ASX Announcement
28 September 2023

ALVO
ASX: ALV

Exceptional High-grade Magnet REE Zone Identified at Bluebush

6m @ 2,537ppm TREO, inc. 3m @ 3,415ppm TREO (24% MREO) from surface and ending in mineralisation

HIGHLIGHTS

- Auger drilling results for Total Rare Earth Oxides (TREO) and the **more valuable Magnet Rare Earth Oxides (MREO)** results reported are the **highest received to date.**
  - Bluebush exhibits exceptional Dysprosium (Dy) and Terbium (Tb) levels, the highest value oxides in MREOs
- **Excellent TREO and MREO results received from Boa Vista with highlights, including:**
  - **BLG08: 6m @ 2,537ppm TREO (21% MREO) to EOH from 0m**
    - **Inc. 3m @ 3,415 TREO (24% MREO) to EOH from 3m**
  - BLG05: 6m @ 1,243ppm TREO (23% MREO) to EOH from 8m
  - **BLG09: 7m @ 1,183ppm TREO (26% MREO) to EOH from 3m**
  - BLG12: 4m @ 1,230ppm TREO (26% MREO) EOH from 2m
    - **2m @ 1,512ppm TREO (29% MREO) EOH from 4m**
  - **BLG14: 11m @ 1,032ppm TREO (22% MREO) to EOH from 0m**
    - **Inc. 4m @ 1,299ppm TREO (22% MREO) to EOH from 7m**
  - BLG38: 10m @ 1,048ppm TREO (23% MREO) to EOH from 4m
    - Inc. 4m @ 1,232ppm TREO (24% MREO) from 5m
  - **BLG40: 12m @ 1,062ppm TREO (23% MREO) to EOH from 4m**
  - BLG48: 9m @ 1,043ppm TREO (21% MREO) to EOH from 2m
    - **4m @ 1,233ppm TREO (20% MREO) to EOH from 5m**
  - **BLG51: 4m @ 1,049ppm TREO (22% MREO) to EOH from 2m**
- **Results from 77 auger holes** reported from **a total of 210 auger holes** drilled in the maiden drill program to date with many **assays expected over coming weeks and months.**
- Follow-up drilling is being planned across the project targeting the highest grade MREOs, including diamond drilling to test the depth profile of the saprolite clay.
- Mineralisation intercepted at multiple prospects, with many of the drillholes ending in high-grade mineralisation confirming the significant scale and MREO grade potential.
- **Bluebush is located adjacent to and in the same geological setting as the tier-one, Serra Verde Ionic Clay REE Project**, the only ionic clay project currently being commissioned outside of China.

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PROJECTS
Palma VMS Cu/Zn Project
Bluebush REE Project

Shares on Issue	93,130,314
ASX Code	ALV

Alvo Minerals Limited (ASX: ALV) ("**Alvo**" or **the** "**Company**") is pleased to announce auger drill results from the highly prospective Bluebush REE Project ("**Bluebush**" or the "**Project**"), located on the northern half of the Serra Dourada granite, host of the Serra Verde Ionic Clay REE deposit ("**Serra Verde**").

Drill results focus on the Boa Vista Prospect where high-grade intercepts across a wide area confirm the area as an exciting prospect for discovery of rare earths and more particularly, the high value MREOs.

Rob Smakman, Alvo's Managing Director commented on progress across the Bluebush Project:

"These results are an indication that Bluebush is looking more and more like another potential Serra Verde. We plan on focusing on the areas with the higher-grades of the higher-value MREOs, as these are the most important aspect of all REE projects. There is fantastic potential at Boa Vista, and we will now start a more systematic approach to the auger drilling, whilst we wait for more drill results from the northern Sao Bento prospects.

"We are also planning some diamond drilling to better test the depth-extent of the saprolite. Given most of the high-grade mineralisation ended at the bottom of the holes, we really don't know how deep the mineralisation goes at Boa Vista.

"Exploration is continuing across Bluebush with a soil sampling campaign, handheld auger drilling and the initiation of the Loupe geophysical surveys and we are of course waiting for the all-important results for the ionic-clay tests, expected within weeks.

"In our opinion Brazil really is emerging as the most important ex-China location for Ionic-Clay hosted Rare Earth projects, especially the Magnet REEs, and the early results indicate that Bluebush will be an important project in this space."

Bluebush Auger Results

Assay results reported include 77 holes drilled at the Boa Vista and Sao Bento[1] prospects on an approximate spacing of 200m between holes, drilled on existing roads. Additional holes (total of 210 holes drilled to date) currently in the lab (or preparing to be sent to the lab) are from holes drilled across Boa Vista and Sao Bento.

Assay results for these holes are reported in Tables 1 & 2[2], including complimentary assays from holes that were partially reported in August.

