BRAZILIAN RARE EARTHS

ASX ANNOUNCEMENT
23 OCTOBER 2024
ASX:BRE

Exceptional Heavy Rare Earth Discovery at Monte Alto Project

- **Outstanding heavy rare earth discovery near Monte Alto:** New discovery of outcropping rare earth mineralisation with grades up to 14.6% TREO, and heavy rare earth grades of up to **5,691ppm** dysprosium oxide (Dy_2O_3), **737ppm** terbium oxide (Tb_4O_7) and **74,543ppm** yttrium oxide (Y_2O_3). Located just 2.5 km from the ultra-high grade Monte Alto deposit

- **High-grade rare earth channel-sampling at Monte Alto East:** Channel samples across a 3-metre-wide exposure at Monte Alto East returned grades of up to 10.7% TREO and included exceptional heavy rare earth grades of 4,306ppm Dy_2O_3 and 508ppm Tb_4O_7 and 51,556ppm Y_2O_3

- **Discovery of high-grade rare earth outcrops:** Multiple outcrops of high-grade REE-Nb-Sc-Ta-U hard rock mineralisation with grades of up to 11.7% TREO, and confirmed extensive areas of shallow, high-grade monazite-sand mineralisation with grades exceeding 1% TREO

- **Monte Alto expands to a 'district-scale' exploration opportunity:** New rare earth discoveries extend over intense district-scale magnetic anomalies adjacent to the Monte Alto deposit, and underpin a +2x increase in the Monte Alto target exploration area to over 4 km by 3 km

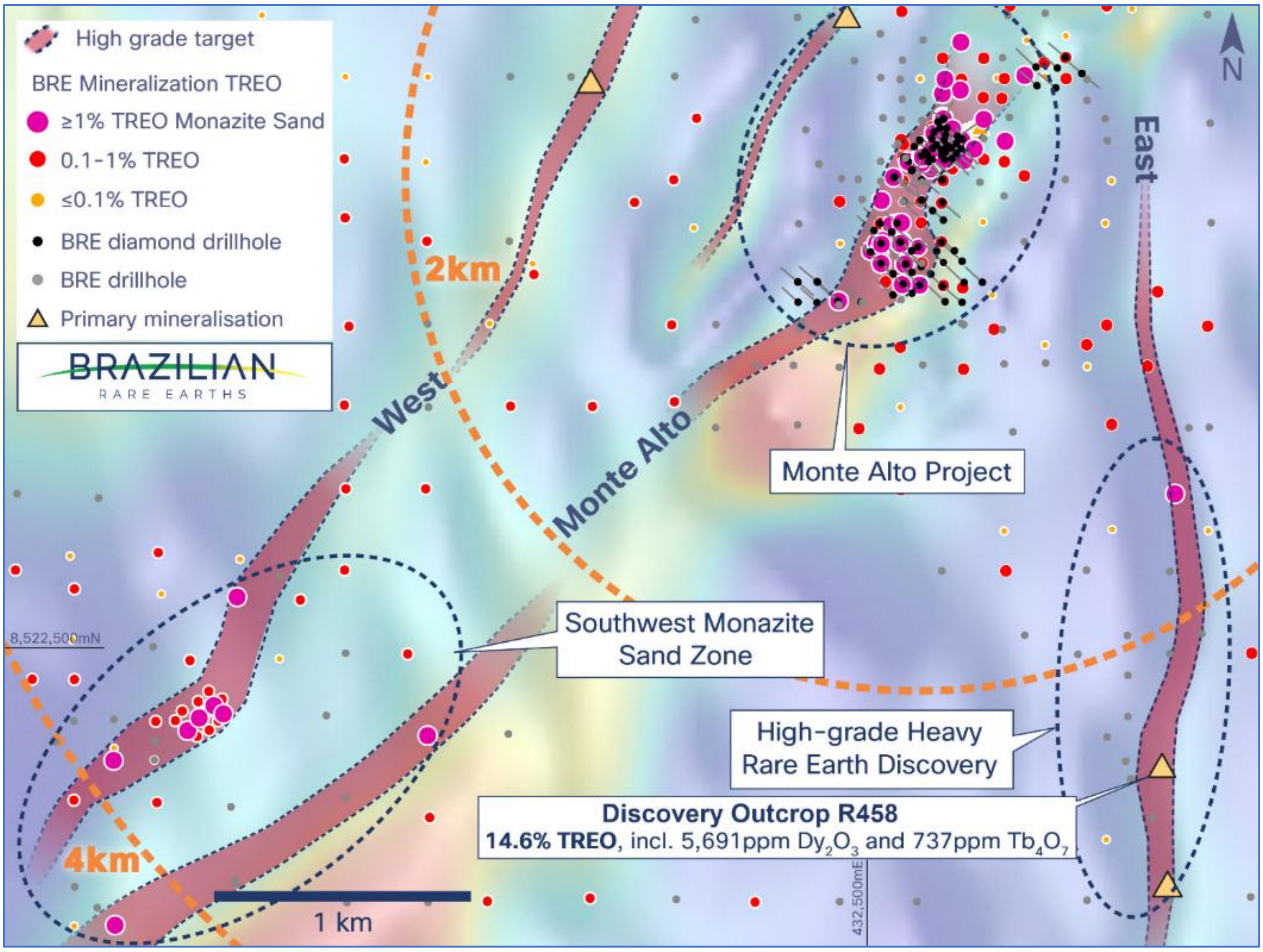


Figure 1: Monte Alto Project – 'District-scale' rare-earth exploration corridors[1]

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

"These outstanding regional exploration results at Monte Alto underscore the prospectivity of our high-grade rare earth province. The discoveries significantly expand Monte Alto's target exploration area and demonstrate its world-class scale, exceptional rare earth grades and substantial potential for exploration upside.

We are thrilled with the exceptionally high-grade heavy rare earth assays from an outcropping discovery located just 2.5km from Monte Alto. Heavy rare earths grades of up to 6,428ppm of dysprosium and terbium (DyTb) are remarkable - and represent some of the highest-grade DyTb assays ever reported globally."

Brazilian Rare Earths Limited (ASX:BRE) (BRE) is pleased to report high-grade assay results from regional exploration at the Monte Alto Rare Earth Project (Monte Alto), located in Bahia, Brazil.

Monte Alto, the most advanced project within BRE's extensive Rocha da Rocha province, has been delineated by a series of drilling programs to a mineralised strike length of approximately 1 km and width of 0.5 km. These successful exploration programs discovered wide zones of ultra-high-grade hard rock REE-Nb-Sc-Ta-U mineralisation, overlain by a high-grade monazite-sand deposit extending from surface to depths of around 75 metres.

The Monte Alto deposit is hosted within the Volta do Rio Plutonic Suite (VRPS), a provincial-scale magmatic system that underpins other major exploration projects such as Sulista and Pelé.

District-Scale Exploration Opportunity at Monte Alto

The latest assay results from Monte Alto highlight the significant exploration potential across a series of intense district-scale magnetic anomalies that run adjacent to the initial Monte Alto deposit (Figure 1).

These magnetic anomalies reveal new, highly-prospective rare earth exploration corridors, extending approximately 3 km to the south and 4 km to the southwest of the initial Monte Alto discovery, more than doubling Monte Alto's target exploration area (see Appendix B for a comparison of the size of the Monte Alto project to BRE's other projects).

Advanced reprocessing of airborne magnetic data, incorporating reduction-to-pole and high-pass filtering techniques, has produced detailed magnetic interpretations that reveal strong correlations between magnetic intensity trendlines/corridors and the mineralised stratigraphy of the VRPS.

Spanning across the Monte Alto tenements, these extensive magnetic anomalies link the initial Monte Alto discovery with new regional rare earth zones and align with mafic cumulate horizons associated with high-grade REE-Nb-Sc-Ta-U mineralisation.

