOAC0089	0.0	19.2	19.2	2,612	476	18%	19.2m @ 2612ppm TREO [0m]
Agostinho	AGOAC0090	0.0	43.5	43.5	3,435	796	23%	43.5m @ 3435ppm TREO [0m]
Agostinho	AGOAC0091	0.0	30.5	30.5	3,735	890	24%	30.5m @ 3735ppm TREO [0m]
Agostinho	AGOAC0092	0.0	22.0	22.0	4,323	1,177	27%	22m @ 4323ppm TREO [0m]
Agostinho	AGOAC0093	0.0	16.0	16.0	5,271	1,436	27%	16m @ 5271ppm TREO [0m]
Agostinho	AGOAC0094	0.0	22.0	22.0	4,575	1,363	30%	22m @ 4575ppm TREO [0m]
Agostinho	AGOAC0095	0.0	13.0	13.0	4,234	1,157	27%	13m @ 4234ppm TREO [0m]
Agostinho	AGOAC0096	0.0	28.0	28.0	3,011	827	27%	28m @ 3011ppm TREO [0m]
Agostinho	AGOAC0097	0.0	50.0	50.0	3,181	558	18%	50m @ 3181ppm TREO [0m]
Agostinho	AGOAC0098	0.0	28.0	28.0	5,315	1,459	27%	28m @ 5315ppm TREO [0m]
Agostinho	AGOAC0099	0.0	20.0	20.0	4,248	1,008	24%	20m @ 4248ppm TREO [0m]
Agostinho	AGOAC0100	0.0	35.2	35.2	2,765	642	23%	35.2m @ 2765ppm TREO [0m]
Agostinho	AGOAC0101	0.0	22.8	22.8	3,687	884	24%	22.8m @ 3687ppm TREO [0m]
Agostinho	AGOAC0102	0.0	17.0	17.0	2,916	668	23%	17m @ 2916ppm TREO [0m]
Agostinho	AGOAC0103	0.0	26.0	26.0	2,715	473	17%	26m @ 2715ppm TREO [0m]
Agostinho	AGOAC0104	0.0	40.0	40.0	2,965	657	22%	40m @ 2965ppm TREO [0m]
Agostinho	AGOAC0105	0.0	37.0	37.0	2,107	323	15%	37m @ 2107ppm TREO [0m]
Agostinho	AGOAC0106	0.0	30.0	30.0	3,761	901	24%	30m @ 3761ppm TREO [0m]
Agostinho	AGOAC0107	0.0	24.2	24.2	6,918	1,867	27%	24.2m @ 6918ppm TREO [0m]
Agostinho	AGOAC0108	0.0	28.0	28.0	4,066	1,046	26%	28m @ 4066ppm TREO [0m]
Agostinho	AGOAC0109	0.0	19.2	19.2	3,083	788	26%	19.2m @ 3083ppm TREO [0m]
Agostinho	AGOAC0110	0.0	22.0	22.0	4,422	1,227	28%	22m @ 4422ppm TREO [0m]
Agostinho	AGOAC0111	0.0	23.4	23.4	3,638	967	27%	23.4m @ 3638ppm TREO [0m]
Agostinho	AGOAC0112	0.0	33.0	33.0	2,943	646	22%	33m @ 2943ppm TREO [0m]
Agostinho	AGOAC0113	0.0	34.4	34.4	2,347	502	21%	34.4m @ 2347ppm TREO [0m]
Agostinho	AGOAC0114	0.0	50.0	50.0	3,039	679	22%	50m @ 3039ppm TREO [0m]
Agostinho	AGOAC0115	0.0	40.0	40.0	2,869	657	23%	40m @ 2869ppm TREO [0m]
Agostinho	AGOAC0116	0.0	25.0	25.0	2,698	568	21%	25m @ 2698ppm TREO [0m]
Weighted Average				***28.4***	***2,771***	***634***	***22%***	28.4m @ 2771ppm TREO [m]

