Monte Alto Metallurgical Results Successfully Deliver High-Purity MREC and Yellowcake Product

- **High-purity MREC production:** Successfully produced a Mixed-Rare-Earth Carbonate (MREC) product that meets quality specifications for conventional solvent-extraction separation circuits
- **Strong magnetic rare-earth recoveries:** High recoveries of magnetic rare earth elements NdPr and DyTb via hydrometallurgical leaching, with TREO extraction rates between 86-90%
- **Uranium co-product recovery:** Successful extraction of uranium with precipitation of uranium peroxide (a form of yellowcake)
- **Direct 'run-of-mine' mineral-to-MREC route:** Bypassing mineral beneficiation unlocks both capex and opex advantages and increases total rare-earth yields
- **Next metallurgical stages underway:** Metallurgical studies now progressing to production of separated NdPr rare earth products and potential recovery of valuable co-products, including niobium, tantalum and scandium

---

Brazilian Rare Earths Limited (ASX: BRE) (OTCQX: BRELY / OTCQX: BRETF) is pleased to report the successful production of both a mixed-rare earth carbonate (MREC) and a uranium peroxide from the ultra-high grade REE-Nb-Sc-Ta-U mineralisation from the Monte Alto Project.

Metallurgical Highlights

- High-value magnetic rare-earths: Excellent leaching extractions of NdPr (85%), Tb (88%), Dy (89%), with peak recovery values for NdPr reaching 90%
- Exceptional mineral-to-MREC rare-earths recoveries: Projected closed-circuit recoveries for Monte Alto 'run-of-mine' mineral sample grade of 15.3 % TREO (153,000 ppm) to the production of high-purity MREC between 83-87%
- MREC for valuable product separation: MREC product meets physical and chemical criteria for rare earth separation from conventional solvent-extraction circuits
- Successful uranium extraction: Efficient uranium recovery using standard tertiary-amine ion-exchange resin to produce a clean MREC product
- Scalable performance: Larger-batch leaching results confirm scalability and reproducibility from previous successful trials

These results mark the successful completion of the second and final phase of Scoping-level metallurgical test work undertaken with ANSTO Minerals and represents a major milestone in BRE's strategy to establish a fully integrated rare-earths and critical-minerals supply chain in Brazil.

Furthermore, the successful production of high-purity MREC and uranium peroxide represents a key advancement in BRE's product strategy, which initially targets four high-value products:

- NdPr oxide: a critical permanent magnet rare earth product
- SEG+ product: a highly marketable concentrate product that is rich in dysprosium, terbium, samarium, gadolinium and yttrium
- Uranium yellowcake product: a strategic co-product for growing global demand
- Multi-revenue co-products: multiple potential co-product streams including niobium, tantalum and scandium

Brazilian Rare Earths' CEO and Managing Director, Bernardo da Veiga, commented:

"In just 16 months, we've progressed from Monte Alto's first ultra-high-grade diamond-core intercepts to the successful production of a high-purity mixed rare earth carbonate (MREC) and uranium peroxide co-product.

This is a major milestone that validates our development strategy: advancing systematic techno-economic studies to establish a fully integrated rare earths and critical minerals supply chain in Brazil, whilst retaining the tactical optionality of a low-capex, low-opex, ultra-high-grade 'DSO-style' operation.

Brazil offers a unique location for value creation - abundant low-cost hydroelectric power, skilled labour, and domestic reagent supply provide structural cost advantages for downstream processing. From our high-purity MREC, we aim to produce four key products: NdPr oxide, a heavy rare earth-rich SEG+ concentrate, uranium, and a valuable co-product stream including niobium, scandium, and tantalum.

Global market dynamics highlight the strategic importance of heavy rare earths. Our potential SEG+ product is particularly rich in dysprosium, terbium, samarium, gadolinium and yttrium that are critical to advanced industries.

Monte Alto's exceptional chevkinite-rich mineralogy, combined with the successful results from ANSTO's metallurgical test work, reinforce our confidence that we can unlock shareholder value from this world-class, ultra-high-grade resource through low-cost leaching and conventional solvent-extraction in Brazil."