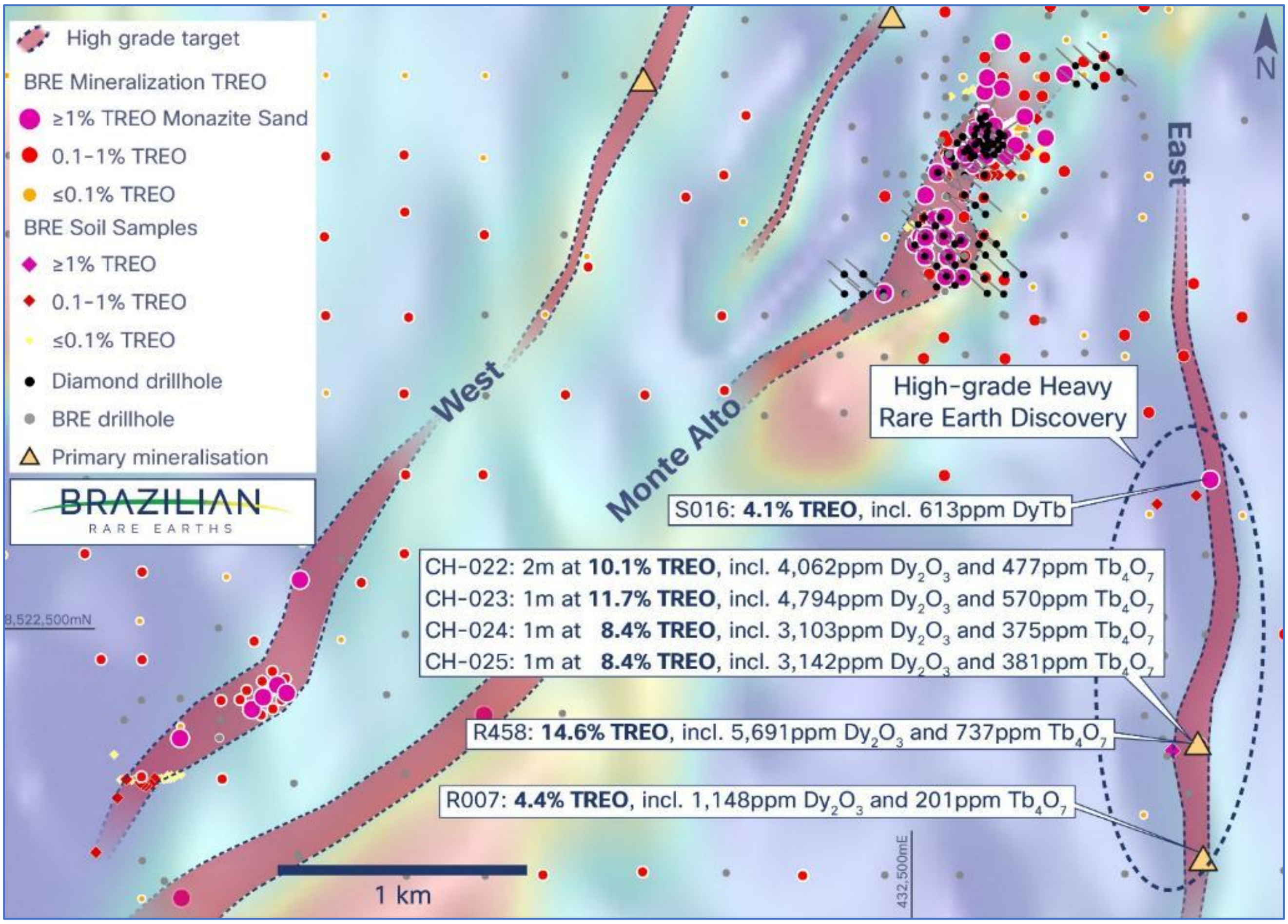
Early prospecting along these exploration corridors has already led to three significant new bedrock-hosted rare earth discoveries, with outcrop samples returning rare earth assays exceeding 10% TREO. Additionally, regional auger exploration drilling has discovered extensive areas of shallow, high-grade monazite-sand mineralisation, with rare earth grades as high as 4.6% TREO, underscoring the district-scale exploration potential of the broader Monte Alto project area[1].

Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

Monte Alto East: High-Grade Heavy Rare Earth Discovery

Monte Alto East is characterised by a prominent north-south magnetic and radiometric anomaly trendline, originating near the initial Monte Alto deposit and extending over 10 km southward through the Velinhas project area (Figure 2).

Recent ground-based prospecting discovered a substantial outcrop of high-grade rare earth mineralisation (Sample R458) just 2.5 km south of the Monte Alto deposit. This outcrop returned exceptional assay grades of key heavy rare earth elements, including dysprosium, terbium, and yttrium.



High-grade Heavy Rare Earth Discovery

S016: **4.1% TREO**, incl. 613ppm DyTb

CH-022: 2m at **10.1% TREO**, incl. 4,062ppm Dy_2O_3 and 477ppm Tb_4O_7
CH-023: 1m at **11.7% TREO**, incl. 4,794ppm Dy_2O_3 and 570ppm Tb_4O_7
CH-024: 1m at **8.4% TREO**, incl. 3,103ppm Dy_2O_3 and 375ppm Tb_4O_7
CH-025: 1m at **8.4% TREO**, incl. 3,142ppm Dy_2O_3 and 381ppm Tb_4O_7

R458: **14.6% TREO**, incl. 5,691ppm Dy_2O_3 and 737ppm Tb_4O_7

R007: **4.4% TREO**, incl. 1,148ppm Dy_2O_3 and 201ppm Tb_4O_7

Figure 2: Monte Alto East – High-grade heavy rare earth discovery[1]

The mineralisation at this outcrop is hosted in granite gneiss, dipping approximately 74 degrees northwest, with an apparent width of ~3 metres (Figure 3).

The weathered hard rock outcrop is highly enriched in xenotime, a rare earth mineral rich in heavy rare earth elements that are critical for advanced technologies such as electronics, robotics, electric vehicle motors and defence applications.

A geological grab sample from the outcrop returned an exceptional heavy rare earth assay of:

- **R458**: 14.6% TREO, including 5,691ppm Dy_2O_3, 737ppm Tb_4O_7, 74,543ppm Y_2O_3 and 2,313ppm U_3O_8

Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

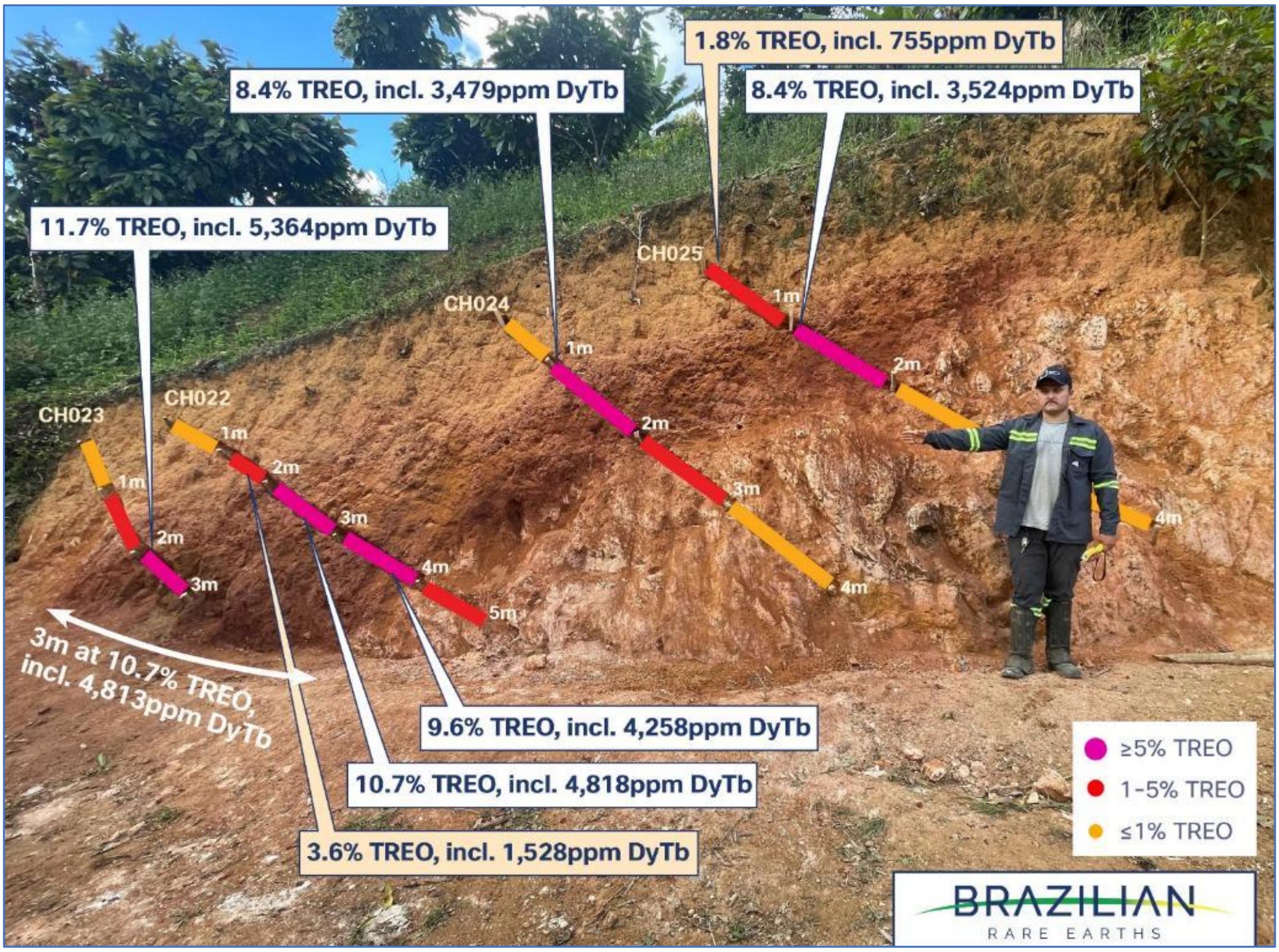


Figure 3: Ultra-high grade heavy rare earth mineralised outcrop at Monte Alto East

Follow-up channel sampling across this outcrop yielded similarly exceptional high-grade assays:

- **CH022** (2m to 4m): 10.1% TREO, including 4,062ppm Dy_2O_3, 477ppm Tb_4O_7, 48,497ppm Y_2O_3, 5,712ppm Nd_2O_3, and 1,740ppm Pr_6O_{11}
- **CH023** (2m to 3m): 11.7% TREO, including 4,794ppm Dy_2O_3, 570ppm Tb_4O_7, 57,673ppm Y_2O_3, 6,393 ppm Nd_2O_3 and 1,856ppm Pr_6O_{11}
- **CH024** (1m to 2m): 8.4% TREO, including 3,103ppm Dy_2O_3, 375ppm Tb_4O_7, 37,345ppm Y_2O_3, 5,571ppm Nd_2O_3 and 1,734ppm Pr_6O_{11}
- **CH025** (1m to 2m): 8.4% TREO, including 3,142ppm Dy_2O_3, 381ppm Tb_4O_7, 37,542ppm Y_2O_3, 5,541ppm Nd_2O_3 and 1,745ppm Pr_6O_{11}

This outcrop is part of a larger rare earth mineralised zone, with additional new surface discoveries approximately 500m south and 1 km north of the outcrop. A hard rock grab sample from the south (Sample R007), and 1km further north a mineralised soil sample (Sample S016):

- **R007**: 4.4% TREO, including 1,148ppm Dy_2O_3, 201ppm Tb_4O_7, 9,663ppm Y_2O_3, 6,150ppm Nd_2O_3, and 1,208ppm Pr_6O_{11} and 814ppm U_3O_8
- **S016**: 4.1% TREO, including 12,872ppm NdPr, 613ppm DyTb, 1,270ppm Y_2O_3, and 708ppm U_3O_8

Note¹ Refer to End Notes for details of previously reported exploration results and mineral resource estimates

These results define a 1.5 km north-south mineralised trend within the Monte Alto East Corridor, containing high-grade rare earth mineralisation in weathered bedrock outcrops and overlying soils. Ongoing exploration aims to expand these discoveries and evaluate the potential for large deposits of high-grade heavy rare earth mineralisation within the expanded Monte Alto exploration target area.

Monte Alto Corridors: Large-Scale Extensions to the World-Class Monte Alto Discovery

The initial Monte Alto discovery features ultra-high-grade hard rock REE-Nb-Sc-Ta-U mineralisation overlain by an extensive surface deposit of high-grade monazite sand. Reprocessing of airborne magnetic data has identified a series of intense parallel western magnetic anomalies, and a central south-west trending extension corridor, potentially linking the initial Monte Alto discovery with new regional rare earth exploration corridors (Figure 4).

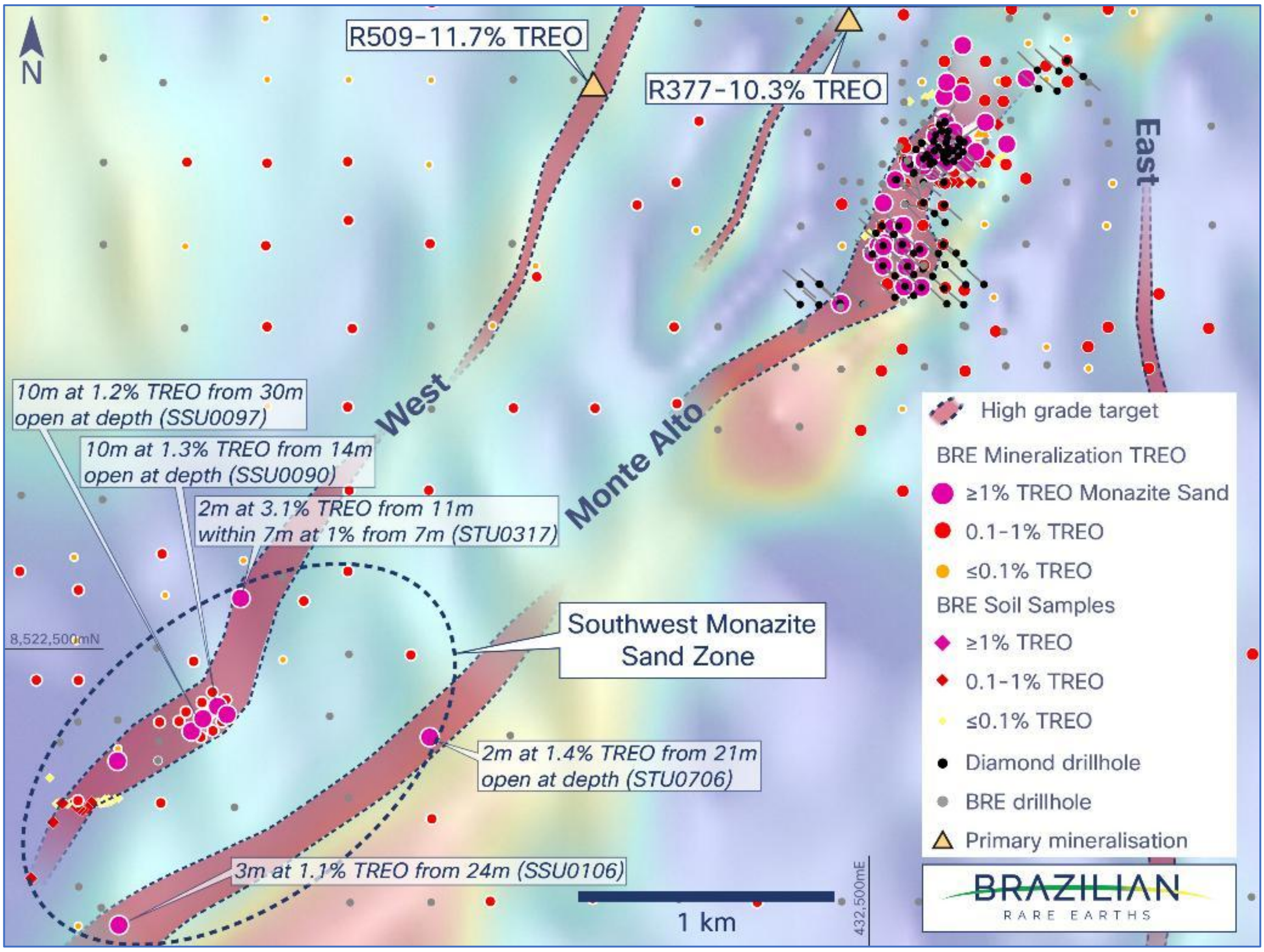


Figure 4: Monte Alto Central and Western Exploration Corridors[1]

