

New Discovery at Apuí ENE REE Project Exceptional REE values with up to 2,757 ppm TREO, including 594 ppm Nd Pr

Highlights

- Exceptional results for TREO with values up to **2,757 ppm TREO** in APTR-013, including **594 ppm Nd Pr oxides**.

Significant results:

- 12 metres @ **1,380 ppm TREO** from surface, including 5m @ **1,942 ppm TREO** from 7 metres (APTR 013)
- 3 metres @ **1,130 ppm TREO** from surface (APTR 014)
- 4 metres @ **908 ppm TREO** from surface (APTR 018)

Andre J Douchane, CEO commented: "APTR 013 is not only a very exciting discovery hole it's also quite amazing because of what it contains. Obviously, the rare earth assays are high (1942ppm over 5 metres); however, the hole also contains slightly over 7% K₂O (potash) from metre 8 to 12 and between 1% and 2.5% TiO₂ over the entire hole. Potash is a fertilizer widely used and produced throughout Brazil, and the world. TiO₂ is a heavy mineral used for white pigments in paint, plastics, and paper. So, given the right circumstances, either of these two different minerals could potentially represent a valuable by-product.

Due to the start of the wet season in mid-December, we will suspend the drilling program at Apui ENE and Ema. A well-planned drill program requires thoughtful technical analysis of completed drill holes before commencing the subsequent set of drill holes and while we believe that we have been very successful with our drilling decisions to date, we now need time to get all assays back and for more thoughtful analysis before we commence the next significant drilling program. We do not think it appropriate to risk a misplaced drill program and related waste of precious funds.

At the end of November 2 of the 4 Ema drills will move to Apui and begin step out drilling from APTR 013. Additionally, at the end of November, we will have enough drilling at Ema to potentially calculate a resource covering up to 30 square kilometers. We are also planning 20 to 25 holes (depending on depth) near APTR 013. With drilling ending mid-December, the last of the assays are expected by mid-February – hopefully in time to be incorporated in a JORC resource estimate.

The discovery hole, APTR 013, with focus on REE, highlights the consolidation of an extraordinary REE portfolio:

- *The Ema with 189 sq km of ionic rare earths – already proved by tests at SGS.*
- *The Apui with an extensive area of 330 sq km of REE rich sediments*
- *The Apui ENE with 170 sq km now with high grade REE associated with high K₂O sedimentary rocks, which host sediments that are older than any of our other discoveries.*
- *All new leases are now approved and active.*

We are still waiting for the final REE report from CETEM. Final sign off for the Bioleach Pilot Plant report will come after one additional test is completed. The additional test work is under way and expected to be completed within the next 2 weeks."

BBX Minerals Limited (**ASX: BBX**) (“**BBX**” or the “**Company**”) is pleased to announce initial Total Rare Oxide (TREO¹) assay results for regional reconnaissance auger drilling conducted 25km NE of the three new leases near Apuí, Brazil (3). These auger holes are within two leases recently granted (Figure 1), encompassing an area of approximately 17,000 hectares, boosting the Apui REE project to 500 sq km.

The highest-grade portion of hole APTR 013 is coincident with a potash-rich zone, grading approximately 7% K₂O (Table 2), interpreted as being related to a potassium-rich sedimentary horizon, potentially of significant areal extent. The hole was terminated at 12m in strongly-mineralised saprolite, grading 1804ppm TREO. The upside potential will be investigated with follow up and additional regional auger drilling.

The REE distribution in the last five meters of APTR013 shows a high (43.8 %) percentage of cerium as in the Makuutu iREE deposit in Uganda developed in the regolith over sediments, typical of glauconites rich in rare earths. The 2 leases representing the Apui ENE REE project cover sediments older than those on the 5 leases around the Apui town site, therefore representing a slightly different protolith and resultant REE basket, although both are rich in cerium, as at Makuutu. The presence of REEs in these four exploration auger holes validate the exploration model within the sedimentary package present in these two new leases, as previously shown for the younger sediments in the Apui REE project.