APPENDIX 3: Caldeira REE Project license details

License	Status	License Holder	Area (Ha)
808027/1975	MINING CONCESSION	COMPANHIA GERAL DE MINAS	600.76
809358/1975	MINING CONCESSION	COMPANHIA GERAL DE MINAS	617.23
809359/1975	MINING CONCESSION	COMPANHIA GERAL DE MINAS	317.36
815645/1971	MINING CONCESSION	COMPANHIA GERAL DE MINAS	366.02
815682/1971	MINING CONCESSION	COMPANHIA GERAL DE MINAS	575.26
817223/1971	MINING CONCESSION	MINERAÇÃO DANIEL TOGNI LOUREIRO LTDA	772.72
803459/1975	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	24.02
808556/1974	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	204.09
811232/1974	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	524.40
814251/1971	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	124.35
815006/1971	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	717.52
816211/1971	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	796.55
835022/1993	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	73.50
835025/1993	MINING CONCESSION	MINERAÇÃO PERDIZES LTDA	100.47
814860/1971	MINING CONCESSION	MINERAÇÃO ZELÂNDIA LTDA	341.73
815681/1971	MINING CONCESSION	MINERAÇÃO ZELÂNDIA LTDA	766.54
820352/1972	MINING CONCESSION	MINERAÇÃO ZELÂNDIA LTDA	26.40
820353/1972	MINING CONCESSION	MINERAÇÃO ZELÂNDIA LTDA	529.70
820354/1972	MINING CONCESSION	MINERAÇÃO ZELÂNDIA LTDA	216.49
2757/1967	MINING CONCESSION	RAJ MINERIOS LTDA	20.10
5649/1963	MINING CONCESSION	RAJ MINERIOS LTDA	12.41
803457/1975	MINING CONCESSION	RAJ MINERIOS LTDA	60.64
825972/1972	MINING CONCESSION	RAJ MINERIOS LTDA	377.42
833914/2007	MINING CONCESSION	RAJ MINERIOS LTDA	6.99
002.349/1967	MINING CONCESSION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	74.01
830443/2018	EXPLORATION LICENSE	FERTIMAX FERTILIZANTES ORGANICOS LTDA	79.24
830444/2018	EXPLORATION LICENSE	FERTIMAX FERTILIZANTES ORGANICOS LTDA	248.34
830824/2006	EXPLORATION LICENSE	RAJ MINERIOS LTDA	13.24
832350/2006	EXPLORATION LICENSE	RAJ MINERIOS LTDA	27.14
832351/2006	EXPLORATION LICENSE	RAJ MINERIOS LTDA	16.77
832671/2005	EXPLORATION LICENSE	RAJ MINERIOS LTDA	16.91
832714/2016	EXPLORATION LICENSE	RAJ MINERIOS LTDA	13.61
832800/2002	EXPLORATION LICENSE	RAJ MINERIOS LTDA	6.94
831686/2012	EXPLORATION LICENSE	VARGINHA MINERACAO E LOTEAMENTOS LTDA	6.50
832193/2012	EXPLORATION LICENSE	VARGINHA MINERACAO E LOTEAMENTOS LTDA	12.46
807899/1975	MINING APPLICATION	COMPANHIA GERAL DE MINAS	948.92
815274/1971	MINING APPLICATION	COMPANHIA GERAL DE MINAS	739.73
833486/1996	MINING APPLICATION	MINAS RIO MINERADORA LTDA	79.38
833655/1996	MINING APPLICATION	MINAS RIO MINERADORA LTDA	249.11
833656/1996	MINING APPLICATION	MINAS RIO MINERADORA LTDA	82.77
833657/1996	MINING APPLICATION	MINAS RIO MINERADORA LTDA	68.25
834743/1995	MINING APPLICATION	MINAS RIO MINERADORA LTDA	283.19
830513/1979	MINING APPLICATION	MINERAÇÃO MONTE CARMELO LTDA	457.77

License	Status	License Holder	Area (Ha)
804222/1975	MINING APPLICATION	MINERAÇÃO PERDIZES LTDA	403.65
813025/1973	MINING APPLICATION	MINERAÇÃO PERDIZES LTDA	943.74
830000/1980	MINING APPLICATION	MINERAÇÃO PERDIZES LTDA	203.85
831092/1983	MINING APPLICATION	MINERAÇÃO PERDIZES LTDA	171.39
830391/1979	MINING APPLICATION	MINERAÇÃO PERDIZES LTDA.	7.30
830633/1980	MINING APPLICATION	MINERAÇÃO ZELÂNDIA LTDA	35.25
831880/1991	MINING APPLICATION	MINERAÇÃO ZELÂNDIA LTDA	84.75
815237/1971	MINING APPLICATION	RAJ MINERIOS LTDA	131.98
830722/2002	MINING APPLICATION	RAJ MINERIOS LTDA	5.60
831250/2008	MINING APPLICATION	RAJ MINERIOS LTDA	2.48
831598/1988	MINING APPLICATION	RAJ MINERIOS LTDA	930.90
832889/2005	MINING APPLICATION	RAJ MINERIOS LTDA	27.82
837368/1993	MINING APPLICATION	RAJ MINERIOS LTDA	340.04
830551/1979	MINING APPLICATION	TOGNI S/A MATERIAIS REFRATÃ• RIOS	528.88
830416/2001	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	166.22
831269/1992	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	442.16
832146/2002	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	18.95
832252/2001	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	51.96
832572/2003	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	204.49
833551/1993	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	98.87
833553/1993	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	98.13
830.697/2003	MINING APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	5.38
830.461/2018	EXPLORATION APPLICATION	FERTIMAX FERTILIZANTES ORGANICOS LTDA	50.88
832799/2002	EXPLORATION APPLICATION	RAJ MINERIOS LTDA	38.35
830955/2006	EXPLORATION APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	1993.50
833176/2008	EXPLORATION APPLICATION	VARGINHA MINERACAO E LOTEAMENTOS LTDA	634.00