Assay results indicate the TREO mineralisation and *more importantly the MREO (see Figures 2, 3 & 4) mineralisation* is widespread, with the **Boa Vista prospect intercepting multiple broad high-grade results** above the 750ppm TREO cut-off grade. Dy (US$400/kg) and Tb (US$1,300/kg) are the highest value of the MREOs whose composition also includes the MREO elements Neodymium (Nd) (US$134/kg) and Praseodymium (Pr) (US$128/kg).

Drillhole highlights include:

- BLG05: 6m @ 1,243ppm TREO (23% MREO) to EOH from 8m
- **BLG08: 6m @ 2,537ppm TREO (21% MREO) to EOH from 0m**
  - **Inc. 3m @ 3,415 TREO (24% MREO) to EOH from 3m**
- **BLG09: 7m @ 1,183ppm TREO (26% MREO) to EOH from 3m**
  - **5m @ 1,302ppm TREO (27% MREO) from 3m**
- BLG12: 4m @ 1,230ppm TREO (26% MREO) to EOH from 2m
  - 2m @ 1,512ppm TREO (29% MREO) to EOH from 4m

[1] Sao Bento is the re-named prospect for areas previously called Ferradura, Fazendinha, Praiao, Engenho and Dois Ranchos.

[2] Results include results from several holes, partially reported in ASX announcement dated 21 August 2023 - Bluebush Maiden Drilling Delivers Magnet & Heavy REE Assays. The previous results are re-reported at a higher cutoff in this current report.

- **BLG14: 11m @ 1,032ppm TREO (22% MREO) to EOH from 0m**
  - **Inc. 4m @ 1,299ppm TREO (22% MREO) to EOH from 7m**
- BLG28: 16m @ 842ppm TREO (22% MREO) to EOH from 0m
- BLG38: 10m @ 1,048ppm TREO (23% MREO) to EOH from 4m
  - Inc. 4m @ 1,232ppm TREO (24% MREO) from 5m
- **BLG40: 12m @ 1,062ppm TREO (23% MREO) to EOH from 4m**
  - 7m @ 1,163 TREO (23% MREO) from 5m
- BLG48: 9m @ 1,043ppm TREO (21% MREO) to EOH from 2m
  - **4m @ 1,233ppm TREO (20% MREO) to EOH from 5m**
- BLG51: 4m @ 1,049ppm TREO (22% MREO) to EOH from 2m
  - 2m @ 1,292ppm TREO (24% MREO) to EOH from 4m

From the Sao Bento Prospect, results for >100 holes are still awaited. To date, the drilling highlights include:

- BLG62: 4m @ 850ppm TREO (27% MREO) from 0m
- BLG67: 4m @ 904ppm TREO (21% MREO) from 2m
- BLG72: 2m @ 975ppm TREO (21% MREO) from 0m
- BLG74: 2m @ 917ppm TREO (20% MREO) from 0m
- BLG87: 2m @ 889ppm TREO (24% MREO) from 0m
- BLG129: **2m @ 1,018ppm** TREO (**20% MREO**) from 2m
- BLG150: **2m @ 1,057ppm** TREO (**21% MREO**) to EOH from 0m
- BLG154: **9m @ 908pm** TREO (**21% MREO**) to EOH from 2m