Initial prospecting over these corridors discovered outcropping hard rock REE-Nb-Sc-Ta-U mineralisation, with grab samples returning assay values of:

- **R377:** 10.3% TREO, including 18,510ppm NdPr, 1,136ppm DyTb, 5,763ppm Nb_2O_5, 247ppm Sc_2O_3, 368ppm Ta_2O_5 and 1,222ppm U_3O_8
- **R509:** 11.7% TREO, including 23,851ppm NdPr, 1,515ppm DyTb and 1,061ppm U_3O_8

Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

These findings confirm a connection between areas of high magnetic intensity and REE-Nb-Sc-Ta-U mineralisation within the VRPS mineral system. Previous exploration results confirm the high-grade mineral system is repeated across the Rocha da Rocha rare earth province.

A parallel 1 km long exploration target zone which hosts the high-grade R377 outcrop (Figure 5) is located 500m the west of the Monte Alto discovery. The R509 high-grade mineralised outcrop is located on a prospective western corridor that continues over 4 km towards the southwest, where it converges with the Monte Alto corridor into an extensive area of high-grade +1% TREO monazite-sand mineralised zones[1] (Figure 3).

Figure 5: High-grade REE-Nb-Sc-Ta-U outcrop mineralisation, 700m west of Monte Alto

Southwest High-Grade Monazite Sand Zone

On the Monte Alto central extension corridor, auger drilling discovered high-grade monazite-sand mineralisation exceeding 1% TREO, including[1]:

- **2m at 1.4% TREO** from 21m, and open at depth (STU0706)[1]
- **3m at 1.1% TREO** from 23m, within 14m at 0.3% TREO and open at depth (SSU0106)[1]

These drill holes intersected monazite sands at depths of over 20m, yet most of the early auger holes within this southeast area were shallow (less than 16m). As such, the southeast continuation of this corridor remains untested and highly prospective for deeper deposits of high-grade monazite sand, which extends to depths of ~75 metres below surface at Monte Alto Project.

On the Western corridor, high-grade monazite-sand mineralisation with grades up to 4.6% TREO has been discovered across a 1,500m long exploration zone. Significant intervals from these previously reported drill holes include[1]:

Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

- 2m at 4.1%TREO, with 14,260ppm NdPr, from 20m within:
  - 10m at 1.3% TREO, with 3,572ppm NdPr, from 14m (SSU0090, open at depth)[1]
- 2m at 4.6%TREO, with 12,682ppm NdPr, from 32m within:
  - 10m at 1.2% TREO, with 2,885ppm NdPr, from 30m, within:
  - 17m at 0.8% TREO, with 1,732ppm NdPr, from 23m (SSU0097, open at depth)[1]
- 2m at 3.1% TREO with 6,807ppm NdPr from 11m, within:
  - 7m at 1.0% TREO, with 2,090ppm NdPr, from 7m (STU0317)[1]

Deep sonic drill holes, and notably drill holes STU0706 and SSU0106 to the east, indicate potential for large-scale high-grade monazite-sand mineralisation, located just 3.5 km from the initial Monte Alto deposit.

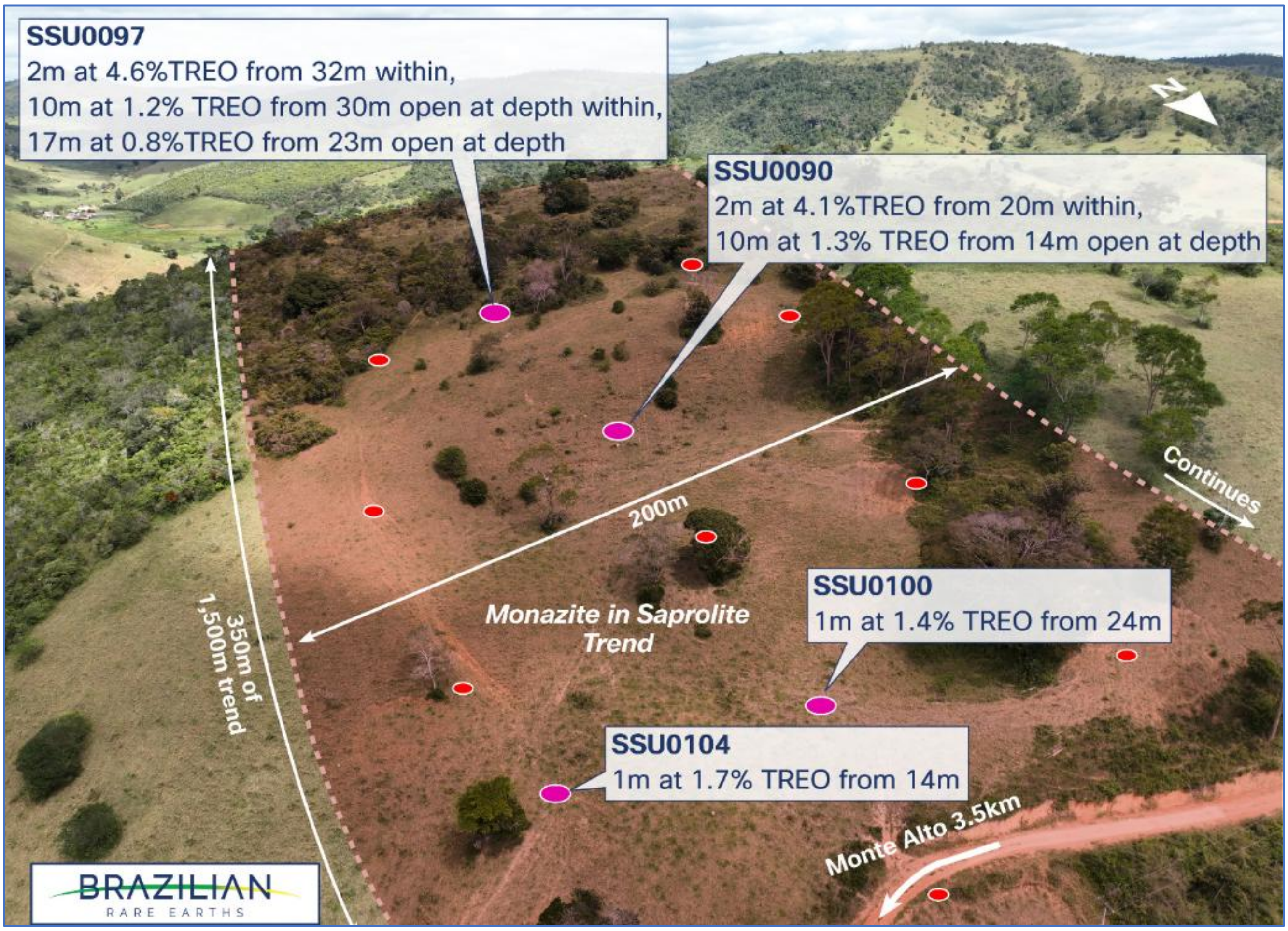


Figure 6: Monte Alto Southwest Monazite-Sand Discovery - Aerial view to the Southwest

Priority exploration will focus on mapping the extension of the rare earth mineralised system of the VPRS across the broader Monte Alto district-scale exploration area. To accelerate this regional exploration program, BRE plans to deploy a drone-based geophysical survey system in the coming months to amplify magnetic and radiometric image resolution. Furthermore, this drone-based survey system will also be used to accelerate high-resolution geophysical data coverage across the larger Sulista and Pelé project areas.

Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

Next Steps

- Monte Alto metallurgical study: Release of first-phase study results
- Pending assays: 8,009m of diamond drilling at the initial Monte Alto deposit
- Sulista and Pelé exploration update: Targeting high-grade monazite-sands and ultra-high grade REE-Nb-Sc-Ta-U hard rock mineralisation

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

For further information and enquires please contact:

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MD and CEO

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

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Note[1] Refer to End Notes for details of previously reported exploration results and mineral resource estimates

References and Notes

1. TREO = Total Rare Earth Oxides; NdPr = Nd_2O_3 + Pr_6O_{11}; DyTb = Dy_2O_3 + Tb_4O_7
2. Refer to the Prospectus dated 13 November 2023 (ASX, 19 December 2023) and the Company's ASX Announcements dated 25 March 2024, 6 June 2024, 11 June 2024 and 26 August 2024 (collectively Original ASX Announcements) for previously reported exploration results and mineral resource estimates. BRE confirms that:
   - (a) It is not aware of any new information or data that materially affects the information included in the Original ASX Announcements and
   - (b) In the case of the estimates of Mineral Resources, all material assumptions and technical parameters underpinning the estimates in the Original ASX Announcements continue to apply and have not materially changed.
3. When reporting exploration results (including weighted average intercepts) or mineral resource estimates, data is rounded to the nearest reporting unit. Discrepancies may occur due to rounding.

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 in light of its 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

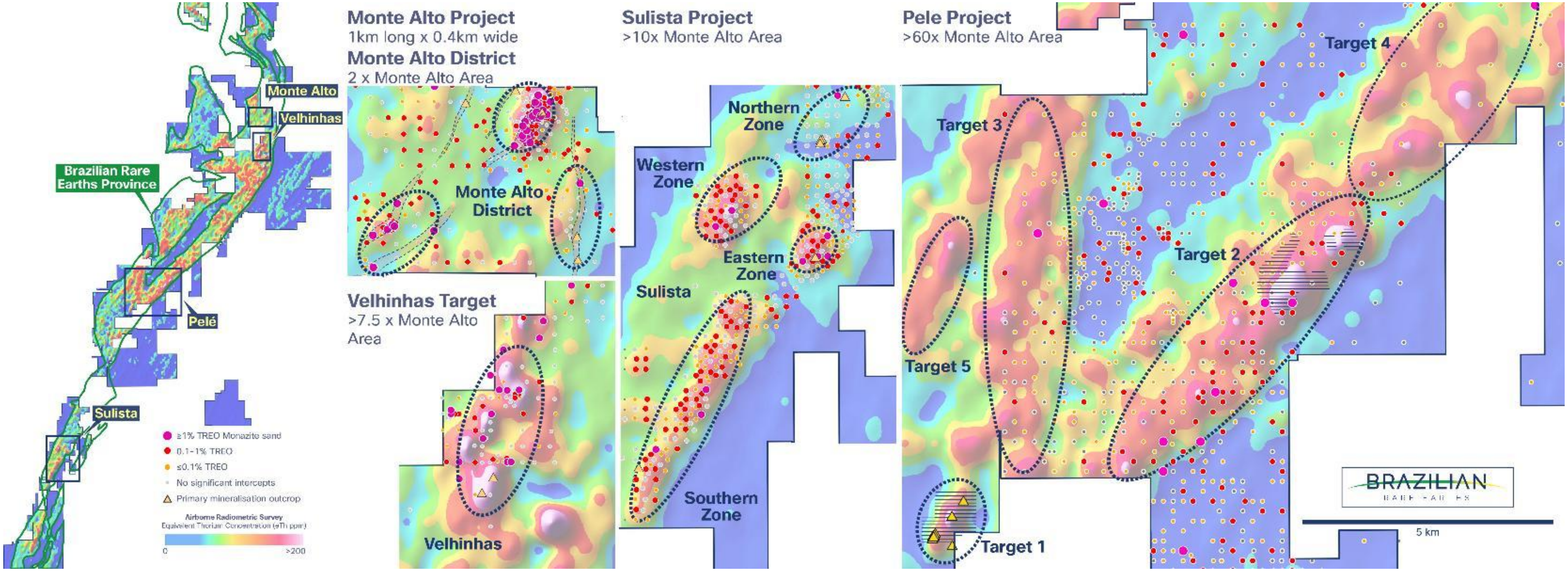
The information in this announcement that relates to Exploration Results is based on, and fairly represents, information compiled or reviewed by Mr Adam Karst P.G, a Competent Person who is a registered member of the Society of Mining, Metallurgy and Exploration which is a Recognised Overseas Professional Organisation. Mr Karst has sufficient experience that is relevant to the style of mineralisation and types of deposit under consideration and to the activity being undertaken 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. Mr. Karst consents to the inclusion in this report of the results of the matters based on his information in the form and context in which it appears.

Appendix A: BRE Critical Minerals

	Market Applications	EU Critical Mineral	USA Critical Mineral
60 **Nd** Neodymium 144.242	Neodymium is used for permanent magnets used in electric vehicles, robotics, wind turbines, electronic equipment and defence applications	☑	☑
59 **Pr** Praseodymium 140.908	Praseodymium is used for permanent magnets used in electric vehicles, robotics, wind turbines, electronic equipment and defence applications	☑	☑
66 **Dy** Dysprosium 162.5	Heavy rare earth: Dysprosium is used for high temperature and coercivity permanent magnets used in electric vehicles, robotics, wind turbines and defence	☑	☑
65 **Tb** Terbium 158.925	Heavy rare earth: Terbium is used for high temperature and coercivity permanent magnets used in electric vehicles, robotics, wind turbines and defence	☑	☑
64 **Gd** Gadolinium 157.25	Heavy rare earth: Gadolinium is is crucial to high-tech applications across medical imaging, energy systems, and data storage	☑	☑
71 **Lu** Lutetium 174.967	Heavy rare earth: Lutetium is vital rare earth element for medical diagnostics, cancer treatment, and advanced laser applications	☑	☑
68 **Er** Erbium 167.259	Heavy rare earth: Erbium has unique optical and electronic properties that are critical for fiber-optics, lasers, and nuclear reactor technologies	☑	☑
39 **Y** Yttrium 88.906	Yttrium is essential for high-tech applications, including phosphors, LEDs, superconductors, aerospace alloys, lasers and solid-oxide fuel calls	☑	☑
41 **Nb** Niobium 92.906	Niobium is used as a micro alloying element for high strength steels and superalloys	☑	☑
73 **Ta** Tantalum 180.948	Tantalum is used in semi-conductors, capacitors, super-alloys and medical devices	☑	☑
21 **Sc** Scandium 44.956	Scandium is used in high performance aluminium-scandium alloys to enhance strength to weight ratios	☑	☑
92 **U** Uranium 238.029	The primary use of uranium is as fuel for nuclear reactors, generating electricity through nuclear fission		

Note: This is a sub-section of the minerals and elements that has been discovered to date at Monte Alto

Appendix B: BRE exploration projects [1]



Note [1] Refer to End Notes for details of previously reported exploration results

