

Exceptional Ore Sorting Results: +95% Yield and +100% Rare Earth Enrichment

Key Highlights

- **Exceptional grade enrichment (+100%):** Achieved grade upgrade factors of >2x, increasing feed grades from 12.4% TREO to ~27% TREO, using multi-sensor ore sorting
- **High-grade product in single-pass:** Produced a +27% TREO ultra-high grade product with single-pass processing
- **World-class recoveries (95%):** Cascade ore sorting produced a +20% TREO rare earth product, with exceptional cumulative recoveries of ~96–99% and upgrade factors of 1.3x-1.7x
- **Efficient waste rejection:** Successfully rejected ~25% of feed mass as waste with negligible rare earth loss (<0.3% of contained metal)
- **Simple, dry beneficiation:** Results validate ore sorting for Monte Alto mineralisation – delivering a high-grade product at yields of +95%, highlighting the potential for downstream direct rare earth extraction
- **Lower costs:** Lower capex and operating costs, with enhanced economics

BRE Managing Director and CEO, Bernardo da Veiga, commented:

“These exceptional ore sorting results from run-of-mine Monte Alto feedstock have exceeded all our expectations. They demonstrate that sensor-based concentration can significantly enhance project economics with +95% yields at lower capital and operating costs, whilst simultaneously reducing environmental footprint through lower energy, minimal water and no reagents.

Our metallurgical programs are designed to maximise the value of Monte Alto’s ultra-high grade rare earth, uranium, scandium, niobium, and tantalum mineralisation. These ore sorting results build on our previous metallurgical programs with the Australian Nuclear Science and Technology Organisation (ANSTO) and provide a pathway for world-leading mineral-to-product yields.

Last year’s metallurgical program with ANSTO successfully demonstrated direct hydrometallurgical processing of high-grade Monte Alto mineralisation, including impurity removal, uranium recovery and the production of high-purity mixed rare earth carbonate.

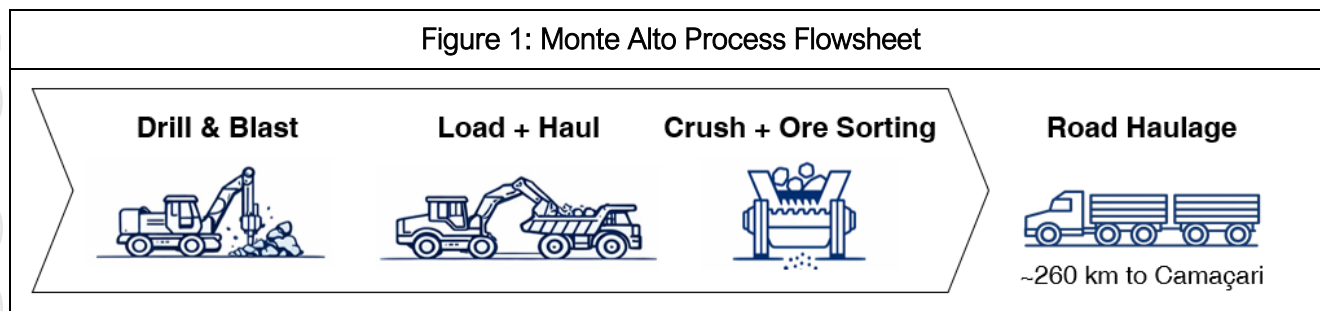
Importantly, the multi-sensor ore sorter enriched run-of-mine Monte Alto feedstock by over two times in a single pass, producing a concentrate of +27% TREO. Subsequent cumulative ore sorter runs produced a **+20% TREO concentrate at very high total recoveries of 96-99%.**

Rare earth projects are typically characterised by low head grades and complex, high-cost processing flowsheets. Monte Alto’s ultra-high grades can deliver a beneficiated product at grades that are suitable for direct hydrometallurgical processing. BRE will now progress flowsheet design, targeting a multi-sensor system capable of processing 100% of Monte Alto’s run-of-mine material at +95% yields.”

Brazilian Rare Earths Limited (ASX: BRE) (OTCQX: BRELY / BRETf) is pleased to report exceptional results from sensor-based ore sorting test work program that confirms its suitability for Monte Alto's beneficiation process flowsheet.

The independent test program, using STEINERT's multi-sensor KSS CLI XT platform, that combines X-ray transmission, 3D laser and inductive sensors, successfully demonstrated the enrichment of run-of-mine rare earth mineralisation from Monte Alto to a product that is ready for direct hydrometallurgical rare earth extraction.