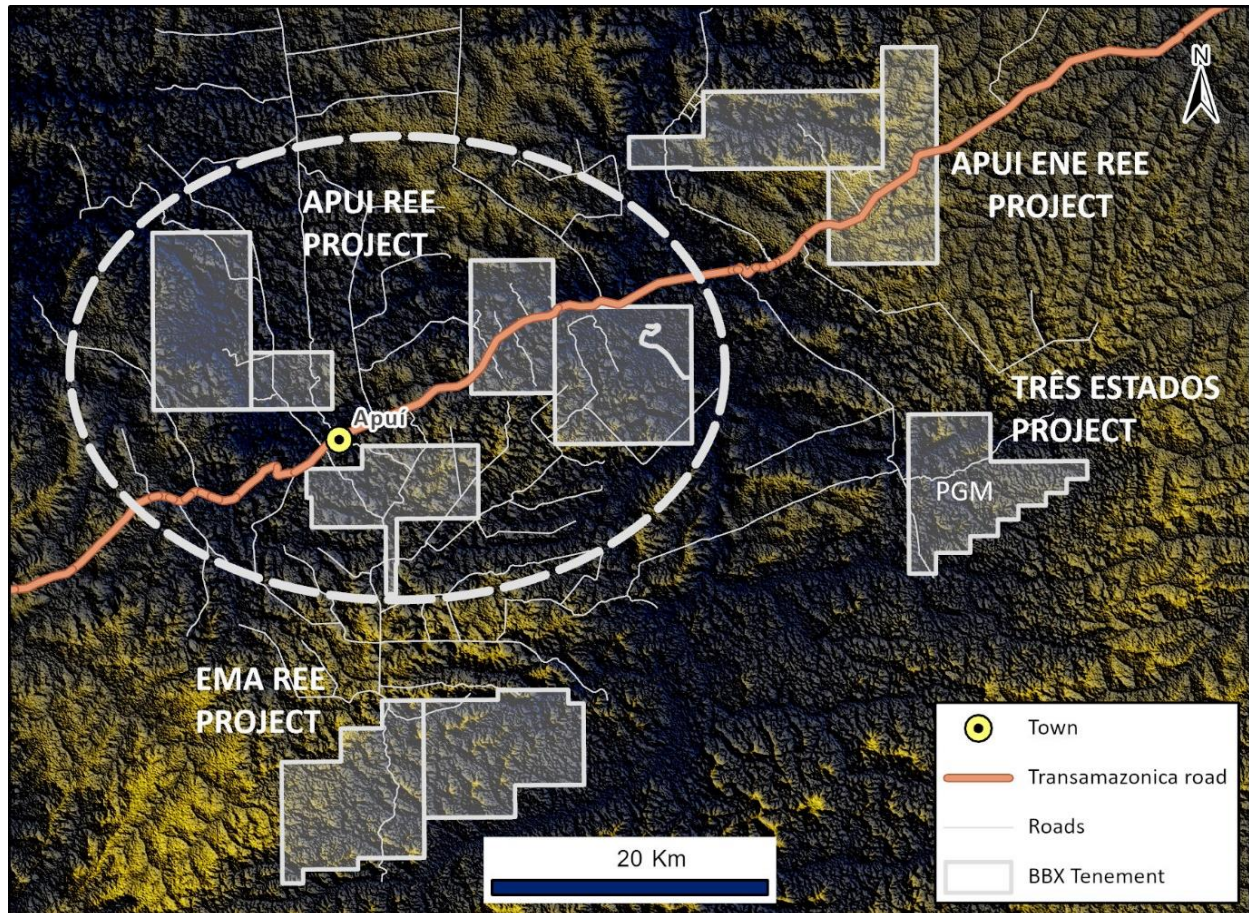
Table 1: REO distribution APTR013 from 7m to 12 m