Appendix C: Monte Alto East Heavy Rare Earth Channel Sample Results

Channel	North	East	From (m)	To (m)	TREO %	HREO %	HREO:TREO %	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	Gd_2O_3 ppm	Sm_2O_3 ppm	Ho_2O_3 ppm	Er_2O_3 ppm	Yb_2O_3 ppm	Lu_2O_3 ppm	Y_2O_3 ppm
CH-022	433,650	8,522,050	0.0	1.0	0.4	0.2	58	228	71	118	14	63	52	31	123	206	33	1,466
	433,650	8,522,049	1.0	2.0	3.6	2.3	64	2,364	734	1,357	171	706	536	359	1,415	2,235	382	15,310
	433,650	8,522,048	2.0*	3.0*	10.7	7.4	69	6,304	1,926	4,318	500	2,157	1,661	1,059	4,588	7,075	1,098	50,801
	433,650	8,522,047	3.0*	4.0*	9.6	6.7	70	5,119	1,555	3,806	453	1,911	1,396	949	4,021	6,339	1,029	46,194
	433,650	8,522,046	4.0	5.0	1.0	0.6	60	748	244	363	45	198	175	92	359	629	94	4,233
CH-023	433,649	8,522,051	0.0	1.0	0.4	0.3	67	228	69	162	19	79	58	42	169	283	46	2,031
	433,649	8,522,050	1.0	2.0	1.4	0.9	63	879	294	534	62	256	210	140	553	930	140	6,146
	433,649	8,522,049	2.0*	3.0*	11.7	8.4	71	6,393	1,856	4,794	570	2,430	1,752	1,212	5,010	7,878	1,274	57,673
CH-024	433,651	8,522,046	0.0	1.0	0.8	0.5	69	396	121	295	35	139	102	77	311	563	85	3,700
	433,651	8,522,046	1.0	2.0	8.4	5.5	65	5,571	1,734	3,103	375	1,660	1,359	781	3,305	5,167	862	37,345
	433,651	8,522,045	2.0	3.0	1.3	0.8	62	771	249	450	53	238	185	111	467	749	115	5,642
	433,651	8,522,044	3.0	4.0	0.3	0.2	61	220	70	125	15	66	54	30	126	204	32	1,402
CH-025	433,652	8,522,045	0.0	1.0	1.8	1.2	66	1,102	350	676	79	348	274	168	716	1,151	174	8,447
	433,652	8,522,044	1.0	2.0	8.4	5.5	65	5,541	1,745	3,142	381	1,651	1,335	788	3,280	5,117	858	37,542
	433,652	8,522,043	2.0	3.0	0.7	0.4	65	389	126	247	29	127	97	61	259	419	65	3,132
	433,652	8,522,042	3.0	4.0	0.7	0.2	63	220	73	139	16	71	55	34	144	235	36	1,589

*Channel samples CH022 2m-4m, and CH023 2m-3m, cover a 3m horizontal width of the mineralization and have an average grade of 10.7% TREO, including 4,306ppm Dy_2O_3, 508ppm Tb_4O_7 and 51,556ppm Y_2O_3

Appendix D: Monte Alto Grab Sample Results

Results for grab samples collected at the Monte Alto project. Point locations do not represent a continuous sample along any length of the mineralized system. Refer to Table 1 for more information.

Outcrop Sample	Target	North	East	TREO%	HREO %	HREO:TREO %	Nd_2O_3 ppm	Pr_6O_{11} ppm	Nd_2O_3 ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	Y_2O_3 ppm	Nb_2O_5 ppm	Sc_2O_3 ppm	Ta_2O_3 ppm	U_3O_8 ppm
R007	MA	433,662	8,521,584	4.4	1.5	33	6,150	1,208	6,150	1,148	201	9,663	7	na	1	814
R377	MA	432,420	8,524,994	10.3	0.9	9	13,400	5,110	13,400	946	191	4,398	5,763	247	368	1,222
R458	MA	433,645	8,522,049	14.6	10.7	73	7,027	2,026	7,027	5,691	737	74,543	494	39	58	2,313
R509	MCC	431,425	8,524,708	11.7	1.4	12	18,469	5,383	18,469	1,195	320	6,526	36	na	2	1,061

na= not assayed

Appendix E: Monte Alto Significant Soil Sample Results

Results for mineralized soil samples +0.1% TREO collected at the Monte Alto project. Point locations do not represent a continuous sample along any length of the mineralized system. Refer to Table 1 for more information.

Soil Sample	Target	North	East	TREO %	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	Y_2O_3 ppm	Nb_2O_5 ppm	U_3O_8 ppm
S016	MA	433,704	8,523,092	4.1	11,664	1,208	489.4	123.3	1,270	53	708
S017	MA	433,640	8,523,035	0.3	201	74	13.2	2.7	61	388	41
S018	MA	433,545	8,522,013	1.9	2,371	827	137.3	31.9	492	7	103
S048	RDA	429,235	8,521,605	0.1	73	23	7.5	1.2	33	13	29
S049	RDA	429,321	8,521,824	0.3	169	56	15.7	2.8	80	72	31
S115	RDA	429,357	8,521,898	0.1	78	28	5.8	1.1	28	329	25
S118	RDA	429,409	8,521,905	0.1	125	42	7.7	1.5	42	44	17
S119	RDA	429,413	8,521,885	0.1	130	42	13.3	2.4	92	52	14
S120	RDA	429,423	8,521,877	0.2	283	97	24.9	4.4	126	24	33
S121	RDA	429,435	8,521,872	0.6	493	172	25.9	5.4	115	126	106
S123	RDA	429,455	8,521,878	0.2	200	69	15.5	3.0	76	37	50
S124	RDA	429,470	8,521,900	0.1	209	63	33.5	5.8	231	76	10
S156	MA	432,598	8,524,120	0.2	144	58	7.0	1.4	26	176	18
S157	MA	432,575	8,524,120	0.2	118	45	8.0	1.5	30	186	19
S158	MA	432,552	8,524,119	0.1	165	57	8.3	1.4	28	101	13
S162	MA	432,596	8,524,139	1.1	427	164	23.0	4.5	102	580	90
S163	MA	432,601	8,524,145	0.7	224	86	12.8	2.4	53	394	62
S164	MA	432,624	8,524,119	0.2	126	52	6.1	1.1	23	88	12
S167	MA	432,831	8,524,516	0.1	34	12	3.0	0.5	17	187	21
S168	MA	432,854	8,524,523	0.3	43	16	3.5	0.6	18	237	35
S169	MA	432,874	8,524,514	1.2	245	90	16.3	3.0	69	489	143
S170	MA	432,902	8,524,520	1.8	1,398	544	78.5	14.5	369	1,309	364
S171	MA	432,948	8,524,543	1.8	1,446	552	87.4	16.0	403	1,126	392
S172	MA	433,002	8,524,545	0.9	744	269	42.3	7.8	200	290	86
S176	MA	432,969	8,524,422	0.2	38	14	3.5	0.7	16	428	59
S177	MA	432,929	8,524,419	0.1	27	9	2.6	0.5	12	324	33
S178	MA	432,901	8,524,410	0.2	33	12	3.3	0.6	15	406	44
S179	MA	432,873	8,524,441	0.6	81	30	7.0	1.5	27	661	141
S180	MA	432,873	8,524,415	0.4	117	44	7.7	1.6	35	738	75
S181	MA	432,850	8,524,416	0.2	59	21	4.6	0.8	21	330	35
S182	MA	432,824	8,524,420	0.2	40	15	3.2	0.6	16	241	27
S183	MA	432,799	8,524,417	0.1	21	8	2.3	0.4	11	128	17
S184	MA	432,776	8,524,417	0.2	39	14	4.2	0.8	19	182	21
S186	MA	432,776	8,524,319	0.1	42	14	3.0	0.5	15	353	24
S187	MA	432,799	8,524,319	0.1	48	16	3.5	0.6	16	413	28
S188	MA	432,823	8,524,321	0.2	35	12	3.1	0.6	15	420	34
S189	MA	432,848	8,524,319	0.1	31	11	2.8	0.5	14	365	34
S191	MA	432,898	8,524,321	0.2	26	9	2.3	0.4	12	273	44
S195	MA	432,939	8,524,521	1.9	1,127	412	70.1	34.2	290	1,340	221
S212	MA	432,912	8,524,518	2.5	3,952	1,570	128.3	28.5	369	476	209
S213	MA	432,912	8,524,525	2.1	1,501	523	61.1	12.5	220	604	238
S214	MA	432,914	8,524,523	2.1	3,200	1,104	104.5	22.3	310	479	181
S572	MA	433,650	8,522,043	8.6	4,708	1,398	3,181	441	40,663	303	1,542