Figure 1: Monte Alto Process Flowsheet



The test work confirms that sensor-based sorting has the potential to deliver very high recoveries in Monte Alto's beneficiation flowsheet. By utilising physics-based mineral sorting, BRE can unlock significant economic benefits compared to traditional chemical flotation or bulk processing methods. By efficiently removing gangue materials, multi-sensor ore sorting has the potential to:

- Increase effective run-of-mine grade by a factor of 1.3x–1.7x at very high processing yields of +95%
- Lower capital and operating costs
- Reduce environmental and permitting risks through lower energy, minimal water and no reagent consumption

1. Sensor-Based Ore Sorting

Sensor-based ore sorting is a dry separation technology used to pre-concentrate and upgrade coarse particle mineral feed (> 8mm). In multi-sensor ore sorters, X-ray transmission (detecting density differences), optical colour, 3D/laser shape measurement and inductive metal sensing are combined to characterise each particle individually and make real-time decisions about what to reject or keep. This multi-sensor approach improves sorting depth and selectivity compared with single-sensor machines with higher recovery performance.

Many hard-rock rare earth deposits, including carbonatites, contain valuable minerals as very small crystals (often <100 µm) scattered semi-homogeneously throughout the host rock, making it difficult for mineralised material and waste material to be easily separated without grinding.

In contrast, mineralisation at Monte Alto is relatively coarse-grained, with rock crushed to ~25 mm fracturing around mineral grain boundaries rather than through them, creating two distinct types of particles: high-grade and high-density mineralised material and waste (low density), a suitable scenario for sensor-based ore sorting to distinguish and sort mineralised material from waste.

The geology of the Monte Alto provides excellent properties for simple and rapid physical detection of mineralised material compared to waste, including:

- **Atomic Density (XRT):** Monte Alto mineralisation contains heavy elements - including rare earths, uranium, niobium, and tantalum – which are denser than the host granite/gneiss waste.
- **Magnetism (Inductive):** Chevkinite is paramagnetic. The sensors can detect this magnetic response when compared to the non-inductive waste material.

- **Surface Texture (Laser):** The 3D laser detects the significant differences in the shape and reflection of the mineralised material versus the waste.

2. Technical Details and Results of Multi-Sensor Ore Sorting Program

Program Overview

The independent ore sorting test program was completed on crushed drill core samples from Monte Alto that were screened and sorted using a STEINERT's KSS CLI XT multi-sensor ore sorting platform. This advanced system combines X-ray Transmission (XRT), 3D Laser, and Inductive sensors to separate ore from waste based on atomic density, surface texture, and conductivity.

The program assessed feed grades, waste rejection, single-stage high-grade concentrate performance, and cumulative scenarios. All reported values were derived from chemical assays and mass balance.

Rare earth projects are typically characterised by low head grades and complex, high-cost metallurgical flowsheets. The ability to concentrate crushed Monte Alto's already exceptionally high grade mineralised material represents the potential to be a highly value accretive addition to the Monte Alto beneficiation flowsheet, with the opportunity for materially reduced capital and operating costs.

Material Tested

Composite samples were prepared from Monte Alto drill holes, crushed and screened into two size fractions:

- –25 / +8 mm (finer fraction)
- +25 mm (coarser fraction)

The feed composite was created by blending equal proportions (25% each) of four calibration samples:

- Ultra-high grade: >25% TREO (U. High)
- High grade: 15–25% TREO (High)
- Medium grade: 5–10% TREO (Med)
- Waste: 0–0.2% TREO (sub 2,000 ppm)

Calculated feed (head) grades:

- Head grade –25 / +8 mm: 12.4% TREO
- Head grade +25 mm: 13.0% TREO

Waste Rejection Performance

The system demonstrated efficient removal of waste rock with minimal loss of valuable metal. Approximately 25-28% of the mass was rejected as waste, containing less than 0.3% of the total rare earths.

Size Fraction	Feed Grade TREO	Waste Product	Mass Yield	Waste Grade TREO	REE Loss to Waste
–25 / +8 mm	12.4%	Eject 1	24.9%	0.2%	0.3%
+25 mm	13.0%	Eject 1 + Eject 2E	28.4%	0.1–0.3%	<0.3%

High-Grade Concentrate Performance (Single Stage)

A single pass produced a product exceeding the calibration targets, with an upgrade factor of >2x indicating very strong enrichment, producing a +27% TREO concentrate in a single pass.

Size Fraction	Product	Mass Yield	Grade TREO	Recovery	Upgrade Factor
–25 / +8 mm	Drop 3	27.0%	27.1%	59.3%	2.2x
+25 mm	Drop 4	31.3%	27.1%	65.2%	2.1x

Cumulative Product Scenarios (Cascade Processing)

Cascade processing by reprocessing retained fractions (cascade methodology), combining streams to maximise yield while maintaining high grades. These scenarios confirm >95–99% rare earth recovery with 1.3–1.7× grade upgrade and significant waste rejection.