Classification	Element	Element	REE ppm	Factor	Oxide	REO ppm	REO/TREO %
LREE	Lanthanum	La	355.0	1.1728	La ₂ O ₃	416.3	21.4
	Cerium	Ce	693.0	1.2284	CeO ₂	851.3	43.8
	Praseodymium	Pr	73.7	1.2082	Pr ₆ O ₁₁	89.0	4.6
	Neodymium	Nd	280.0	1.1664	Nd ₂ O ₃	326.6	16.8
HREE	Samarium	Sm	52.9	1.1596	Sm ₂ O ₃	61.3	3.2
	Europium	Eu	6.7	1.1579	Eu ₂ O ₃	7.8	0.4
	Gadolinium	Gd	23.8	1.1526	Gd ₂ O ₃	27.4	1.4
	Terbium	Tb	1.2	1.1762	Tb ₄ O ₇	1.4	0.1
	Dysprosium	Dy	14.3	1.1477	Dy ₂ O ₃	16.4	0.8
	Holmium	Ho	3.1	1.1455	Ho ₂ O ₃	3.6	0.2
	Erbium	Er	10.3	1.1435	Er ₂ O ₃	11.8	0.6
	Thulium	Tm	1.6	1.1421	Tm ₂ O ₃	1.8	0.1
	Ytterbium	Yb	11.6	1.1387	Yb ₂ O ₃	13.2	0.7
	Lutetium	Lu	1.7	1.1371	Lu ₂ O ₃	1.9	0.1
	Yttrium	Y	88.6	1.2699	Y ₂ O ₃	112.5	5.8
	Totals		1618			1942	100

BBX has announced the full assay results for 26 holes out of the 158 holes drilled to date at Ema and 14 auger holes drilled in the Apui and Apui ENE REE projects (Figure 4). Four auger rigs are now drilling the EMA East in an 800m drilling space testing the regolith developed on top of the felsic volcanics.

¹ TREO = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Lu₂O₃ + Y₂O₃

Figure 1- BBX's REE projects



Apui ENE REE project

The multi-element distribution along the auger hole APTR013 (Table 2) indicates that the highest TREO grades from 7 metres downhole are directly correlated with a potash-rich sediment (7% K₂O) anomalous in rubidium, with silica and iron contents typical of a mature glauconite mineral which occurs in extensive marine sediments. Glauconite decomposes into halloysite, kaolin and smectite where REEs may be ionic or colloiddally hosted.

Uranium and thorium are low, compatible with ionic rare earth mineralisation.

Mineralogical characterisation is in progress at the Brazilian Government mineral research laboratory, CETEM.

Table 2: Hole APTR-013 multi-element distribution

Depth m	TREO ppm	MREO ppm	K ₂ O %	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %	Rb ppm	U ppm	Th ppm
0-1	894	169	0.1	36.2	5.1	2.51	3.5	9.09	66.5
1-2	637	123	0.1	29.9	23.7	1.85	2.0	6.53	50.4
2-3	863	171	0.2	26.4	15.0	2.13	4.8	7.77	60.3
3-4	1,397	380	0.3	24.8	12.5	1.97	8.0	8.39	59.8
4-5	1,084	237	0.8	24.4	19.5	1.79	20.6	7.58	55.6
5-6	1,070	227	2.7	32.2	15.8	1.71	65.9	7.25	50.3
6-7	874	181	4.9	38.5	11.9	1.38	119.3	6.6	43.9
7-8	1,797	399	5.7	41.0	8.4	1.25	131.4	6.59	43.6
8-9	2,757	613	7.0	43.9	9.5	1.24	162.5	7.24	44.7
9-10	2,181	493	6.8	46.6	8.0	1.14	129.6	6.51	39.5
10-11	1,200	265	7.3	49.0	7.2	1.08	145.0	5.98	35.8
11-12	1,804	399	7.0	46.2	7.5	1.12	144.5	6.16	38.6