APPENDIX 4: JORC Code, 2012 Edition – Table 1.

Section 1 Sampling Techniques and Data

Criteria	Commentary

Sampling techniques	• The license area was sampled using: a diamond drill machine and an Aircore drill machine.
	• **Diamond drill holes**
	  ○ The intact drill cores are collected in plastic core trays with depth markers recording the depth at the end of each drill run (blocks).
	  ○ Samples were collected at 1m intervals. In the saprolite zone the core is halved with a metal spatula and bagged in plastic bags, the fresh rock was halved by a powered saw and bagged.
	• **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 Pocos de Caldas.

Drilling techniques	• **Diamond Core**
	  ○ Diamond drilling employed a conventional wireline diamond drill rig (Mach 1200). All holes were drilled vertical using PQ diameter core through soils and clays (85mm core diameter), reducing to HQ through transition material and fresh rock (63.5mm core diameter). The maximum depth drilled was 48.1m. The final depth was recorded using the length of the 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. All holes are drilled vertical.
	  ○ Most drill sites require minimal to no site preparation. On particularly steep sites, the area is levelled with a backhoe loader.
	  ○ 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). On occasions a face sampling hammer is used once 'blade refusal' is reached to penetrate through the remaining transition zone and into the fresh rock.

Drill sample recovery	• **Diamond drill hole recovery**
	  ○ Calculated after each run, comparing length of core recovery vs. drill depth. Overall core recoveries are 92.5%, achieving 95% in the saprolite target horizon, 89% in the transition zone and 92.5% in fresh rock.
	• **Aircore recovery**
	  ○ 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	• **Diamond drilling**
	  ○ Geology description is made in a core facility, focused on the soil (humic) horizon, saprolite, transition zone and fresh rock boundaries. The geology depth is honored and described with downhole depth (not metre by metre). Parameters logged include: grainsize, texture and colour, which can help to identify the parent rock before weathering.
	  ○ All drill holes are photographed and stored at Core facility in Pocos de Caldas.
	• **Aircore drilling**
	  ○ The 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.
	  ○ Logging is done on 2m intervals due to the nature of the drilling with 2m composite samples collected in a bucket and presented for sampling and logging.
	  ○ The chip trays of all drilled holes have a digital photographic record and are retained at a Core facility in Pocos de Caldas.

Sub-sampling techniques	• **Diamond cores**
	  ○ In the saprolite zone the core is halved with a metal spatula and bagged in plastic bags
	  ○ The fresh rock was halved by a powered saw and bagged into a plastic bag with a unique sequential number of samples and sent to ALS laboratory in Vespasiano – Minas Gerais.
	  ○ Field duplicates consist of quarter core, with both quarters sent to the lab.

Criteria	Commentary

and sample preparation

- **Aircore material**
  - Samples are weighed at the Rig. When the sample > 6kg it passes through a single tier Riffle splitter generating a 50/50 split, one for ALS Laboratory and a duplicate which is retained in core facility. Samples are bagged in plastic bags with unique tag for the interval.
  - Given the grainsize if the mineralisation is extremely fine (clays) and shows little variability, the practice of submitting 50% of original sample for analysis is deemed appropriate.
  - Field Duplicates are routinely submitted and results analysed by examining the correlation between original and duplicate samples. More than 90% of duplicates show <20% variance.