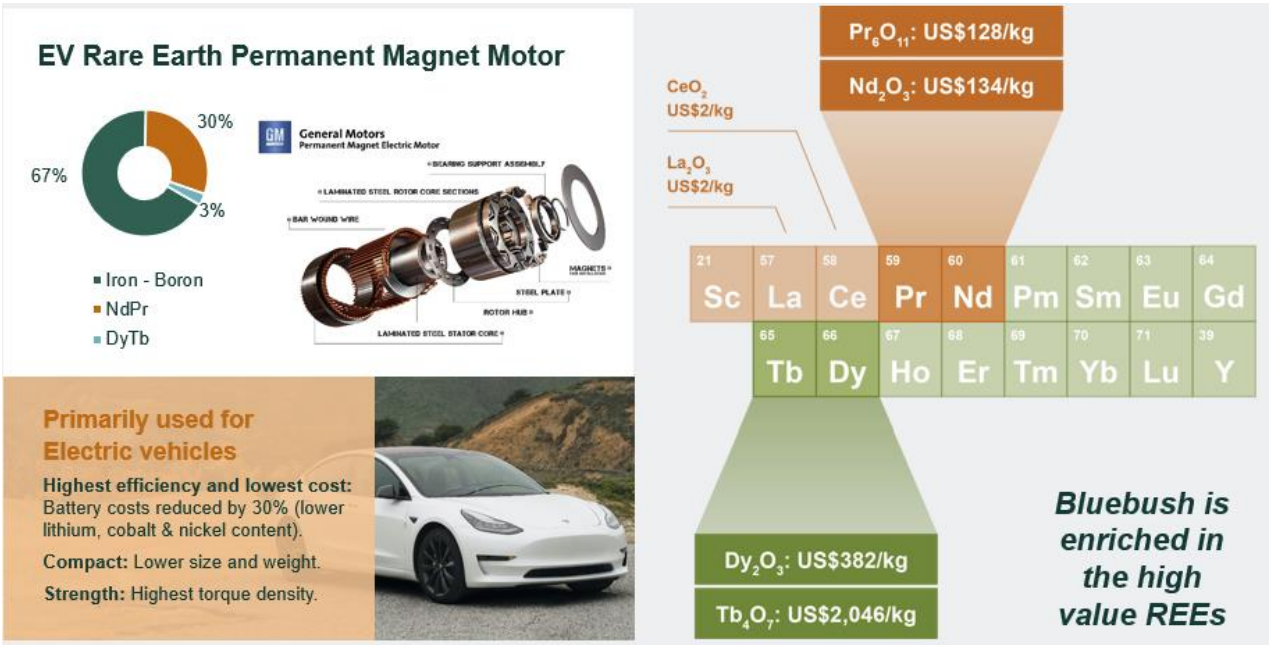

Figure 1: *Magnet Rare Earth Elements (MREOs) are primarily used for permanent magnet motors in electric vehicles. High-value MREOs are highlighted with their relative values[3], with the oxides of Dy and Tb the highest of all the MREOs.*

[3] Sources: International Renewable Energy Agency; General Motors; Standford Magnets. Price data sourced from USGS 2021 Rare Earths Update, Statista and Goldman Sachs Rare Earths Update 6 July 2023