na= not assayed

APPENDIX F: 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.*	The reported drill results are obtained from auger drilling, sonic core drilling, channel samples and soil samples. Sonic core holes were drilled using 2m run lengths. Drill core was collected directly from a core barrel and placed in pre-labelled core trays. Run interval depths were measured and recorded. Drill core was transported to the BRE's exploration facility where it was measured for recovery, geologically logged, photographed, and marked up for sampling. Selected sample intervals took into account lithological boundaries (i.e. sample was to, and not across, major contacts). Sonic drill core was cut with a knife, into two quarter core samples with one summited for assay and the other retained for archive. The remaining half core remained in the core tray for further testing. Cuts were made along a line drawn to ensure samples were not influenced by the distribution of mineralization within the drill core (i.e. the cut line bisected mineralized zones). The split for assay was placed in pre-numbered sample bags for shipment to the laboratory for ICPMS analysis. Auger samples were recovered directly from the auger bucket and placed onto a polypropene tarp, photographed, and geologically logged in the field. The samples were transported to the BRE's exploration facility where they were sieved through a 10 mm by 10 mm screen. The oversized material was mechanically pulverized prior to being re-combined with the undersized material on a plastic tarp. The sample was homogenised by working the material back and forth on tarp and was then split into two portions: one for assay and another for archive. The split for assay was placed in pre-numbered sample bags for shipment to the laboratory for ICPMS analysis. The other portion was bagged and stored onsite in a secure warehouse as archive material. The collected sample interval lengths are 1 m with some variation depending on sample recovery and geological unit boundaries. Channel sampling of outcropping saprolite mineralization was conducted after careful cleaning of the outcrop to expose in situ material, and establishing of cut lines perpendicular to mineralization with meter marks. Samples were extracted along cuts 1 meter in length and nominally 10cm deep and wide. A three-person team, led by a BRE geologists, was employed to cut and collect each the sample into a tarp after which the sample was processed and analysed in the same manner as an auger sample. Grab samples were collected from REE-Nb-Sc-Ta-U boulders, subcrop and outcrop using a rock hammer to obtain representative rock fragments with an average weight of 0.6kg. Soil geochemistry sample were collected using handheld digging tools to obtain a sample

		of sub-surface material with an average weight of 1.4kg. Grab sample rock fragments, and soil samples, were placed in pre-numbered sample bags in the field and then transported to the Company's exploration facility for shipment to the laboratory for ICPMS analysis. All drilling and channel sampling provides a continuous sample of mineralized 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. Sonic drilling was conducted by the Company and utilized a 2m long single wall barrel to obtain 0.076m diameter core, or a 2m long double wall core barrel to obtain 0.068m diameter core. The sonic drill string is advanced until either rock or hard rock boulders are encountered, or operational limits are reached. Outer casing is used when the water table or poor recovery is encountered. Water is used as a drilling fluid as necessary and to aid in extruding material from the core barrel. The sonic drill rig has a maximum operational depth limit of 60m. The average sonic hole depth is 35m. Sonic core is not oriented. Auger drilling was conducted by BRE using a 0.05m diameter x 0.4m long clay soil auger bucket with 0.5m to 1m long rods rotated by a gasoline engine with hand-holds. The auger bucket was advanced by adding rods until either groundwater was reached (which degrades sample quality) or refusal due to rock or hard saprolite. Auger drilling has a maximum operational limit of 30 m deep. The average auger hole depth is 18m. All augur holes are drilled vertically.
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 sonic 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. Samples collected from auger drilling were checked by the technician at the rig to ensure they represented of the interval drilled. When fall-back was noted, fallen material was removed before sample collection. If poor recovery is encountered drill speed was decreased. If poor recovery at the beginning of a hole was persistent, the hole was redrilled at a nearby location. For sonic drilling, casing is used to minimize fall back.

		Recoveries for all core drilling are consistently good. 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 these drilling and sampling methods.
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.*	Data was collected in sufficient detail to support Mineral Resource estimation studies. Drill core was logged at BRE's exploration facility by the logging geologist. Sonic core was photographed wet in core boxes immediately before sampling. Core photos show sample numbers, drill run lengths for material in the core box. Each auger drillhole interval was logged in the field by the onsite technician. Each auger sample was arranged on a plastic sheet to align with the likely in-situ position and was then photographed in its natural condition prior to transport to the exploration facility. Photos show auger hole number and drill run lengths. 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 measurement 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.*	Core from sonic drilling was split to obtain quarter core sub-samples for assaying. Reported core sample intervals were typically 1m in length. Interval lengths took into account lithological boundaries (i.e. sample was to, and not across, major contacts). To avoid selection bias, the right of core was consistently sampled and the bottom half retained in the core tray for archiving. Each auger sample was sieved through a 10mm by 5mm screen. The oversized material mechanically pulverized prior to being re-combined with the undersized material on a plastic tarp. The sample material was homogenized by working it back and forth on the tarp, and then split using the cone and quarter method to produce sub-samples for assaying and archiving. Auger samples were processed with natural moisture content. Otherwise, samples too wet for effective screening were air dried naturally prior to processing. To minimize cross contamination sampling tools, such as the plastic tarp, screen, and cutting tools were cleaned using compressed air between samples. Field duplicates were completed at frequency 1:20 samples to evaluate the sample collection procedures to ensure representativeness and show good reproducibility. Duplicate analyses of coarse crush and pulp material were provided by SGS.

<table>
<tr>
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<td>Auger and sonic sub-samples submitted for assaying had an average weight of 1.2 kg. Channel samples had an average weight of 1.1 kg. Grab samples had an average weight of 0.65 kg.

Submitted samples of all types have appropriate mass to represent the material collected which includes mega-enclaves of cumulate REE-Nb-Sc-Ta-U mineralization, microparticle to sand sized monazite grains, and ionic clay REE mineralisation.</td>
</tr>
<tr>
<td><i>Quality of assay data and laboratory tests</i></td>
<td>
<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>
<i>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.</i>
<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>
</td>
<td>Drill core, auger, channel, grab and soil samples collected by the Company were assayed by SGS Geosol in Vespasiano, Minas Gerais, Brazil, which is considered the Primary laboratory.

Samples were initially dried at 105 degrees Celsius for 24 hours. Samples were crushed to 75% passing the 3mm fraction and the weight was recorded. The sample was reduced on a rotary splitter and then 250g to 300g of the sample was pulverized to 95% passing 75 µm. Residues were stored for check analysis or further exploration purposes.

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:

<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>

Overlimit samples were analysed at percentage levels using SGS Geosol analysis code IMS95RS

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:

<table>
<tr><td>Al_2O_3</td><td>Ba</td><td>CaO</td><td>Cr_2O_3</td></tr>
<tr><td>Fe_2O_3</td><td>K_2O</td><td>MgO</td><td>MnO</td></tr>
<tr><td>Na_2O</td><td>P_2O_5</td><td>SiO_2</td><td>Sr</td></tr>
<tr><td>TiO_2</td><td>V</td><td>Zn</td><td>Zr</td></tr>
</table>

Analysis for Scandium (Sc) was made by 4-Acid ICP-AES Analysis (SGS Geosol code ICM40-FR).