Metallurgical Test Work Overview

A staged *step-through* metallurgical program at Australia's Nuclear Science and Technology Organisation (ANSTO) has successfully completed the first-pass flowsheet for Monte Alto's high-grade REE-Nb-Sc-Ta-U mineralisation. The program evaluated mineral leaching, impurity removal, uranium recovery and the precipitation of high-purity mixed rare-earth carbonate (MREC).

The 'run-of-mine' mineral sample from Monte Alto had a grade of 15.3 % TREO (153,000 ppm) and was leached without any prior beneficiation - avoiding the cost, yield loss and schedule risk of a mineral concentration stage. Recoveries from mineral-to-MREC are correspondingly high: neodymium 84%, praseodymium 86%, dysprosium 89% and terbium 88%, delivering a combined 21,909 ppm of these four magnet-critical elements in the MREC.

The same Monte Alto mineral sample contains the 'magnificent seven' rare earth elements that are now subject to Chinese export controls - samarium (Sm), gadolinium (Gd), terbium (Tb), dysprosium (Dy), lutetium (Lu), scandium (Sc) and yttrium (Y) - which together report to MREC at 9,228 ppm. Significant niobium (4,435 ppm), tantalum (244 ppm) and uranium (2,594 ppm) round out a strategic and valuable co-product suite.

Taken together, these metallurgical results position Monte Alto to pursue a simple mineral-to-MREC flowsheet that promises lower capital intensity, lower operating costs and superior metal yield compared with other mineral deposits.

(oxide equivalent)		Nd	Pr	Dy*	Tb*	Total NdPr + DyTb
Mineral sample head grade	*ppm*	17,900	6,670	1,080	200	**25,850**
Mineral to MREC recovery	*%*	84%	86%	89%	88%	
Recovered grade in MREC	*ppm*	15,036	5,736	961	176	**21,909**

(oxide equivalent)		Sm*	Gd*	Lu*	Sc*	Y*	Export controlled REE*
Mineral sample head grade	*ppm*	2,190	1,430	60	140	5,500	**10,600**
Mineral to MREC recovery	*%*	86%	88%	91%	NA	89%	
Recovered grade in MREC	*ppm*	1,883	1,258	55	NA	4,895	**9,228**

Tables 1a and 1b: Recovered grade in MREC of Monte Alto sample of key rare earth oxides, including the seven elements subject to Chinese export restrictions (denominated by *)

		Nb	Sc	Ta	U
Mineral sample head grade	*ppm*	4,435	215	244	2,594

Table 2: Other highly valuable non-rare earth elements contained within BRE's mineral sample

Bulk Leach Testing

During this campaign of work, five bulk leach tests were conducted using high-grade Monte Alto REE-Nb-Sc-Ta-U mineral feedstock. Consistent TREO extractions (86–90%) along with reproducible acid consumption rates were observed.

Test work started with two 100 g diagnostic leaches (BL1 & BL2) at 80 °C to produce liquor allowing the establishment of impurity removal curves by staged neutralisation of the pregnant leach solution (PLS). The bulk leaches demonstrated, within the first 15 minutes, > 60 % TREE extraction and > 70 % Dy extraction, underscoring the fast-leaching nature of chevkinite-rich mineralisation. Up-scaling to 160 g (BL3) and 180 g (BL4) at the same temperature confirmed reproducibility of rapid-kinetics and solution chemistry.

The keystone experiment, BL5, processed 1.5 kg of 53 µm feed at a reduced temperature of 60 °C. Despite the lower operating temperature, BL5 achieved 85 % Nd extraction, 89 % Dy extraction and 86 % overall TREO extraction after six hours. Importantly, TREE tenor in solution stabilised at ~18 g L^{-1} – a level ideal for downstream impurity removal without inducing unwanted secondary REE precipitation. Acid consumption remained consistent and predictable throughout

Impurity Removal

Two-stage pH neutralisation with magnesia removed deleterious elements (Fe, Th, Ti, P, Si) effectively at pH 3.5 to 4.5, minimising rare earth loss. A two staged approach was employed to facilitate the high recovery of uranium from the PLS. Uranium recovery was undertaken between Stage 1 and Stage 2 of the impurity removal process.