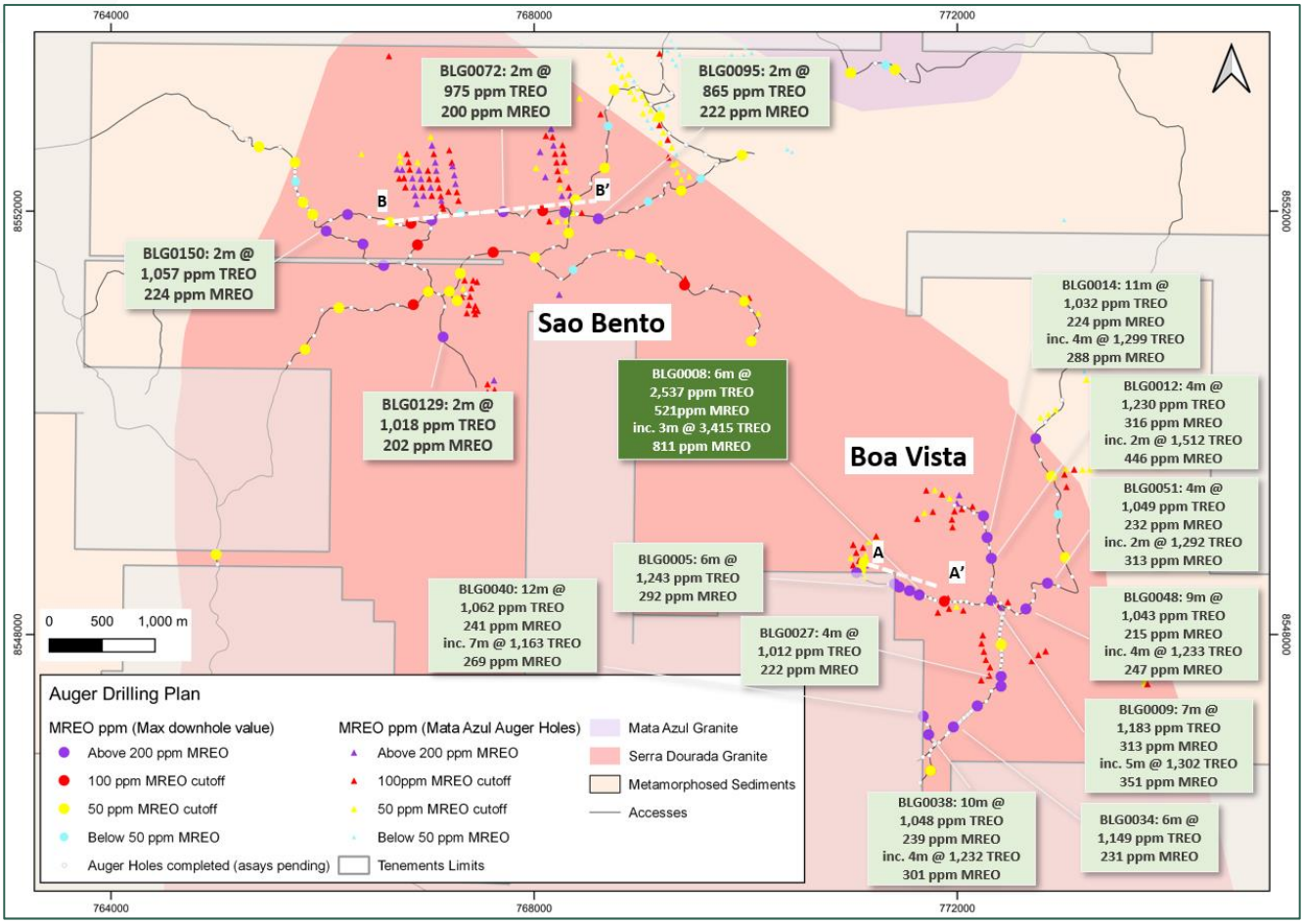

Figure 2: *Bluebush REE Project auger results and completed drilling*

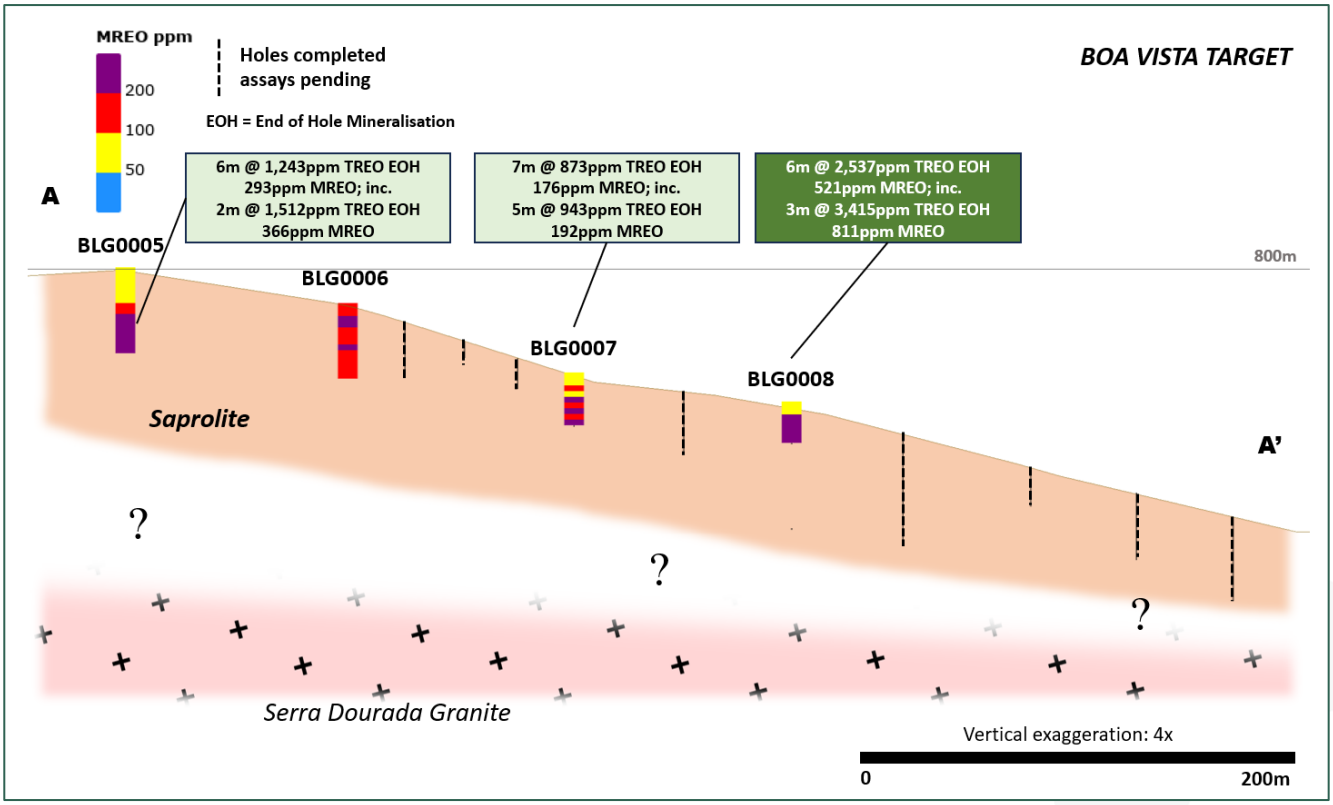

Figure 3: *Cross section through A-A' prospect at the Boa Vista Target*

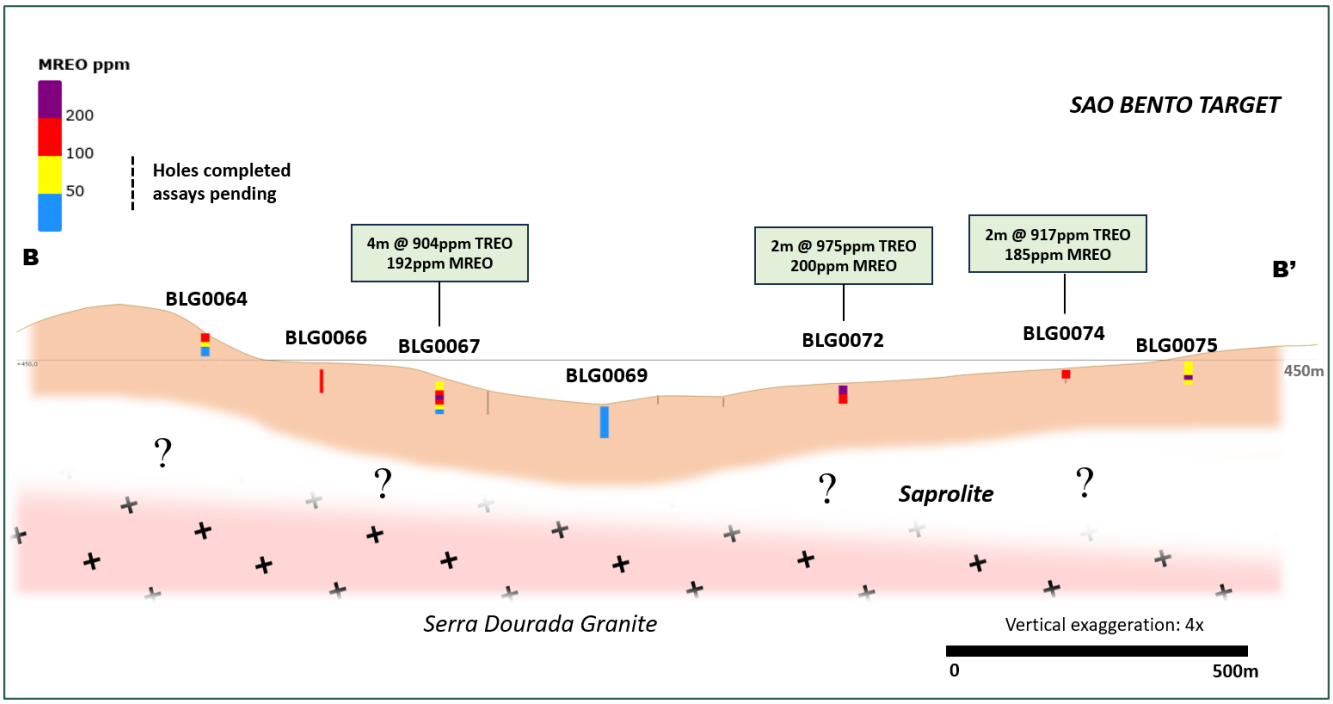

Figure 4: *Cross section through B-B' prospect at the Sao Bento Target*

Figure 5*: Alvo's auger rig drilling at Bluebush REE Project (Boa Vista Prospect Top left and bottom). Loupe Electromagnetic equipment in action (not from Alvo's areas- see [Loupe Geophysics – New Technology in Portable TEM for Near Surface Measurements](#).) SciApps X-555 portable XRF analyzer in action at Alvo's core shed.*