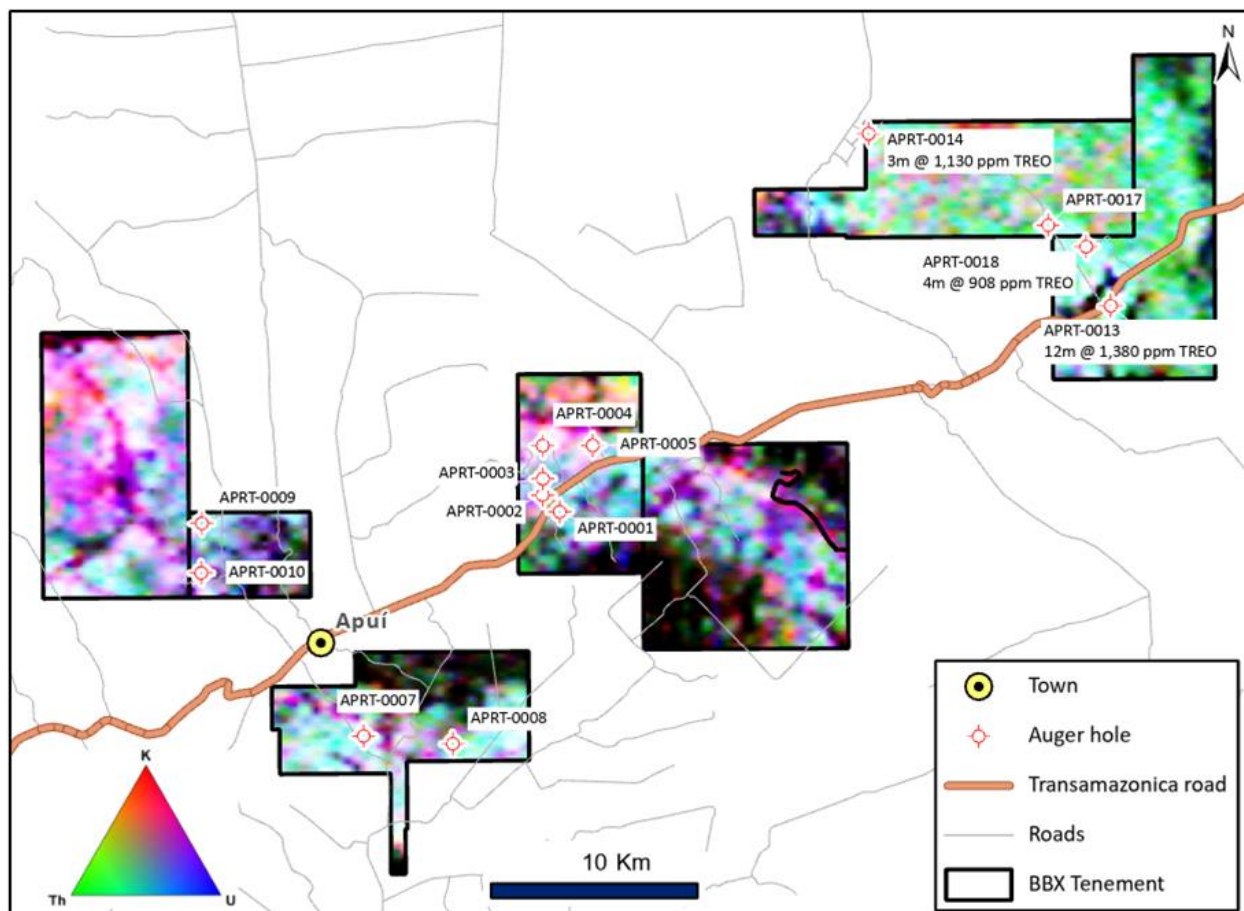


Figure 1: Apui project – drilling status showing ternary radiometric response

Table 3: Apui ENE auger hole intersections

Auger hole	From (m)	Interval (metres)	TREO ppm	% HREO ²	% MREO ³	NdPr ppm	DyTb ppm
APTR-013	0.0	12.0	1,380	20	22	286	19
APTR-014	0.0	3.0	1,130	28	19	181	29
APTR-017	0.0	4.0	766	24	21	146	17
APTR-018	0.0	4.0	908	28	20	154	23

Exploration strategy and future work at Apui ENE-REE project

Follow up the auger hole APTR-013 in conjunction with regional reconnaissance auger holes on an 800m drilling grid.