Uranium Recovery

Greater than 99.6% uranium removal was achieved using Puromet MTA6002PF IX resin columns ("IX") with negligible REE loss. This demonstrates the effective removal of uranium from the PLS and facilitates the preparation of a saleable uranium (yellowcake) product.

Further process development work will be undertaken to improve the purity of the uranium produced via IX, namely employing a two-column extraction process to improve the selectivity over competing ions.

MREC Precipitation

A clean MREC product was generated from uranium-free leach liquor via sodium carbonate addition. Batch-continuous precipitation yielded a high-purity carbonate suitable for conventional solvent extraction separation.

A free-filtering, granular carbonate formed almost instantaneously, achieving a final TREO + Y grade of 56 wt %, which sits comfortably within globally traded MREC benchmarks.

- Product grade: 56 wt % TREO + Y - well above industry minimums
- NdPr content: 8.8 wt % - in-line with traded benchmarks

Next Steps: Metallurgical Process Development

The production of MREC is major milestone for BRE's product strategy, focused on four target products: NdPr oxide, SEG+ concentrate rich in dysprosium and terbium, uranium yellowcake product and a valuable co-product stream including niobium, tantalum and scandium.

With Scoping Study metallurgical test work program complete, BRE is now advancing to techno-economic analysis and process optimisation, including:

- Solvent extraction test work for separation of NdPr from MREC
- Design and demonstration of NdPr oxide production
- Co-product recovery for niobium, tantalum, and scandium

This announcement has been authorised for release by the CEO and Managing Director.

For further information or enquiries please contact:

Bernardo da Veiga
MD and CEO

Brazilian Rare Earths
bdv@brazilianrareearths.com

Sign up to our investor hub at investors.brazilianrareearths.com

Forward-Looking Statements and Information

This Announcement may contain “forward-looking statements” and “forward-looking information”, including statements and forecasts which include (without limitation) expectations regarding industry growth and other trend projections, forward-looking statements about the BRE’s Projects, future strategies, results and outlook of BRE and the opportunities available to BRE. Often, but not always, forward-looking information can be identified by the use of words such as “plans”, “expects”, “is expected”, “is expecting”, “budget”, “outlook”, “scheduled”, "target", “estimates”, “forecasts”, “intends”, “anticipates”, or “believes”, or variations (including negative variations) of such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “might”, or “will” be taken, occur or be achieved. Such information is based on assumptions and judgments of BRE regarding future events and results. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, targets, performance or achievements of BRE to be materially different from any future results, targets, performance or achievements expressed or implied by the forward-looking information.

Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and management of the Company. Key risk factors associated with an investment in the Company are detailed in Section 3 of the Prospectus dated 13 November 2023. These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements.

Forward-looking information and statements are (further to the above) based on the reasonable assumptions, estimates, analysis and opinions of BRE made on the perception of trends, current conditions and expected developments, as well as other factors that BRE believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. Although BRE believes that the assumptions and expectations reflected in such forward-looking statements and information (including as described in this Announcement) are reasonable, readers are cautioned that this is not exhaustive of all factors which may impact on the forward-looking information.

The Company cannot and does not give assurances that the results, performance or achievements expressed or implied in the forward-looking information or statements detailed in this Announcement will actually occur and prospective investors are cautioned not to place undue reliance on these forward-looking information or statements.

Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Competent Persons Statement

The information in this release that relates to Metallurgical Testwork, is based on information compiled and/or reviewed by Dr Kurt Forrester who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Dr Forrester is Chief Metallurgist and Head of Metallurgical Processing for Brazilian Rare Earths Limited (“BRE”) with sufficient experience relevant to the activity which he is undertaking to be recognised as competent to compile and report such information to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Forrester is entitled to participate in BRE’s Employee Incentive Plan and holds securities in BRE via a related party..