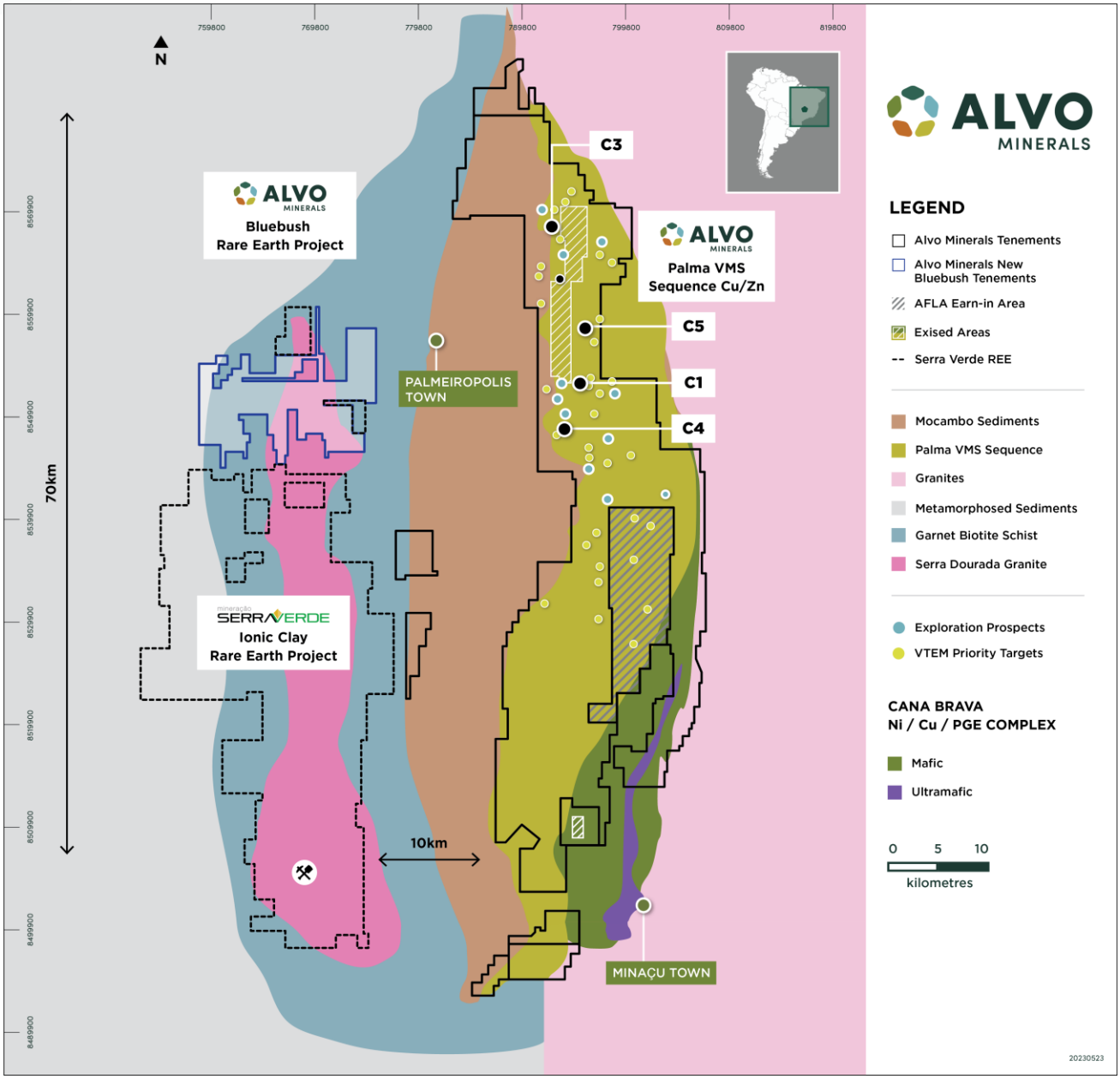

Figure 6: *Regional geology and tenement holdings for Alvo's Bluebush REE Project and Palma Project area*

Alvo's Bluebush Exploration Strategy and Future Work

Alvo is uniquely positioned to rapidly explore and advance Bluebush due to its existing exploration infrastructure, personnel and the equipment the Company has on site in Palmeiropolis.

The Bluebush Project area will be prioritised within Alvo's wider Brazilian exploration schedule, cognisant of the 6-month (extendable by agreement) due diligence period (expiring in December 2023). Alvo intends to build a better understanding around the potential scale, grade and recoverability of the MREO mineralisation at Bluebush.

As part of a systematic, innovative and accelerated exploration program, Alvo intends to:

- Utilise the Loupe Portable Electromagnetic survey system to map the near surface conductivity. Alvo has recently imported this equipment into Brazil - believed to be the first of its kind in South America.

The strategy of this mapping is to map the thickness and extent of saprolite/clay horizons to prioritise ongoing exploration.

- Auger drilling using Alvo's truck-mounted auger drill rig that has completed 1,199 auger holes for 12,054m across all of Alvo's Projects since mid-January 2023 (incl. 210 holes for 1,669m at Bluebush).
- Alvo has recently purchased a hand-held auger, which is more portable and therefore able to access remote areas of the Project.
- A soil sampling program has also been instigated to map areas away from the auger drilling and prioritise exploration.
- Systematical sampling of the auger and soil samples that are dried overnight, sieved, and analysed using the SciApps X-555 portable XRF analyzer. This analyzer has a higher voltage, providing higher sensitivity for strategic metals, including REEs.
- Samples from the auger drilling will also be sent to an independent lab in Brazil for analysis.
- Selected samples (once sufficient drill results have been received) will be sent to an independent lab for testing of the ionic-clay adsorption characteristics, vital in the due diligence of the Project.

Exploration work is also continuing at the Palma VMS Project, across multiple prospects with the aim of advancing prospects to drill-ready status. Field activities include diamond drilling at the C4 prospect, geological mapping, soil sampling, auger drilling, Induced Polarisation Surveys and Fixed Loop electromagnetic surveys. These activities are being undertaken concurrently on various prospects identified by the Company from historical work completed to date.