Define the limits of the high grade REE zone coincident with the regolith derived from the potash-rich sediment unit.

Investigate the level of REE in the glauconite fresh sediments in this region, which appear to be non-outcropping, based on the K radiometric response.

BBX's Rare Earth Projects

Project	Deposit Type
Ema 189 sq km	iREE hosted in regolith developed from felsic volcanics – rhyolites similar to the Chinese deposits
Apui 330 sq km	REE hosted in regolith developed from sediments, similar to Makuutu deposit-Uganda
Apui ENE 170 sq km	REE hosted in regolith developed from a potash (7% K ₂ O) rich sediment-mature glauconites

This announcement has been authorised for release by the Board of Directors.

For more information:

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About BBX Minerals Ltd

BBX Minerals Limited is a unique mineral exploration and mineral processing technology company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, mainly in the southern Amazon, a region BBX believes is vastly underexplored with high potential for the discovery of world class gold-PGM, base metal and Ionic Adsorbed Clay (IAC) Rare Earth Element deposits. BBX's key assets are the Três Estados and Ema gold-PGM projects and the iREE projects at Ema,

² HREO (Heavy Rare Earth Oxide) = Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Y₂O₃ + Lu₂O₃

³ MREO (Magnetic Rare Earth Oxide) = Tb₄O₇ + Dy₂O₃ + Nd₂O₃ + Pr₆O₁₁



Ema East and Apui. The company has 718km² of exploration tenements within the Colider Group and adjacent sediments, a prospective geological environment for gold, PGM, base metal and iREE deposits.

BBX is also developing an environmentally friendly and sustainable beneficiation process to extract precious metals using a unique bio leach process. This leading-edge process, that extracts precious metals naturally, is being developed initially for the primary purpose of economically extracting Platinum Group metals from the Três Estados mineral deposit. It is expected that such technology will be transferable and relevant to many other PGM projects. BBX believes that this processing technology is critical in the environmentally timely PGM space and supports a societal need to move towards a carbon neutral economy.

Competent Person Statement

The information in this report that relates to exploration results is based on information compiled by Mr. Antonio de Castro, BSc (Hons), MAusIMM, CREA, who acts as BBX's Senior Consulting Geologist through the consultancy firm, ADC Geologia Ltda. Mr. de Castro has sufficient experience which is relevant to the type of deposit under consideration and to the reporting of exploration results and analytical and metallurgical test work to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Castro consents to the report being issued in the form and context in which it appears.

CREA/RJ:02526-6D

AusIMM:230624

Appendices

Appendix 1: Total REE oxide distribution down-hole

HOLE ID	FROM	TO	TREO ppm	% HREO	% MREO	NdPr ppm	DyTb ppm	Int
APRT-0013	0	1	894	27	19	148	21	1380
APRT-0013	1	2	637	25	19	109	14	
APRT-0013	2	3	863	25	20	153	18	
APRT-0013	3	4	1397	19	27	356	24	
APRT-0013	4	5	1084	21	22	218	19	
APRT-0013	5	6	1070	24	21	205	23	
APRT-0013	6	7	874	26	21	161	20	
APRT-0013	7	8	1797	15	22	380	19	
APRT-0013	8	9	2757	11	22	594	19	
APRT-0013	9	10	2181	12	23	477	16	
APRT-0013	10	11	1200	18	22	248	17	
APRT-0013	11	12	1804	14	22	381	18	
APRT-0014	0	1	1170	28	18	186	30	1130
APRT-0014	1	2	1174	27	19	189	28	
APRT-0014	2	3	1045	28	19	168	28	
APRT-0017	0	1	793	25	20	141	18	766
APRT-0017	1	2	665	23	21	127	14	
APRT-0017	2	3	685	23	22	134	15	
APRT-0017	3	4	920	24	22	181	21	
APRT-0018	0	1	1025	28	20	174	26	908
APRT-0018	1	2	1041	28	19	173	27	
APRT-0018	2	3	693	27	20	121	18	
APRT-0018	3	4	874	28	20	149	22	