Size Fraction	Products Combined	Mass Yield	Product Grade (TREO)	Tailings Grade (TREO)	Recovery	Upgrade Factor
–25 / +8 mm	U. High + High	57.6%	20.7%	1.1%	96.3%	1.7x
	U. High + High + Med.	75.1%	16.4%	0.2%	99.7%	1.3x
+25mm	U. High + High	60.4%	21.1%	0.8%	97.7%	1.6x
	U. High + High + Med.	75.4%	17.2%	0.1%	99.8%	1.3x

3. Consolidated Summary of Ore Sorting Testing Results

Description	Size Fraction	Mass Yield	Grade TREO	Recovery	Upgrade Factor	Notes
Feed	–25 / +8 mm	100%	12.4%	100%	1x	Calculated composite head
	+25 mm	100%	13%	100%	1x	Calculated composite head
Waste Rejection	–25 / +8 mm	24.9%	0.2%	0.3%	-	Negligible REE loss
	+25 mm	28%	0.1–0.3%	<0.3%	-	Negligible REE loss
U. High-Grade (single stage)	–25 / +8 mm	27%	27.1%	59.3%	2.2x	>27% TREO achieved
	+25 mm	31.3%	27.1%	65.2%	2.1x	>27% TREO achieved
Cumulative: U. High + High	–25 / +8 mm	57.6%	20.7%	96.3%	1.7x	Balanced grade/recovery
	+25 mm	60.4%	21.1%	97.7%	1.6x	Balanced grade/recovery
Cumulative: U. High + High + Med.	–25 / +8 mm	75.1%	16.4%	99.7%	1.3x	Maximum recovery
	+25 mm	75.4%	17.2%	99.8%	1.3x	Maximum recovery

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

For further information, please contact:

Bernardo da Veiga
MD and CEO

Brazilian Rare Earths Limited
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 Rocha da Rocha Project and the Amargosa Project, 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. These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements.

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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.

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: Sensor Based Sorting Equipment and Sorted Fragments