Bluebush REE Project

Alvo has an option agreement with Mata Azul SA (**Mata Azul** or **Project vendors**) to acquire 100% of the Bluebush REE Project. Alvo has six months to complete due diligence on the Project to its satisfaction, after which it can purchase the Project. Bluebush neighbours Alvo's Palma VMS Project (see Figure 6) making due diligence and exploration a relatively straightforward exercise. Bluebush is considered highly prospective for the high value Magnet Rare Earth Elements hosted in surficial saprolites, potentially of the highly valued ionic adsorption clay classification.

Ionic clay hosted REE deposits are highly favoured due to the relatively simple processing required to create a REE oxide concentrate and for the high levels of HREO[4] and MREO[5] rare earth element oxides.

Bluebush is along strike from, and on the same biotite-rich granitic intrusion called Serra Dourada, host of the Serra Verde Ionic Clay REE Project, the only ionic clay REE project currently in the commissioning phase outside of China. Alvo understands that Serra Verde is expecting to commence production in late CY2023[6].

Serra Verde has an estimated Mineral Resource[7] of 911Mt @ 1,200ppm TREO and an Ore Reserve of 350Mt @ 1,500ppm TREO. With an elevated percentage of the higher value heavy and magnet REEs, Serra Verde is projecting a mine life of over 20 years.

[4] **HREO Heavy rare earth oxides** are defined by their higher atomic weights relative to light rare earth oxides. HREOs include oxides of gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu) and include scandium (Sc) and yttrium (Y). Alvo's results do not include Sc. Uses include computer and phone displays, and fibre optic cables.

[5] **MREO Magnet rare earth oxides** can handle greater saturation magnetization than more common elements such as iron and allow for fabrication of stronger and smaller magnets. These can be used for climate economy products such as electric vehicles and wind turbines. MREOs include oxides of Nd, Pr, Dy, and Tb and are some of the highest value REEs.

[6] For more information on the Serra Verde operation, please refer to the company website: https://serraverde.com/en/our-operation/

[7] For details of the Serra Verde Mineral Resource Estimate, please refer to Serra Verde presentation: https://www.cetem.gov.br/antigo/images/palestras/2015/iiisbtr/05-denilson-fonseca.pdf

The Serra Verde deposit is hosted in the weathered saprolite profile of the Serra Dourada biotite granite, the same granite that is mapped on the Bluebush areas. Historical work by the Bluebush Project vendors has been ongoing intermittently since they acquired Bluebush in 2004 and has confirmed the presence of mineralised REEs within the saprolite (Serra Verde was discovered in ~2010).

Alvo intends to utilise the due diligence period to not only verify the historical results by auger drilling but will also apply systematic exploration across the tenure to better understand the potential of the Project. Preliminary tests for ionic clay hosted mineralisation within the Bluebush are currently underway, with results expected in coming weeks.

This announcement has been approved for release by the Board of Alvo Minerals Limited.

ENQUIRIES

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Forward Looking Statements

Statements regarding plans with respect to Alvo's Palma Project and its exploration program are forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside Alvo's control and actual values, results or events may be materially different to those expressed or implied herein. Alvo does not undertake any obligation, except where expressly required to do so by law, to update or revise any information or any forward-looking statement to reflect any changes in events, conditions, or circumstances on which any such forward-looking statement is based.

Competent Person's Statement

The information contained in this announcement that relates to recent exploration results is based upon information compiled by Mr Rob Smakman of Alvo Minerals Limited, a Competent Person and Fellow of the Australasian Institute of Mining and Metallurgy. Mr Smakman is a full-time employee of Alvo and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (or JORC 2012). Mr Smakman consents to the inclusion in this announcement of the matters based upon the information in the form and context in which it appears.

In relation to the MRE and other exploration results or estimates cross-referenced herein, these are extracted from the Independent Geologists' Report prepared by Target Latin America and others (the "**IGR**"), which is included in full in Alvo's prospectus dated 30 July 2021 (the "**Prospectus**") and which was announced to ASX within the Prospectus on 18 October 2021. Alvo confirms that it is not aware of any new information or data that materially affects the information included in the IGR and that all the material assumptions and technical parameters underpinning the Inferred Mineral Resource Estimate continue to apply and have not materially changed.

ABOUT ALVO

Alvo Minerals (ASX: ALV) is an active critical minerals exploration company, with two exciting Projects being explored from the Company's base in Central Brazil.

Alvo is hunting high-grade copper and zinc at its Palma Copper-Zinc VMS Project. The Palma Project has a JORC 2012 Inferred Mineral Resource Estimate (MRE) of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag. MRE to be updated in 2023.

Alvo is also exploring for Rare Earth Elements, currently undertaking due diligence on the highly prospective Bluebush MREE Project, adjacent to its existing exploration base. Bluebush is adjacent to and along strike from the Serra Verde Ionic Clay REE Project, which is the only Ionic Clay REE project currently in construction outside of China.