Appendix 2: Auger drill-hole location

Hole ID	East	North	RL (m)	Depth	Azimuth	Dip	Tenement
APTR-013	220048.3	9220137.87	216.9	12	0	-90	880.077/2023
APTR-014	208312.54	9228468.61	173.34	3	0	-90	880.076/2023
APTR-017	217017.88	9224042.27	220.16	4	0	-90	880.076/2023
APTR-018	218858.12	9223003.26	224.05	4	0	-90	880.077/2023

Appendix 3

The following Table and Sections are provided to ensure compliance with JORC Code (2012 Edition).

JORC (2012) Table 1 – Section 1: Sampling Techniques and Data for auger hole drilling

Item	JORC code explanation	Comments
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 representativity 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 1 m samples from which 3 kg was pulverised to produce a 30 g 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. 	<ul style="list-style-type: none"> Exploration results are based on auger drilling conducted by BBX’s exploration team. The data presented is based on the assay of soils and saprolite by auger drilling at 1m sample intervals. Sampling was supervised by a BBX geologist or field assistants. Every 1-metre sample was collected in a raffia bag in the field and transported to the exploration shed to be dried in the sun, prior to homogenisation. Samples were homogenised and subsequently riffle split with about 2 kg sent to SGS for analysis and a similar amount stored. 1 certified blank sample, 1 certified reference material (standard) samples and 1 field duplicate sample were inserted into the sample sequence for each 25 samples.
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 	<ul style="list-style-type: none"> Auger drilling was completed by a hand held-mechanical auger with a 3” auger bit. The drilling is an open hole, meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.

Item	JORC code explanation	Comments
	<p>tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</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. 	<ul style="list-style-type: none"> • Precise recoveries are not recorded. • The operator observes the volume of each metre and notes any discrepancy. • No relationship is believed to exist between recovery and grade.
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. 	<ul style="list-style-type: none"> • All holes were logged by BBX geologists or field technicians, detailing the colour, weathering, alteration, texture and any geological observations. Care is taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that would support a Mineral Resource Estimate. • Qualitative logging with systematic photography of the stored box. • The entire auger hole is logged.
Sub- Sampling Techniques and Sampling Procedures	<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 representativity of samples. 	<ul style="list-style-type: none"> • Auger sampling procedure is completed in the exploration shed in Apui. • The entire one metre sample is bagged on site, in a raffia bag which is transported to the exploration shed, where it is naturally dried prior to homogenisation, then quartered to about 1kg to go to SGS and another 1kg to store on site. • Sample preparation for the auger samples was conducted at SGS Vespasiano (greater Belo Horizonte) comprising oven drying, crushing of entire sample to 75% < 3mm followed by rotary splitting and pulverisation of 250 to 300 grams at 95% minus 150#