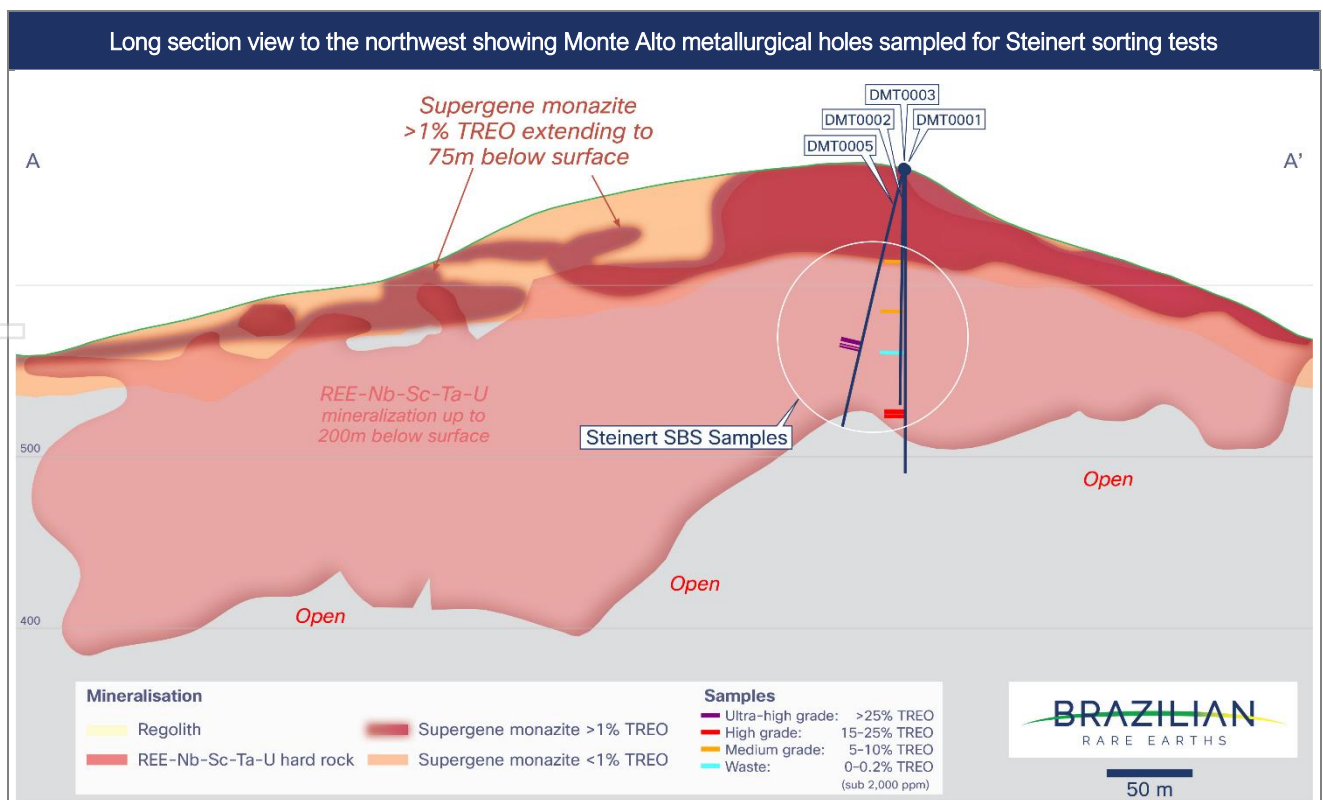
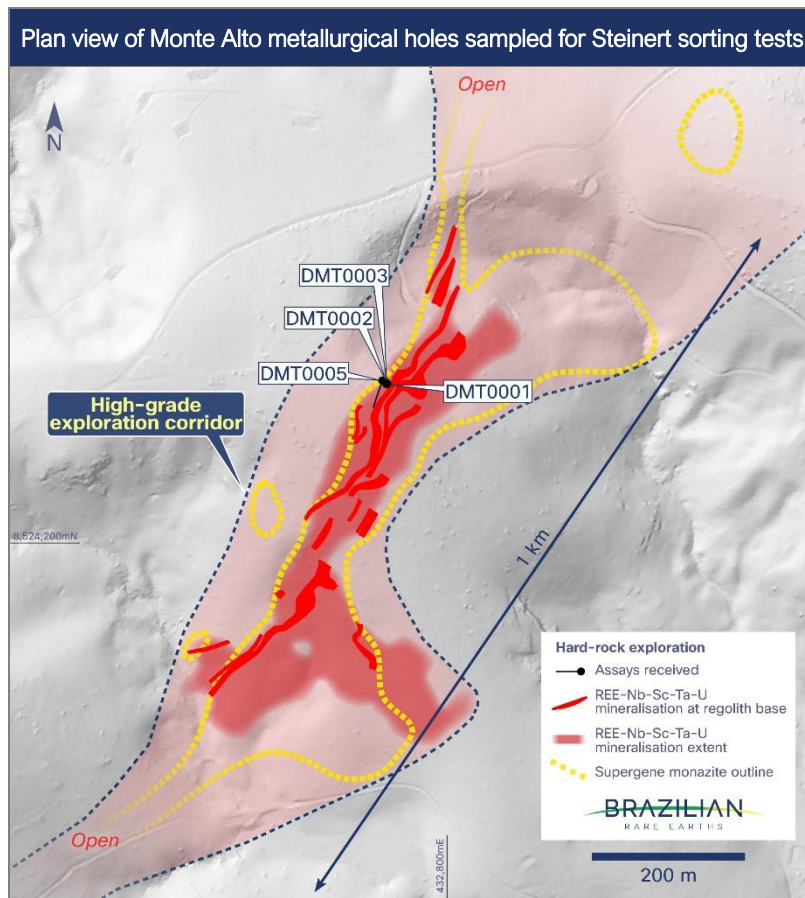
Steinert KSS CLI XT combination sorting system incorporating X-ray transmission (XRT), 3D laser and inductive sensors



Drop (left) and Eject (right) sorter fragments showing clear separation of dark ultra-high grade Monte Alto mineralisation



Appendix B: Location of Monte Alto Drill Metallurgical Holes used for Sensor Based Sorting



Appendix C: Monte Alto drillhole information and sorting intervals

Intervals selected for Steinert sensor based sorting with qualitative grade classification

Hole ID	X	Y	Elevation	Depth	Dip	Azimuth	From (m)	To (m)	Interval (m)	Mass (kg)	SBS Sample Classification
DMT0001 and and	432,722	8,524,408	671	180.25	90.0	130.0	85.6	86.6	1.0	10.74	Waste
							109.0	111.0	2.0	10.32	Waste
							146.0	148.0	2.0	9.97	Waste
DMT0002 and	432,721	8,524,408	671	140.55	88.9	177.4	85.0	87.0	2.0	6.095	Medium Grade
							109.0	111.0	2.0	12.05	Medium Grade
DMT0003 and and	432,720	8,524,409	671	170.05	89.7	186.9	56.0	58.0	2.0	10.95	Medium Grade
							109.0	111.0	2.0	13.91	High Grade
							143.0	146.0	3.0	21.61	High Grade
DMT0005 and and	432,715	8,524,412	671	158.85	75.8	198.0	107.2	109.7	2.5	18.45	U. High Grade
							110.9	111.7	0.8	5.935	U. High Grade
							112.2	113.3	1.1	8.175	U. High Grade

Appendix D: Monte Alto drillhole information and significant REE-Nb-Sc-Ta-U intercepts

Rare earth and critical element assays by SBS Eject (E) and Drop (D) products by size fraction.