Quality of assay data and laboratory tests

- **Diamond and Aircore** samples are analysed by ALS Laboratories (accredited) in Batches up to 72 samples. Upon arriving at ALS Vespasiano samples receive additional preparation (drying, crushing, splitting, and pulverising):
  - dried at 60°C
  - the fresh rock is crushed to sub 2mm
  - the saprolite is disaggregated with hammers
  - Riffle split 800g sub-sample
  - 800 g pulverized to 90% passing 75um, monitored by sieving.
  - Aliquot selection from pulp packet

The aliquot obtained from the physical preparation process at Vespasiano is sent to ALS Lima or analysis by ME-MS81 – which consists of analysis of Rare Earths and Trace Elements by ICP-MS for 32 elements by fusion with lithium borate as seen below (with detection limits):

Code	Analytes & Ranges (ppm)							
ME-MS81	Ba	0.5 - 10000	Gd	0.05 - 1000	Rb	0.2 - 10000	Ti	0.01 - 10%
	Ce	0.1 - 10000	Hf	0.5 - 10000	Sc	0.5 - 500	Tm	0.01 - 1000
	Cr	5 - 10000	Ho	0.01 - 10000	Sm	0.03 - 1000	U	0.05 - 1000
	Cs	0.01 - 10000	La	0.1 - 10000	Sn	0.5 - 10000	V	5 - 10000
	Dy	0.05 - 1000	Lu	0.01 - 10000	Sr	0.1 - 10000	W	0.5 - 10000
	Er	0.03 - 1000	Nb	0.05 - 2500	Ta	0.1 - 2500	Y	0.1 - 10000
	Eu	0.02 - 1000	Nd	0.1 - 10000	Tb	0.01 - 1000	Yb	0.03 - 1000
	Ga	0.1 - 10000	Pr	0.02 - 10000	Th	0.05 - 1000	Zr	1 - 10000

- MEI QAQC protocols demand duplicate sample every 20 samples, and a blank and standard sample in each 30 samples. In addition, ALS inserted their own internal reference check samples as well as conducting repeat analysis. Results show: 94.94% of Standards are within tolerance limits, 99.96% of Blanks are within tolerance limits, and only 4.92% of Duplicate samples showed >30% variation for the Original result.

Verification of sampling and assaying

- Given the nature of the ionic clay mineralisation visual checks are not appropriate for verification of mineralised intercepts.
- MEI completed several rounds of Twin Hole drilling at nearby licenses (CDM-SB-FG) as part of resource estimation drilling to verify sampling methods:-
  - DD drill holes twinning historic Auger holes
    - A total of 32 DD holes were drilled to twin historic Auger holes and confirm the reported widths and grades across the 6 resource areas (February 2023 - January 2024). Results confirmed the width and general nature of high-grade TREO mineralization, showing a slight (14%) Positive Bias in Auger results compared to DD results. The apparent Bias is not considered significant.
  - AC holes twinning existing DD holes
    - A total of 17 AC holes were drilled at Soberbo, Capão do Mel and Figueira deposits to twin existing DD drill holes and assess AC as a sampling method (March 2023 – March 2024). Results confirmed the width and general nature of high-grade TREO mineralization, showing a slight (20%) Negative Bias in AC results compared to DD results. The apparent Bias is not considered significant.
- For all drilling conducted by MEI (DD and AC), data is recorded into MX Deposit tables (collar, survey, geology, sample) using tablets/laptops at the Aircore Rig or in the Core Shed. Files are forwarded via email by Geologists to Database manager for uploading into the Database. The data is stored in MX Deposit database (Sequent). Data validation is turned ON during the import of data avoiding errors.
- Raw assays are received as Elemental data (ppm) from ALS laboratories. The Elemental data is converted to Element Oxide data using the following conversion factors:

Element Oxide	Oxide Factor	Element Oxide	Oxide Factor
CeO_2	1.2284	Pr_6O_{11}	1.2082
Dy_2O_3	1.1477	Sm_2O_3	1.1596
Er_2O_3	1.1435	Tb_4O_7	1.1762
Eu_2O_3	1.1579	ThO2	1.1379
Gd_2O_3	1.1526	Tm_2O_3	1.1421
Ho_2O_3	1.1455	U_3O_8	1.1793