Item	JORC code explanation	Comments																																																
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The <3mm rejects and the 250-300 grams pulverised sample were returned to BBX for storage. 																																																
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 instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established 	<ul style="list-style-type: none"> 1 blank sample, 1 certified reference material (standard) sample and 1 field duplicate sample were inserted by BBX into each 25-sample sequence. Standard laboratory QA/QC procedures were followed, including inclusion of standard, duplicate and blank samples. The assay results of the standards fall within acceptable tolerance limits and no material bias is evident. The assay technique used for REE was Lithium Metaborate Fusion ICP-MS (SGS code ICP95A and IMS95A). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels: <table border="1" data-bbox="1220 991 2056 1177"> <tr><td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</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>Nb</td><td>Nd</td><td>Pr</td></tr> <tr><td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr> <tr><td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td>Zn</td><td>Co</td></tr> <tr><td>Cu</td><td>Ni</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <p>The sample preparation and assay techniques used are industry standard and provide total analysis.</p> <p>Major oxide elements are analysed by the same technique if requested under the code ICP95A at % levels:</p> <table border="1" data-bbox="1220 1342 2056 1385"> <tr><td>Al2O3</td><td>CaO</td><td>Cr2O3</td><td>Fe2O3</td><td>K2O</td><td>MgO</td><td>MnO</td><td>Na2O</td></tr> </table>	Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th	Tm	U	V	W	Y	Yb	Zr	Zn	Co	Cu	Ni							Al2O3	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O
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Item	JORC code explanation	Comments			
		<table border="1" data-bbox="1223 341 1541 389"> <tr> <td>P2O5</td> <td>SiO2</td> <td>TiO2</td> </tr> </table> <ul style="list-style-type: none"> • The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited. • Analytical standard for REE ITAK-705 was used as CRM material in the batches sent to SGS. • The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • The blanks used contain some REE, with critical elements Ce, Nd, Dy and Y present in minor quantities. • Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. Variability between duplicate results is considered acceptable and no sampling bias is evident. • Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results. 	P2O5	SiO2	TiO2
P2O5	SiO2	TiO2			
Verification of Sampling and Assaying	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Apart from the routine QA/QC procedures by the Company and the laboratory, there was no other independent or alternative verification of sampling and assaying procedures. • Analytical results for REE were supplied digitally, directly from the SGS laboratory in Vespasiano to the BBX's Exploration Manager in Rio de Janeiro. • No twinned holes were used. 			

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		<ul style="list-style-type: none"> Geological data was logged onto paper and transferred to Excel spreadsheets at end of the day and then transferred into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data integrity checks. All assay data is imported directly into the Microsoft Access database. No adjustments were made to the data. All REE assay data received from the laboratory in element form is unadjusted for data entry. Conversion of elements analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source:https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors). <table border="1" data-bbox="1223 890 2056 1412"> <thead> <tr> <th>Element ppm</th> <th>Conversion Factor</th> <th>Oxide Form</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>1.2284</td><td>CeO2</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er2O3</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td></tr> <tr><td>La</td><td>1.1728</td><td>La2O3</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu2O3</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr6O11</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td></tr> </tbody> </table>	Element ppm	Conversion Factor	Oxide Form	Ce	1.2284	CeO2	Dy	1.1477	Dy2O3	Er	1.1435	Er2O3	Eu	1.1579	Eu2O3	Gd	1.1526	Gd2O3	Ho	1.1455	Ho2O3	La	1.1728	La2O3	Lu	1.1371	Lu2O3	Nd	1.1664	Nd2O3	Pr	1.2082	Pr6O11	Sm	1.1596	Sm2O3	Tb	1.1762	Tb4O7	Tm	1.1421	Tm2O3
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La	1.1728	La2O3																																										
Lu	1.1371	Lu2O3																																										
Nd	1.1664	Nd2O3																																										
Pr	1.2082	Pr6O11																																										
Sm	1.1596	Sm2O3																																										
Tb	1.1762	Tb4O7																																										
Tm	1.1421	Tm2O3																																										