SBS Products	Size	TREO (%)	Nd ₂ O ₃ (ppm)	Pr ₆ O ₁₁ (ppm)	Dy ₂ O ₃ (ppm)	Tb ₄ O ₇ (ppm)	Nb ₂ O ₅ (ppm)	Sc ₂ O ₃ (ppm)	Ta ₂ O ₅ (ppm)	U ₃ O ₈ (ppm)
Eject 1 (E1)	+8mm	0.17	203	71	16	3	70	2	6	23
Eject 1 (E1)	+25mm	0.13	157	56	11	2	69	1	4	20
Eject 2 (E2)	+8mm	2.33	2,984	1,060	215	37	737	68	40	324
Eject 2 Drop (E2D)	+25mm	2.36	3,071	1,082	221	38	727	61	38	314
Eject 2, Eject (E2E)	+25mm	0.27	321	112	27	5	97	5	6	36
Eject 3 (E3)	+8mm	14.96	17,513	6,298	1,002	178	4,256	197	271	2,376
Eject 3 (E3)	+25mm	13.92	16,123	5,844	941	166	3,938	193	251	2,209
Drop 3 (D3)	+8mm	27.14	32,850	12,425	2,000	392	8,685	211	499	3,227
Eject 4 (E4)	+25mm	16.72	19,772	7,103	1,164	200	4,921	200	294	2,517
Drop 4 (D4)	+25mm	27.07	32,875	12,297	2,012	383	8,380	212	489	3,178

Rare earth and critical element assays by groups SBS Eject (E) and Drop (D) products by size fraction.

Accumulated SBS Product Groups	SBS Products Included	TREO (%)	Nd ₂ O ₃ (ppm)	Pr ₆ O ₁₁ (ppm)	Dy ₂ O ₃ (ppm)	Tb ₄ O ₇ (ppm)	Nb ₂ O ₅ (ppm)	Sc ₂ O ₃ (ppm)	Ta ₂ O ₅ (ppm)	U ₃ O ₈ (ppm)
Feed +8mm	E1, E2, E3, D3	0.2	203.2	71.0	15.6	2.6	70.0	2.3	5.6	22.9
Feed +25	E1, E2D, E2E, E3, E4, D4	0.2	179.2	63.8	13.1	2.3	72.5	1.4	4.2	21.7
Waste +8mm	E1	12.4	14,796.7	5,483.4	887.8	167.4	3,792.4	129.6	226.0	1,659.8
Waste +25	E1, E2E	13.0	15,630.3	5,776.7	947.5	175.5	3,939.3	130.0	234.6	1,699.9
U. High Grade (single stage) +8mm	D3	27.1	32,850.5	12,425.1	2,000.4	392.1	8,684.6	210.7	499.1	3,226.6
U. High Grade (single stage) +25mm	D4	27.1	32,875.0	12,297.1	2,011.9	382.9	8,379.9	211.8	488.7	3,177.8
Cumulative: U. High Grade + High +8mm	E3, D3	20.7	24,710.2	9,173.3	1,470.4	278.5	6,333.9	203.3	378.2	2,775.1
Cumulative: U. High Grade + High +25mm	E3, E4, D4	21.1	25,233.5	9,336.9	1,522.2	282.6	6,355.5	203.5	379.4	2,746.9
Cumulative: U. High Grade + High + Medium +8mm	E2, E3, D3	16.4	19,622.5	7,273.2	1,176.3	221.9	5,023.3	171.6	298.9	2,201.1
Cumulative: U. High Grade + High + Medium +25mm	E2D, E2E, E3, E4, D4	17.2	20,685.2	7,645.5	1,253.5	232.2	5,203.8	172.2	309.9	2,248.8

Appendix E: JORC Table

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>The reported Sensor-Based-Sorting (SBS) sighter test samples are 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.</p> <p>All drilling provided a continuous sample of mineralised zone. Mineralisation that is material to this report has been directly determined through quantitative laboratory analytical techniques that are detailed in the sections below.</p>
Drilling techniques	<ul style="list-style-type: none"> 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). 	<p>Core drilling was conducted by BRE using a using an I-800 DKVIII-12 rig to drill angled holes with an operational depth limit of 500m and an average depth of 162m for the holes analysed.</p> <p>Drill core was recovered from surface to the target depth. All diamond drill holes utilised a 3.05m long HQ single wall barrel. Water is used as a drilling fluid as necessary and to aid in extruding material from the core barrel. Core is not orientated.</p>
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>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.</p> <p>Recoveries for all core drilling included in the ore sorter samples detailed in this report are consistently good (averaging 100%). There does not appear to be a relationship between</p>