Accuracy was monitored through submission of certified reference materials (CRMs) supplied by OREAS North America Inc. CRM materials (25a, 106, 147, 460 and 465) cover</td>
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</table>

		a range of REE grades encountered on the project. CRM 465 has an equivalent grade of approximately 10% TREO and supports reliable analysis of high grade REEE-Nb-Sc mineralisation detailed in this report. CRM were inserted within batches of core, sonic and auger drill samples, and grab samples, at a frequency of 1:20 samples. CRMs were submitted as “blind” control samples not identifiable by the laboratory and were alternated to span the range of expected grades within a group of 100 samples. Contamination was monitored by insertion of blank samples of coarse quartz fragments. Blanks were inserted within batches of sonic and auger drill samples, and grab samples, at a frequency of 1:40 samples. Blanks pass through the entire sample preparation stream to test for cross contamination at each stage. No laboratory contamination or bias were noticed. Precision and sampling variance was monitored by the collection ‘Field duplicate’ samples, predominantly from mineralised intervals, at the rate of 1:20 samples. Half core was split into two ¼ core samples to make field duplicate pairs that are analysed sequentially. The adopted QA/QC protocols are acceptable for this stage of exploration. 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 and their use for Mineral Resource estimation.
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. Nineteen closely spaced twin holes were drilled using a sonic drill rig to verify the auger drilling and sampling methods. There does not appear to be a systematic bias associated with auger drill method. Mean assay values obtained by augering are not likely to be higher or lower than values obtained by sonic drilling. 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. 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) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$

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<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 + $Pr_6O_{11}Pr_6O_{11}$ + 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% of TREO = Nd_2O_3 + Pr_6O_{11}/TREO x 100</p>
<p>HREO% of TREO = HREO/TREO x 100</p>
<p>Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.</p>
<table>
<tr><th><i>Element</i></th><th><i>Factor</i></th><th><i>Oxide</i></th></tr>
<tr><td><i>La</i></td><td><i>1.1728</i></td><td>La_2O_3</td></tr>
<tr><td><i>Ce</i></td><td><i>1.2284</i></td><td>Ce_2O_3</td></tr>
<tr><td><i>Pr</i></td><td><i>1.2082</i></td><td>Pr_6O_{11}</td></tr>
<tr><td><i>Nd</i></td><td><i>1.1664</i></td><td>Nd_2O_3</td></tr>
<tr><td><i>Sm</i></td><td><i>1.1596</i></td><td>Sm_2O_3</td></tr>
<tr><td><i>Eu</i></td><td><i>1.1579</i></td><td>Eu_2O_3</td></tr>
<tr><td><i>Gd</i></td><td><i>1.1526</i></td><td>Gd_2O_3</td></tr>
<tr><td><i>Tb</i></td><td><i>1.1762</i></td><td>Tb_4O_7</td></tr>
<tr><td><i>Dy</i></td><td><i>1.1477</i></td><td>Dy_2O_3</td></tr>
<tr><td><i>Ho</i></td><td><i>1.1455</i></td><td>Ho_2O_3</td></tr>
<tr><td><i>Er</i></td><td><i>1.1435</i></td><td>Er_2O_3</td></tr>
<tr><td><i>Tm</i></td><td><i>1.1421</i></td><td>Tm_2O_3</td></tr>
<tr><td><i>Yb</i></td><td><i>1.1387</i></td><td>Yb_2O_3</td></tr>
<tr><td><i>Lu</i></td><td><i>1.1372</i></td><td>Lu_2O_3</td></tr>
<tr><td><i>Y</i></td><td><i>1.2699</i></td><td>Y_2O_3</td></tr>
</table>
<p>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. (<i>Source: https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors)</i></p>
</td>
</tr>
<tr>
<td><i>Location of data points</i></td>
<td><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations</i></td>
<td>Sonic drill collars and channel sample positions are located by a surveyor using RTK-GPS with centimetre scale accuracy. Auger drill hole collars and grab sample sites were located by a handheld GPS with accuracies <5m.</td>
</tr>
</table>

	used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Downhole surveys are not collected for sonic and auger drill holes which are vertical and less than 30m (auger) or 60m (sonic). Therefore, drill hole deviation will result in errors that are not material to the reliability of drillhole trace projections. 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 a DEM obtained from SRTM data at a lateral resolution of $30m^2$.
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-Ta-U mineralisation, the drill spacing is generally 40m to 200m along strike and down dip. This spacing is sufficient to determine continuity in geology and grade with sufficient resolution to support early-stage exploration and targeting. At all target areas laterally extensive REE enriched horizons are present in the regolith. These areas are tested by auger and sonic drilling at spacings ranging from approximately 40m to 400m in the north-south and east west directions. At Monte Alto, REE are predominantly hosted in the regolith by sand sized monazite grains distributed within a central high-grade zone. This zone is tested by auger and sonic drilling at 80 m grid spacings. For all regolith mineralisation styles, the drill spacing is sufficient to establish geology and grade continuity in accordance with Inferred classification criteria. Outcrop channel sample cut lines are spaced at 1-2m intervals across the outcrop face. Individual channel samples are 1m in length. Composite sample grades are calculated by generating length weighted averages of assay values.
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 REE in the regolith horizons is largely controlled by vertical changes within the profile. Vertical drill holes intersect these horizons perpendicularly and obtain representative samples that reflect the true width of horizontal mineralisation. In regolith, auger and sonic drill hole orientations do not result in geometrically biased interval thickness. Outcrop channel sample cuts are made perpendicular to the apparent orientation of mineralisation on the outcrop face. When mineralisation is obliquely exposed in outcrop channel samples may overstate the true width of mineralisation. The extent to which this occurs at Monte Alto East has not been established. Grab samples are collected from single location points on outcropping material, or boulders. Soil samples are collected from single location points at surface. Neither sample types represent a continuous sample along any length of the mineralised system.
Sample security	• *The measures taken to ensure sample security.*	After collection in the field, the auger, grab and soil samples were placed in sealed plastic bags that were then placed into larger polyweave bags labelled with the sample IDs inside

		and transported to the Company's secure warehouse. Drill core samples were transported in their core boxes. A local courier transported the samples submitted for analysis to the laboratory. A copy of all waybills related to the sample forwarding was secured from the expediter. An electronic copy of each submission was forwarded to the laboratory to inform them of the incoming sample shipment. 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.*	The Company engaged the services of Telemark Geosciences to review the sampling and analysis techniques used at the Project, and to establish a "Standard Operating Procedures" manual to guide exploration. CSA Global Associate Principal Consultant, Peter Siegfried has toured the Company's exploration sites and facilities and conducted reviews of sampling techniques and data. The Company has addressed recommendations and feedback provided by CSA Global.

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 120 granted exploration permits covering a land area of approximately 1,683 km^2. The Sulista Rare Earth project comprises 11 (eleven) granted exploration permits covering a land area of approximately 108 km^2. Permits are registered at Brazil's National Mining Agency The Project also includes additional applications for over 2,592 km2 of exploration licenses, 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 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 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 land-owners 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. 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 authorized 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 56,919 m in 4,257 drill holes. 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. As of the effective date of this report, BRE is appraising the exploration data collected by other parties.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Company's tenements contain REE deposits interpreted as analogies to Ion Adsorption ionic Clay ("IAC") deposits, and regolith hosted deposits of monazite mineral grains, and primary in-situ REEE-Nb-Sc mineralisation. 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. 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 characterized by steeply dipping mega-enclaves of REE-Nb-Sc-Ta-U cumulate mineralisation and localised zones of xenotime rich mineralisation in saprolite. 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.
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 related to all the diamond core drill holes presented in this Report are detailed in Appendix A.
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.*	Downhole length weighted averaging is used to aggregate assay data from multiple samples within a reported intercept. No grade truncations or cut-off grades were applied. No metal equivalents values are used.
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').*	In the weathered profile all intercepts reported are down hole lengths. The geometry of mineralisation is interpreted to be flat. The drilling is vertical and perpendicular to mineralisation. In the weathered profile down hole lengths correspond to true widths.
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*	Diagrams, tables, and any graphic visualization are presented in the body of the report.

	drill hole collar locations and appropriate sectional views.	
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 drilling results that are material to the project and are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.
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.*	Detailed walking radiometer surveys have been completed on the target areas using a RS-230 Portable Gamma Spectrometer. In survey mode, the total Count of gamma particles Per Second (“CPS”) is recorded in real time. In survey mode, the total count of radioactive elements is recorded in real time. Readings are taken at waist height (approximately 1 m from the surface), the sensor can capture values in a radius of up to 1 m². High CPS occur in the presence of gamma releasing minerals. Throughout the Rocha da Rocha Critical Mineral Province, BRE has observed a positive correlation between CPS and thorium and REE bearing monazite. BRE has determined that gamma spectrometry is an effective method for determining the presence of REE mineralization that is material to 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 develop the Monte Alto District 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 40m x 40m at the Monte Alto Project. 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.