Item	JORC code explanation	Comments						
		<table border="1" data-bbox="1223 339 2056 416"> <tr> <td data-bbox="1223 339 1503 375">Y</td> <td data-bbox="1503 339 1783 375">1.2699</td> <td data-bbox="1783 339 2056 375">Y2O3</td> </tr> <tr> <td data-bbox="1223 375 1503 416">Yb</td> <td data-bbox="1503 375 1783 416">1.1387</td> <td data-bbox="1783 375 2056 416">Yb2O3</td> </tr> </table> <p data-bbox="1223 472 2002 568">Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:</p> <p data-bbox="1223 588 2022 686">TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p> <p data-bbox="1223 707 1995 735">LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3</p> <p data-bbox="1223 756 2051 817">HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p> <p data-bbox="1223 837 2051 898">CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3</p> <p data-bbox="1223 919 1933 979">(From U.S. Department of Energy, Critical Material Strategy, December 2011)</p> <p data-bbox="1223 1000 1995 1061">MREO (Magnetic Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3</p> <p data-bbox="1223 1082 1509 1110">NdPr = Nd2O3 + Pr6O11</p> <p data-bbox="1223 1131 1498 1160">DyTb = Dy2O3 + Tb4O7</p> <p data-bbox="1223 1181 1704 1209">In elemental from the classifications are:</p> <p data-bbox="1223 1230 1944 1259">TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p> <p data-bbox="1223 1279 1771 1308">HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p> <p data-bbox="1223 1329 1491 1358">CREE: Nd+Eu+Tb+Dy+Y</p> <p data-bbox="1223 1378 1451 1407">LREE: La+Ce+Pr+Nd</p>	Y	1.2699	Y2O3	Yb	1.1387	Yb2O3
Y	1.2699	Y2O3						
Yb	1.1387	Yb2O3						

Item	JORC code explanation	Comments
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. 	<ul style="list-style-type: none"> • The UTM WGS84 zone 21S grid datum is used for current reporting. The drill holes collar coordinates for the holes reported are currently controlled by hand-held GPS.
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. 	<ul style="list-style-type: none"> • Auger holes were designed for reconnaissance testing the regolith developed on top of felsic volcanic and sediments. • The data spacing and distribution is sufficient to establish the level of REE elements present in the target area and its continuity along the regolith profile. • No sample compositing was applied.
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. 	<ul style="list-style-type: none"> • The location and depth of the sampling is appropriate for the deposit type. • Relevant REE values are compatible with the exploration model for ionic REEs. • No relationship between mineralisation and drilling orientation is known at this stage.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • The auger samples in sealed plastic bags were sent directly to SGS by bus and then airfreight. The Company has no reason to believe that sample security poses a material risk to the integrity of the assay data.
Audit or Reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.

JORC (2012) Table 1 - 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. 	<ul style="list-style-type: none"> The Apui leases are 100% owned by BBX with no issues in respect to native title interests, historical sites, wilderness or national park and environmental settings. The company is not aware of any impediment to obtain a licence to operate in the area.
Exploration done by Other Parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> No exploration by other parties has been conducted in the region.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The REE mineralisation at the Apuí and Apui ENE projects is contained within the tropical lateritic weathering profile developed on top of sediments as per the Makuutu iREE deposit in Uganda. The REE mineralisation is concentrated in the weathered profile where it has dissolved from the primary mineral, such as monazite and xenotime, then ionically bonded (adsorbed) or colloiddally bonded on to the neo-forming fine particles of aluminosilicate clays (e.g. halloysite, kaolinite, illite, smectite). The adsorbed and colloidal REE is the target for extraction and production of REO.
Drill Hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar 	<ul style="list-style-type: none"> Auger locations and diagrams are presented in this announcement. Details are tabulated in the announcement.

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. 	<ul style="list-style-type: none"> • Weighted averages were calculated for all intercepts. • No cut-off grade was applied. • No metal equivalent values reported.
Relationship between mineralization widths and intercepted 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. 	<ul style="list-style-type: none"> • Significant values of REE were reported for the auger samples. • Mineralisation orientation is not known at this stage, although assumed to be flat. • The downhole depths are reported, true widths are not known at this stage.

Criteria	JORC code explanation	Commentary
	<ul style="list-style-type: none"> 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'). 	
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. 	<ul style="list-style-type: none"> Maps and tables of the auger hole location and target location are inserted.
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 to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Relevant REE mineralisation with its grades were reported.
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. 	<ul style="list-style-type: none"> No other significant exploration data has been acquired by the Company.
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. 	<ul style="list-style-type: none"> Conduct follow up drilling of these auger holes to define the extent of the mineralisation. Conduct additional regional reconnaissance auger holes.