Criteria	JORC Code explanation	Commentary
		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.
Logging	<ul style="list-style-type: none"> 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. 	<p>All drill core used to carry out the SBS sighter test work are geologically logged with a level detail that supports the studies presented in this report.</p> <p>Drill core was logged at BRE's exploration facility by a logging geologist. Core was photographed wet and dry in core boxes before sampling.</p> <p>Logging included qualitative 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 geophysical features were also measured.</p> <p>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.</p> <p>All drill holes reported in this news release were logged entirely.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<p>For the Steinert SBS sighter test, sample 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.</p> <p>The samples in this report are considered representative of the fresh in-situ REE-Nb-Sc-Ta U mineralization, and the predominate granite gneiss waste rock present at Monte Alto and elsewhere on the Property. SBS sighter test composite samples were obtained from whole HQ core, with a cumulative interval length of 46.2m. The Steinert SBS sighter test samples detailed in this report have appropriate mass to represent the material collected which includes medium grade (MG - 29.0 kg), high-grade (HG - 32.7 kg) and ultra-high grade (UHG - 32.7 kg) styles of this mineralization and waste rock (31.2 kg).</p> <p>The samples were shipped from the Project site in Brazil to SGS Geosol Laboratories in Vespasiano, Brazil. At SGS, each sample was stage crushed to produce size fractions at +25mm (averaging 16kg), -25+8mm (averaging 12kg) and +8mm (averaging 4kg). The +25mm and, -25+8mm fractions were shipped to Steinert Brazil for SBS tests.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 	<p>Sub samples of each SBS size fraction were assayed by SGS Geosol in Vespasiano, Minas Gerais, Brazil, which is considered the Primary laboratory.</p> <p>Samples were prepared in accordance with SGS Geosol code PRP70J_a2 and were jaw crushed to 70% passing the 2mm and then pulverized to 95% passing 75 µm. Residues were stored for check analysis or further exploration purposes.</p>

Criteria	JORC Code explanation	Commentary																																																
	<p><i>instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"><i>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.</i>	<p>The assay technique used for REE was Lithium Borate Fusion ICP-MS (SGS Geosol code IMS95A). This is a total analysis of the REE. Elements analysed at ppm levels were as follows:</p> <table><tr><td>Ce</td><td>Co</td><td>Cs</td><td>Cu</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr><tr><td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Mo</td><td>Nb</td><td>Nd</td></tr><tr><td>Ni</td><td>Pr</td><td>Rb</td><td>Sm</td><td>Sn</td><td>Ta</td><td>Tb</td><td>Th</td></tr><tr><td>Tl</td><td>Tm</td><td>U</td><td>W</td><td>Y</td><td>Yb</td><td></td><td></td></tr></table> <p>Overlimit samples were analysed at percentage levels using SGS Geosol analysis code IMS95RS</p> <p>The assay technique used for major oxides and components was Lithium Borate Fusion ICP-OES (SGS Geosol code ICP95A). This is a total analysis for the elements analysed % and ppm (Ba, V, Sr, Zn, Zr) levels as listed below:</p> <table><tr><td>Al₂O₃</td><td>Ba</td><td>CaO</td><td>Cr₂O₃</td></tr><tr><td>Fe₂O₃</td><td>K₂O</td><td>MgO</td><td>MnO</td></tr><tr><td>Na₂O</td><td>P₂O₅</td><td>SiO₂</td><td>Sr</td></tr><tr><td>TiO₂</td><td>V</td><td>Zn</td><td>Zr</td></tr></table> <p>Analysis for Scandium (Sc) was made by 4-Acid ICP-AES Analysis (SGS Geosol code ICM40B-FR).</p> <p>Accuracy was monitored through SGS laboratories internal QA/QC procedures that include submission of certified reference materials (CRMs) in each batch of samples at a frequency of 1:5 samples and conducting of at least one duplicate analyses in each batch.</p> <p>The adopted QA/QC protocols are acceptable for the small set of analyses conducted as part of this sighter test programme. Examination of the QA/QC sample data indicates satisfactory performance of field sampling protocols and assay laboratory procedures. Levels of precision and accuracy are sufficient to allow disclosure of analysis results.</p>	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	Lu	Mo	Nb	Nd	Ni	Pr	Rb	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	W	Y	Yb			Al ₂ O ₃	Ba	CaO	Cr ₂ O ₃	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	P ₂ O ₅	SiO ₂	Sr	TiO ₂	V	Zn	Zr
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Verification of sampling and assaying	<ul style="list-style-type: none"><i>The verification of significant intersections by either independent or alternative company personnel.</i><i>The use of twinned holes.</i><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i><i>Discuss any adjustment to assay data.</i>	<p>No independent verification of significant intersections was undertaken.</p> <p>All assay results are checked by the company's Principal Geologist. Logging for drillholes was directly uploaded to the project database hosed in the MXDeposit system. Assay data and certificates in digital format from the laboratory are directly uploaded to the project database.</p>																																																