Dr Forrester consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix A: Summary of mineral sample to MREC recovery and MREC TREO composition **(calculated)**

	Mineral sample head grade	Mineral to MREC recovery	Mineral to MREC recovered grade	MREC TREO composition
Element	ppm oxide equiv.	%	ppm oxide equiv.	%
La	41,500	87	36,105	27.5
Ce	75,500	85	64,175	48.8
Pr	6,670	86	5,736	4.4
Nd	17,900	84	15,036	11.4
Sm	2,190	86	1,883	1.4
Eu	30	87	26	0.0
Gd	1,430	88	1,258	1.0
Tb	200	88	176	0.1
Dy	1,080	89	961	0.7
Ho	200	89	178	0.1
Er	530	90	477	0.4
Tm	70	90	63	0.0
Yb	440	91	400	0.3
Lu	60	91	55	0.0
Y	5,500	89	4,895	3.7
U	2,594	86	2,234	
LRE	141,570		**121,052**	92.1
MRE	35,170		**30,124**	22.9
NdPr + DyTb	25,850		**21,909**	16.7
HRE	11,730		**10,373**	7.9
TRE+Y	153,300		**131,425**	100.0
TRE+Y+U	155,894		**133,660**	

Appendix B: Mixed-rare earth carbonate and uranium peroxide generated by ANSTO on ultra-high grade REE-Nb-Sc-Ta-U mineralisation sourced from the Monte Alto Project

Appendix C: ANSTO Certificate of Analysis – Bulk Leach 5 (MREC) and feed head grade[1]

Rare Earth Elements (%)		
Oxide	Concentration	Distribution
La_2O_3	16.5	29.7
CeO2	27.9	50.0
Pr_6O_{11}	2.1	3.7
Nd_2O_3	5.9	10.6
Sm_2O_3	0.6	1.1
Eu_2O_3	0.0	0.0
Gd_2O_3	0.4	0.8
Tb_4O_7	0.1	0.1
Dy_2O_3	0.3	0.6
Ho_2O_3	0.1	0.1
Er_2O_3	0.2	0.3
Tm_2O_3	0.0	0.0
Yb_2O_3	0.1	0.2
Lu_2O_3	0.0	0.0
Y_2O_3	1.6	2.8
TREO	55.8	100.0

Feed head grade *ppm oxide equivalent*	
La	41,500
Ce	75,500
Pr	6,670
Nd	17,900
Sm	2,190
Eu	30
Gd	1,430
Tb	200
Dy	1,080
Ho	200
Er	530
Tm	70
Yb	440
Lu	60
Y	5,500
Total	153,300
Nb	4,435
Sc	215
Ta	244
U	2,594

[1] *Refer ASX Announcement dated 26 November 2024 for locations of the Monte Alto drill holes used for the reported minerology and metallurgy test work and for the composition of the ANSTO metallurgical sample and expected head grade calculation.*