Criteria	Commentary
	La_2O_3 1.1728; Y_2O_3 1.2699; Lu_2O_3 1.1728; Yb_2O_3 1.1387; Nd_2O_3 1.1664
Location of data points	• **Diamond and Aircore collars** ○ The survey was made by MEI personel using a GPS CHCNAV i73 RTK GNSS capable of carrying out data surveys and kinematic locations in real time (RTK-Real Time Kinematic), consisting of two GNSS receivers, a BASE and a ROVER. The horizontal accuracy, in RTK, is 8mm +/- 1mm, and vertical 15mm +/- 1mm.
Data spacing and distribution	• Aircore drilling was done at 100m x 100m spacing over the highest soil anomalism, stepping out to 400m x 400m in areas away from this to ensure total coverage of the license. Diamond holes had no regular spacing but were designed to target specific geologic characteristics (i.e. grade, density). • Given the substantial geographic extent and generally shallow, flat lying geometry of the mineralisation, the spacing and orientation are considered sufficient to establish geologic and grade continuity. • Sample compositing: ○ Diamond samples were collected at 1.00m composites, respecting the geological contacts. ○ Aircore samples were collected at 2.00m composites.
Orientation of data in relation to geological structure	• The mineralisation is flat lying and occurs within the saprolite/clay zone of a deeply developed regolith (reflecting topography and weathering). Vertical sampling for all sampling methods is considered most appropriate.
Sample security	• **Diamond samples:** ○ Samples are removed from the field by MEI staff and transported back to a Core shad to be logged and sampled. All samples for submission to the lab are packed in plastic bags (in batches) and sent to the lab where it is processed as reported above. The transport of samples from Poços de Caldas to ALS laboratory in Vespasiano was undertaken by a commercial Transport Company. • **Aircore samples:** ○ Samples are split and bagged in the field and transported back to a Core shed. All samples for submission to the lab are packed in plastic bags (in batches) and despatched to ALS laboratory in Vespasiano using a commercial Transport Company.
Audits or reviews	• MEI conducted a review of assay results as part of its Due Diligence prior to acquiring the project. Approximately 5% of all stored coarse rejects from auger drilling were resampled and submitted to two (2) labs: SGS Geosol and ALS Laboratories. Results verified the existing assay results, returning values +/- 10% of the original grades, well within margins of error for the grade of mineralisation reported. (see ASX:MEI 13/03/23 for a more detailed discussion) • A site visit was carried out by Volodymyr Myadzel from BNA Mining Solutions on 19-20 February 2024 as part of Resource Estimation work. At this time he had occasion to review all aspects of Geology, including: inspect drilling and sampling procedures, verify survey methods, inspect the storage shed, verification of geological records, review of QAQC procedures and review of geologic models.

Section 2 Reporting of Exploration Results (Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Mineral tenement and land tenure status	• Listed in Appendix 3. • 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	• The Caldeira Project has had significant exploration 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).

Criteria	Commentary
Geology	• The Alkaline Complex of Poços de Caldas represents in Brazil one of the most important geological terrains which hosts deposits of 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 dominant REE mineral in the source rock (syenite) beneath the clay zone is Bastnaesite, a major source of REE worldwide. Bastnaesite is a REE carbonate-fluoride mineral (REE)CO3F and has very low levels of U and Th in its structure. Due to the chemistry of the underling intrusives and the intense weathering of the region, a thick profile comprising soil, clay and saprolite (regolith) has formed and these are the hosts to the ionic clay REE mineralization.
Drill hole Information	• Drill hole information for all Aircore holes is presented in Appendices 1 & 2.
Data aggregation methods	• Mineralised Intercepts are reported with a minimum of 4m width, lower cut-off 1,000ppm 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 3,000 ppm TREO, with a maximum of 1m internal dilution. • Extreme 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. • No Metal Equivalents are used.
Mineralisation widths and intercept lengths	• 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	• Reported in the body of the text.
Balanced reporting	• Significant Intercepts for all Aircore drill holes are reported in Appendix 2 of this report.
Other substantive exploration data	• Metallurgical work was carried out on samples split from a 200kg composite sample, which in turn was composed of a selection of 184 samples from 41 holes (100 x100m grid) across the Capo do Mel Target. Head grade of the composite sample was 4,917ppm TREO. Results showed excellent recoveries by desorption of Rare Earth Elements (REE) using ammonium sulphate solution [(NH4)2SO4)] in weakly acidic conditions [pH 4]. Average recovery of the low temperature magnet REE Pr + Nd was 58%. Desorption was achieved using a standard ammonium sulphate solution at pH 4 and confirms the Caldeira Project is an Ionic (Adsorption) Clay REE deposit (for further discussion refer ASX Release 20 December 2022). • Updated resources were reported to the ASX in August 2024.
Further work	• Proposed work is discussed in the body of the text.