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		<p>Mineralised intersections have been verified against the downhole geology and the Company's previously reported geochemical analysis.</p> <p>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:</p> <p>Note that Y_2O_3 is included in the TREO, HREO and MREO calculations.</p> <p>TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$.</p> <p>HREO (Heavy Rare Earth Oxide) = $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$.</p> <p>MREO (Magnet Rare Earth Oxide) = $Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3 + Gd_2O_3 + Ho_2O_3 + Sm_2O_3 + Y_2O_3$.</p> <p>LREO (Light Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3$.</p> <p>$NdPr = Nd_2O_3 + Pr_6O_{11}$.</p> <p>$NdPr\% \text{ of TREO} = Nd_2O_3 + Pr_6O_{11} / TREO \times 100$.</p> <p>$HREO\% \text{ of TREO} = HREO / TREO \times 100$.</p> <p>Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.</p> <table border="1"> <thead> <tr> <th>Element</th><th>Factor</th><th>Oxide</th></tr> </thead> <tbody> <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> </tbody> </table>	Element	Factor	Oxide	La	1.1728	La_2O_3	Ce	1.2284	Ce_2O_3	Pr	1.2082	Pr_6O_{11}	Nd	1.1664	Nd_2O_3	Sm	1.1596	Sm_2O_3	Eu	1.1579	Eu_2O_3	Gd	1.1526	Gd_2O_3	Tb	1.1762	Tb_4O_7	Dy	1.1477	Dy_2O_3	Ho	1.1455	Ho_2O_3	Er	1.1435	Er_2O_3
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Location of data points	<ul style="list-style-type: none"> 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. 	<p>Diamond drill collars are located by a surveyor using RTK-GPS with centimetre scale accuracy.</p> <p>Drill hole surveying was performed on each diamond hole using a REFLEX EZ-Trac multi-shot instrument. Readings were taken every 10m to 25m and recorded depth, azimuth, and inclination. Projected drill hole traces show little deviation from planned orientations.</p> <p>The accuracy of projected exploration data locations is sufficient for this stage of exploration and to support mineral resource estimation studies.</p> <p>The grid 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 survey control. The LiDAR data was collected at a density of 4 points per m² and processed to provide 'bare earth' DTM models with an accuracy class of +/- 0.1m.</p>												
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<p>For selected areas at Monte Alto that host fresh rock REE-Nb-Sc-U mineralisation, the drill spacing is generally 25m to 50m along strike and down dip. This spacing is sufficient to establish geology and grade continuity in accordance with Inferred and Indicated classification criteria.</p> <p>SBS sighter test samples were collected from drill holes 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</p>												
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<p>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</p>												

Criteria	JORC Code explanation	Commentary
		<p>with this orientation. Neither drilling type is systematically biased towards any other geological characteristic such as mineralisation grade.</p> <p>The Steinert SBS samples were designed to target fresh rock REE-Nb-Sc-Ta-U Mineralisation. They are not considered to be biased towards any other geological characteristics.</p> <p>The extent of sampled material and its representativeness of the fresh hard rock REE-Nb-Sc-Ta Mineralisation is considered appropriate for SBS sighter test at the initial stage of study described in this report.</p>
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<p>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 SBS sighter test samples were placed into 200L plastic barrels. A total of four barrels were secured to a pallet and wrapped in plastic for transport by road freight to SGS Geosol Laboratories in Vespasiano, Brazil for initial processing. The sized fractions used for SBS were transported to Steinert Latinoamericana, Minas Gerias Brazil, using secure inter laboratory shipping procedures.</p> <p>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.</p>
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<p>No audits were undertaken however the Brazilian Rare Earths technical experts were involved in all stages of the metallurgical sampling and tests. In-house reviews were also completed on the sampling techniques and testwork results.</p>

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<p>As at 31 March 2024, the Rocha da Rocha Project comprised 261 granted exploration permits registered with Brazil's National Mining Agency and covering an area of approximately 434,835 hectares. All exploration permits are located in Bahia, Brazil and are held by the BRE's Brazilian subsidiaries directly or are to be acquired through legally binding agreements with third parties.</p> <p>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. CFEM 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 mischaracterization or in the industrialization 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 landowners royalties could be subject of a transaction, however, if there's 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.</p> <p>The exploration permits in the BRE Tenements section of Table 3 (but excluding exploration permit 871.929/2022 and 871.931/2022, and also excluding the application for exploration permit 871.928/2022) are subject to an additional 2.5% royalty agreement in favour of Brazil Royalty Corp. Participações e Investimentos Ltda (BRRCP).</p> <p>Outside of the ESEC, a further 35 tenements contain approximately 165 km that falls within a State Nature Reserve (APA Caminhos Ecológicos da Boa Esperança), in which mining activities are allowed if authorized by the local environmental agency.</p> <p>In the Brazilian legal framework, mining activities within sustainable use areas are not explicitly prohibited at federal, state, or municipal levels, despite that, the zone's management authority may prohibit mining, if it deems necessary, in the zone's management plan. Activities in these areas must reconcile economic development with environmental preservation. Mining operations impacting these areas require licensing approval from the respective zone's management authority. This authorization is</p>