APPENDIX D: JORC Table

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg. submarine nodules) may warrant disclosure of detailed information.*	Details of the ANSTO sample discussed in this Report are provided in BRE ASX Announcement dated 26 November 2024. The sample was obtained from diamond core drilling. Diamond drill holes were drilled with 3m run lengths in fresh rock. Drill core was collected directly from the core barrel and placed in pre-labelled core trays and transported to the BRE's secure exploration facility where it was measured for recovery, geologically logged, photographed, and marked up for sampling. All drilling provided a continuous sample of mineralised zone. All mineralisation that is material to this report has been directly determined through quantitative laboratory analytical techniques that are detailed in the sections below.
Drilling techniques	• *Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Core drilling was conducted by BRE using a Royal Eijkelkamp CompactRotoSonic XL170 MAX DUO rig to drill vertical holes with an operational depth limit of 200m and an average depth of 112m; and using an I-800 DKVIII-12 rig to drill angled holes with an operational depth limit of 500m and an average depth of 160m. Drill core was recovered from surface to the target depth. All diamond drill holes utilised a 3.05m long single wall barrel and were collared with HQ and were transitioned to NQ upon encountering non-weathered and unoxidized bedrock. Water is used as a drilling fluid as necessary and to aid in extruding material from the core barrel.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	The diamond core was transported from the drill site to the logging facility in covered boxes with the utmost care. Once at the logging facility, broken core was re-aligned to its original position as closely as possible. The recovered drill core was measured, and the length was divided by the interval drilled and expressed as a percentage. This recovery data was recorded in the database. Recoveries for all core drilling included in the minerology and metallurgy samples detailed in this report are consistently good (averaging 100%). There does not appear to be a relationship between sample recovery and grade or sample bias due to preferential loss or gain of fine or coarse material with the drilling and sampling methods used.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	All drill core used for ANSTO testwork are geologically logged to a detail level that supports the studies presented in this report. Drill core was logged at BRE's exploration facility by a logging geologist. Core was photographed wet in core boxes immediately before geochemical sampling. Core photos show sample numbers, drill run lengths for material in the core box. Logging included qualitive determinations of primary and secondary lithology units, weathering profile unit (mottled zone, lateritic zone, saprock, saprolite, etc.) as well as colour and textural characteristics of the rock. Quantitative measurements of structural and geophysical features were also measured. GPS coordinates as well as geological logging data for all drillholes were captured in a Microsoft Excel spreadsheet and uploaded to the project database in MXDeposit. All drill holes reported in this news release were logged entirely.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The details of the ANSTO sample discussed in this Report are provided in BRE ASX Announcement dated 26 November 2024. The ANSTO sample is representative of the fresh in-situ REE-Nb-Sc-Ta U mineralisation present at Monte Alto and elsewhere on the Property. The submitted sample has appropriate mass to represent the material collected. Interval selection considered lithological boundaries (i.e. sample was to, and not across, major contacts) as well as zonation of chevkinite and apatite-britholite mineralisation intensity. The ANSTO sample was predominantly obtained from whole core, with a cumulative interval length of 46.2m. The bulk Monte Alto high-grade mineralised sample (circa 400kg) was shipped from the Project site in Brazil to Mineral Technologies Australia. The sample was crushed to 100% passing <2 mm and homogenised. A staged crushing process was utilised to minimise risk of overgrinding. A 30kg representative sub-sample was shipped to Australia's Nuclear Science and Technology Organisation (ANSTO) for further processing. At ANSTO, the 30kg <2mm sub-sample was split out and milled to target approximately 80% passing 40µm. The particle size distribution (PSD) of one of the milled samples was determined by laser sizing is P_{80} was 52.6µm, with a very small portion of >100µm particles. At the grind size employed chevkinite and apatite-britholite are generally well liberated for subsequent test work. After testing, leach residues were submitted in their entirety for analysis, whilst solutions were subsampled for analysis.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Representative sub-sample of the ANSTO sample material was analysed by XRF and total fusion digestion followed by ICP-MS and ICP-OES assay of the digest liquor. Leachates, residues and precipitates generated during testwork was analysed by ANSTO using appropriate methods. Standard laboratory QAQC was undertaken and monitored by the laboratory. Mass balances for each test reported by ANSTO were reconciled against the feed grade.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	No independent verification of significant intersections was undertaken. All assay results are checked by the company's Principal Geologist or Principal Metallurgist. ANSTO sample results have been verified against the downhole geology and the Company's previously reported geochemical analysis. The ANSTO composite sample had a head grade of 15.3% TREO and was predominantly obtained from an interval in metallurgical drill hole SDD0009 from 124.4m to 147.55m. SDD0009 is a twin of an earlier exploration drillhole SDD0006 5m to the southwest. The corresponding mineralised intercept in hole SDD0006 from 124m-148m had a grade of 16.5% and verifies that the metallurgical composite is representative of the insitu Mineralisation as tested by exploration drilling and assaying. Rare earth oxide is the industry-accepted form for reporting rare earth elements. The following calculations are used for compiling REO into their reporting and evaluation groups: Note that Y_2O_3 is included in the TREO, HREO and MREO calculations. TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$. HREO (Heavy Rare Earth Oxide) = $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3$, $+ Y_2O_3 + Lu_2O_3$. MREO (Magnet Rare Earth Oxide) = $Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3 + Gd_2O_3 + Ho_2O_3 + Sm_2O_3 + Y_2O_3$. LREO (Light Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3$. NdPr = $Nd_2O_3 + Pr_6O_{11}$.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>NdPr% of TREO = Nd_2O_3 + Pr_6O_{11}/TREO x 100.

HREO% of TREO = HREO/TREO x 100.

Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.

<table>
<tr><th>Element</th><th>Factor</th><th>Oxide</th></tr>
<tr><td>La</td><td>1.1728</td><td>La_2O_3</td></tr>
<tr><td>Ce</td><td>1.2284</td><td>Ce_2O_3</td></tr>
<tr><td>Pr</td><td>1.2082</td><td>Pr_6O_{11}</td></tr>
<tr><td>Nd</td><td>1.1664</td><td>Nd_2O_3</td></tr>
<tr><td>Sm</td><td>1.1596</td><td>Sm_2O_3</td></tr>
<tr><td>Eu</td><td>1.1579</td><td>Eu_2O_3</td></tr>
<tr><td>Gd</td><td>1.1526</td><td>Gd_2O_3</td></tr>
<tr><td>Tb</td><td>1.1762</td><td>Tb_4O_7</td></tr>
<tr><td>Dy</td><td>1.1477</td><td>Dy_2O_3</td></tr>
<tr><td>Ho</td><td>1.1455</td><td>Ho_2O_3</td></tr>
<tr><td>Er</td><td>1.1435</td><td>Er_2O_3</td></tr>
<tr><td>Tm</td><td>1.1421</td><td>Tm_2O_3</td></tr>
<tr><td>Yb</td><td>1.1387</td><td>Yb_2O_3</td></tr>
<tr><td>Lu</td><td>1.1372</td><td>Lu_2O_3</td></tr>
<tr><td>Y</td><td>1.2699</td><td>Y_2O_3</td></tr>
</table>

The process of converting elemental analysis of rare earth elements (REE) to stoichiometric oxide (REO) was carried out using predefined conversion factors on a spreadsheet. (Source: https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/ resources-and-extras/ element- to-stoichiometric-oxide-conversion-factors)</td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
• Specification of the grid system used.
• Quality and adequacy of topographic control.</td><td>Diamond drill collars are located by a surveyor using RTK-GPS with centimetre scale accuracy.

Drill hole surveying was performed on each diamond hole using a REFLEX EZ-Trac multi-shot instrument. Readings were taken every 10 to 25m and recorded depth, azimuth, and inclination. Projected drill hole traces show little deviation from planned orientations.

The accuracy of projected exploration data locations is sufficient for this stage of exploration and to support mineral resource estimation studies.