Criteria	JORC Code explanation	Commentary
		contingent upon conducting thorough Environmental Impact Assessment (EIA) studies. These prescribed areas do not limit mining elsewhere on the Property. The tenements are secure and in good standing with no known impediments to obtaining a licence to operate in the area.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>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.</p> <p>On the Sulista Property, between 2013 and 2019 the project Vendors conducted exploration on the Licences that included drilling of approximately 5,000m of across 499 auger holes and approximately 1,000m of core holes.</p> <p>As of the effective date of this report, BRE is appraising the exploration data collected by other parties.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<p>The Company's tenements contain REE deposits interpreted as analogies to Ion Adsorption Clay ("IAC") deposits, and regolith hosted deposits of monazite mineral grains, and primary in-situ REE-Nb-Sc-Ta-U mineralisation.</p> <p>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 thorium rich monazitic leucogranites with associated REE.</p> <p>Bedrock REE-Nb-Sc-Ta-U mineralisation is characterized by shallow to steeply dipping mega-enclaves of chevkinite and apatite-britholite cumulate mineralisation. At Monte Alto cumulate horizons are interpreted to occupy the core of a west facing anticline. The company has initiated mapping of the limited bedrock exposures at property and proposes to undertake further infill drilling to develop a model of the local geological setting.</p> <p>The regolith surrounding the REE-Nb-Sc-Ta-U mineralization is enriched in residual monazite sand and REE bearing Th-Nb-Fe-Ti-Oxides arising from weathered cumulate mineralization. More broadly, the regolith IAC 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.</p>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> 	The details related to all the diamond core drill holes presented in this Report are detailed in Appendix C and D.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ 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. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. 	<p>Downhole length, or mass weighted averaging is used to aggregate assay data from multiple samples.</p> <p>No maximum or minimum cut-off grades or metal equivalents values are used in this announcement.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● 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'). 	<p>Sampled intercepts detailed in this release are reported in down hole lengths. For the Mineralisation that is the subject of this report, the true thickness of previously reported intercepts are detailed in the Original ASX Announcements.</p> <p>Significant diamond drill hole intercepts in the fresh rock are reported in down hole lengths and true thickness. The distribution of mineralisation in fresh rock at Monte Alto is controlled by shallow to steeply dipping mega-enclaves of chevkinite and apatite-britholite cumulate mineralisation that dip to the northwest. The angled drill holes have inclinations ranging from -50 to -80 degrees and will tend to intersect mineralisation at moderate angle. For these holes true thickness will typically be 60%-99% of down hole thickness. In the northern and central parts of Monte Alto vertical DMT series holes tend to intersect steep to moderately dipping mineralisation at an oblique angle, for these holes true thickness will typically be 50% of down hole thickness.</p>
Diagrams	<ul style="list-style-type: none"> ● 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. 	Diagrams, tables, and any graphic visualisation are presented in the report appendices.
Balanced reporting	<ul style="list-style-type: none"> ● 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 SBS sighter test results that pertain to the fresh hard rock REE-Nb-Sc-Ta mineralisation that is the subject of this report.

Criteria	JORC Code explanation	Commentary
		<p>These samples disclosed are representative of the material 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.</p>
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<p>The details of SBS sighter test sample preparation are detailed in Section 1.</p> <p>Preliminary SBS sighter testwork was undertaken Steinert Latinoamericana test facility in Pedro Leopoldo, Minas Gerais, Brazil and was designed to assess the response of rare earth mineralised material to sensor-based sorting at coarse particle sizes applicable to potential pre-concentration scenarios</p> <p>SBS of UHG, HG, MG, and Waste fragments was conducted using two particle size fractions (-25 +8 mm and +25 mm) for each material type using a Steinert KSS CLI XT combination sorting system incorporating X-ray transmission (XRT), 3D laser, and inductive sensors. The XRT sensor was used to differentiate particles based on atomic density, the 3D laser sensor to assess particle geometry and surface characteristics, and the inductive sensor to detect conductive or paramagnetic responses.</p> <p>A cascade separation methodology was applied, whereby material reporting to eject or drop streams at each stage was reprocessed under adjusted sensor sensitivity settings to generate multiple discrete product streams. All separation products were weighed and retained for chemical analysis</p> <p>With the exception of previously reported exploration result 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.</p>
Further work	<ul style="list-style-type: none"> 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. 	<p>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 aiming for a drill spacing of 25m x 25m at the Monte Alto deposit.</p> <p>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.</p> <p>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.</p>