The gird datum used is SIRGAS 2000 UTM 24S.Topographic control is provided by an airborne LiDAR and photogrammetry survey with highly accurate RTN-GPS ground control</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		survey control. The LiDAR data was collected at a density of 4 points per m^2 and processed to provide 'bare earth' DTM models with an accuracy class of +/- 0.1m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	For selected areas at Monte Alto that host fresh rock REE-Nb-Sc-U mineralisation, the drill spacing is generally 20m to 80m along strike and down dip. This spacing is sufficient to establish geology and grade continuity in accordance with Inferred and Indicated classification criteria. The ANSTO metallurgical sample is a composite of: • a 36m whole core interval from hole SDD0009 (118m to 154m), intersecting the main mineralisation body over a significant depth extent at the centre of the Monte Alto deposit. The sample characterises a large volume of the fresh, high-grade, REE-Nb-Sc-Ta-U mineralisation that makes up the majority of Monte Alto hard rock deposit. This material is supplemented by: • a 1.7m of ¾ core obtained from further up the hole SDD0009 (79m to 80.7m) and a 5m interval of ¾ core from hole SDD0008, 370m to the south-southwest. The ANSTO metallurgical sample (circa 400kg) was shipped from the Project site in Brazil to Mineral Technologies Australia. The sample was staged crushed to 100 % passing <2 mm and homogenised to prevent excessive generation of fines. A 30kg representative sub-sample was shipped to Australia's Nuclear Science and Technology Organisation (ANSTO) for further processing.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The distribution of mineralisation in fresh rock at Monte Alto is controlled by steeply dipping to sub vertical mega-enclaves of REE-Nb-Sc-Ta-U Mineralisation that strike northwest. The angled drill holes were designed to intersect these bodies as perpendicular as possible. Vertical SSD series holes tend to intersect steeply dipping mineralisation at a highly oblique angle resulting in a relative bias toward Mineralisation with this orientation. Neither drilling type is systematically biased towards any other geological characteristic such as Mineralisation grade. ANSTO metallurgical sampling was designed to target fresh rock REE-Nb-Sc-Ta-U Mineralisation. They are not considered to be biased towards any other geological characteristics. The extent of sampled material and its representativeness of the fresh hard rock REE-Nb-Sc-Ta Mineralisation is considered appropriate for metallurgical testwork at the initial stage of study described in this report.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	After collection in the field, the drill core samples were transported in their core boxes to the Company's secure warehouse. Drill core intervals selected for the ANSTO metallurgical sample were placed into polypropylene bags at 1-2m intervals. Sample bags were label and fastened using a cable tie before being placed in 200L plastic barrels. A total of three barrels were secured to a pallet and wrapped in plastic for transport by air freight. All samples were transported from site to independent preparation and analysis laboratories by reputable transport companies. An electronic copy of all waybills related to the sample forwarding was obtained and forwarded to the receiving laboratory. Once the samples arrived at the laboratory, the Company was notified by the laboratory manager and any non-compliance is reported. The laboratory did not report any issues related to the samples received.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits were undertaken however the Competent Person was involved in all stages of the metallurgical sampling and tests. In-house reviews were also completed on the sampling techniques and testwork results.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Project is 100% owned by, or to be acquired by, subsidiaries of Brazilian Rare Earths Limited (BRE), an Australian registered company. Located in the State of Bahia, Northeastern Brazil, the BRE Property consists of 262 granted exploration permits covering a land area of approximately 4,222 km^2. Permits are registered at Brazil's National Mining Agency The Project also includes four applications for mining permits and two disponibilidades, as well as an option (described in the prospectus as the Amargosa Option Agreement) to acquire three additional granted exploration permits. All exploration permits are held by the Company's Brazilian subsidiaries directly or are to be acquired through agreements with third parties as detailed in the BRE prospectus and in the Company's ASX Announcement "BRE Expands Control over Rocha da Rocha Rare Earth Province" dated January 22, 2024 All mining permits in Brazil are subject to state and landowner royalties, pursuant to article 20, § 1, of the Constitution and article 11, "b", of the Mining Code. In Brazil, the Financial Compensation for the Exploration of Mineral Resources (Compensação Financeira por Exploração Mineral - CFEM) is a royalty to be paid to the Federal Government at rates that can vary from 1% up to 3.5%, depending on the substance. It is worth noting that CFEM

Criteria	JORC Code explanation	Commentary
		rates for mining rare earth elements are 2%. CFEM shall be paid (i) on the first sale of the mineral product; or (ii) when there is mineralogical mischaracterisation or in the industrialisation of the substance, which is which is considered "consume" of the product by the holder of the mining tenement; or (iii) when the products are exported, whichever occurs first. The basis for calculating the CFEM will vary depending on the event that causes the payment of the royalty. The landowner royalties could be subject of a transaction, however, if there is no agreement to access the land or the contract does not specify the royalties, article 11, §1, of the Mining Code sets forth that the royalties will correspond to half of the amounts paid as CFEM. The exploration tenement (870.685/2021) that host the Monte Alto project that is the subject of this report is subject to an additional 2.5% royalty agreement in favour of Brazil Royalty Corp. Participações e Investimentos Ltda (BRRCP). The portion of exploration tenement (870.685/2021) that hosts the Monte Alto Deposit that is the subject of this report measures 53.26 km^2 and is not known to within any environmentally designated areas. The remainder of the tenement, measuring 84.17 km^2, falls within a State Nature Reserve (APA Caminhos Ecológicos da Boa Esperança), in which mining activities are allowed if authorised by the local environmental agency. The tenements are secure and in good standing with no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	On the BRE Property, no previous exploration programs conducted by other parties for REEs. Between 2007 and 2011 other parties conducted exploration that is detailed in the company's prospectus and included exploratory drilling amounting to 56,919m in 4,257 drill holes.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Company's tenements contain primary in-situ REEE-Nb-Sc-Ta-U mineralisation which is the subject of this report. The Project is hosted by the Jequié Complex, a terrain of the north-eastern São Francisco Craton, that includes the Volta do Rio Plutonic Suite of high-K ferroan ("A-type") granitoids, subordinate mafic to intermediate rocks; and leucogranites with associated REE cumulates. The region is affected by intense NE-SW regional shearing which may be associated with a REE enriched hydrothermal system. Exploration completed by the Company has focused on the bedrock and regolith profile. Bedrock mineralisation is characterised by steeply dipping to sub vertical mega-enclaves of chevkinite rich REE-Nb-Sc-Ta-U mineralisation. Elemental deportment of the Ce, La, Nd and Th in the sample was calculated by ANSTO using QEMSCAN software. The results presented in demonstrate that approximately 80% of the REEs analysed are hosted by chevkinite, with circa 10% hosted by apatite-britholite.

Criteria	JORC Code explanation	Commentary
		Local bedrock controls to mineralisation, such as faults or dykes, are not well understood. The company has initiated mapping of the limited bedrock exposures at property and proposes to undertake deeper drilling to create a model of the local geological setting. The regolith mineralisation is characterised by a REE enriched lateritic zone at surface underlain by a depleted mottled zone grading into a zone of REE-accumulation in the saprolite part of the profile. Minerology and metallurgy aspects of the regolith and near surface mineralisation are not described in this report but will be detailed in future.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		The details of the Ansto sample discussed in this Report are provided in BRE ASX Announcement dated 26 November 2024.
		
		The details related to all the diamond core drill holes presented in this Report are reported in BRE's ASX Announcements dated 1 February 2024, 6 June 2024 and 26 August 2024 (Original ASX Announcements). BRE confirms that it is not aware of any new information or data that materially affects the information included in the Original ASX Announcements.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No average or aggregated assay data from multiple samples are used in this announcement. No maximum or minimum cut-off grades or metal equivalents values are used in this announcement.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').*	Sampled intercepts detailed in this release were previously reported in down hole lengths provided in BRE ASX Announcement dated 26 November 2024. The true thickness of previously reported intercepts are detailed in the Original ASX Announcements. The distribution of mineralisation in fresh rock at Monte Alto is controlled by moderate to steeply dipping and sub vertical mega-enclaves of chevkinite rich REE-Nb-Sc-Ta-U Mineralisation that strikes northwest. Angled drill holes have inclinations ranging from -55 to -75 degrees and will tend to intersect mineralisation at moderate angle. For these holes true thickness will typically be 50%-90% of down hole thickness. Vertical SSD series holes

Criteria	JORC Code explanation	Commentary
		in the northern portion of Monte Alto tend to intersect mineralisation at a highly oblique angle. For these holes true thickness will typically be 30-50% of down hole thickness.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Tables are presented in the body of the report. A plan view of drill hole collar locations and a long section view of source intervals for the Ansto sample are provided in BRE ASX Announcement dated 26 November 2024.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	The report presents all new metallurgy results obtained from the ANSTO metallurgical sample that is the subject of this report. The report is unbiased with respect to Mineralisation grades and/or width and is consistent with the JORC guidelines.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	With the exception of previously reported exploration results that are the subject of earlier ASX Announcements, the Competent Person is not aware of any other substantive exploration data that is meaningful or material to the fresh hard rock REE-Nb-Sc-Ta Mineralisation that is the focus of this report.
Further work	• *The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	To further develop the Monte Alto target and develop a hard-rock REE-Nb-Sc-Ta-U Mineral Resource, the Company will complete additional step-out and infill diamond core drilling to establish geological and grade continuity. Elsewhere on the project BRE intends to test the Regolith Exploration Target (effective date of July 1, 2023) which is based on the results of BRE's previous drill programs and will be tested by ongoing infill and step out auger drilling in high priority areas. Upcoming works aim to assess whether the project may become economically feasible including metallurgical recovery, process flowsheet and optimisation. Further resource definition through additional drilling and sampling, geological mapping, and regional exploration through additional land acquisition are also planned. No forecast is made of such matters.