Alvo's strategic intent is to aggressively explore and deliver growth through discovery, leveraging managements' extensive track record in Brazil.

Alvo is committed to fostering best in class stakeholder relations and supporting the local communities in which it operates.

Table 1: Significant Intercepts of Auger drilling from Bluebush REE Project

AUGER HOLE ID	From	Length (m)	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	TREO ppm	MREO ppm	Comments	% MREO / TREO	Target
BLG0001	0.0	**1.0**	80	25	20	3	780	128		**16%**	BOA VISTA
	2.0	**2.0**	117	37	21	3	773	178	Ends in Mineralisation	**23%**	BOA VISTA
BLG0002	2.0	**2.0**	166	52	20	3	**1,053**	242	Ends in Mineralisation	**23%**	BOA VISTA
BLG0003	1.0	**4.0**	95	31	17	3	863	146	Ends in Mineralisation	**17%**	BOA VISTA
BLG0004	3.0	**2.0**	123	39	25	4	905	191		**21%**	BOA VISTA
BLG0005	8.0	**5.7**	192	61	33	5	**1,243**	292	Ends in Mineralisation	**23%**	BOA VISTA
BLG0006	0.0	**3.0**	134	44	20	3	838	202		**24%**	BOA VISTA
	6.0	**1.0**	148	49	26	4	887	227		**26%**	BOA VISTA
BLG0007	1.0	**7.0**	117	38	18	3	873	176	Ends in Mineralisation	**20%**	BOA VISTA
BLG0008	0.0	**6.0**	347	110	56	9	**2,537**	521	Ends in Mineralisation	**21%**	BOA VISTA
Including	3.0	**3.0**	545	172	81	14	**3,415**	811	Ends in Mineralisation	**24%**	BOA VISTA
BLG0009	3.0	**7.0**	217	69	23	4	**1,183**	313	Ends in Mineralisation	**26%**	BOA VISTA
Including	3.0	**5.0**	245	79	23	4	**1,302**	351		**27%**	BOA VISTA
BLG0012	2.0	**4.0**	215	69	27	5	**1,230**	316	Ends in Mineralisation	**26%**	BOA VISTA
Including	4.0	**2.0**	302	97	40	7	**1,512**	446	Ends in Mineralisation	**29%**	BOA VISTA
BLG0014	0.0	**11.0**	146	46	28	4	**1,032**	224	Ends in Mineralisation	**22%**	BOA VISTA
Including	7.0	**4.0**	192	60	31	5	**1,299**	288	Ends in Mineralisation	**22%**	BOA VISTA
BLG0016	2.0	**2.0**	135	44	11	2	895	192		**21%**	BOA VISTA
	7.0	**0.8**	269	84	30	5	**1,034**	387	Ends in Mineralisation	**37%**	BOA VISTA
BLG0024	0.0	**15.5**							NSI		BOA VISTA
BLG0027	0.0	**4.0**	152	46	20	4	**1,012**	222		**22%**	BOA VISTA
BLG0028	0.0	**16.0**	129	39	16	3	842	186	Ends in Mineralisation	**22%**	BOA VISTA
BLG0031	3.0	**6.7**	164	50	21	4	891	240	Ends in Mineralisation	**27%**	BOA VISTA
BLG0034	4.0	**6.0**	137	41	46	6	**1,149**	231		**20%**	BOA VISTA
	15.0	**5.0**	157	50	19	3	958	230		**24%**	BOA VISTA
BLG0038	4.0	**10.0**	160	51	24	4	**1,048**	239	Ends in Mineralisation	**23%**	BOA VISTA
Including	5.0	**4.0**	205	64	26	5	**1,232**	301		**24%**	BOA VISTA
BLG0040	4.0	**12.0**	160	50	27	4	**1,062**	241	Ends in Mineralisation	**23%**	BOA VISTA
Including	5.0	**7.0**	179	57	29	5	**1,163**	269		**23%**	BOA VISTA
BLG0048	0.0	**9.0**	143	44	24	4	**1,043**	215	Ends in Mineralisation	**21%**	BOA VISTA
Including	5.0	**4.0**	163	51	29	5	**1,233**	247	Ends in Mineralisation	**20%**	BOA VISTA
BLG0051	2.0	**4.0**	159	51	18	3	**1,049**	232	Ends in Mineralisation	**22%**	BOA VISTA
Including	4.0	**2.0**	215	70	24	4	**1,292**	313	Ends in Mineralisation	**24%**	BOA VISTA
BLG0055	0.0	**12.0**							NSI		SAO BENTO
BLG0057	0.0	**14.0**							NSI		SAO BENTO
BLG0058	0.0	**13.0**							NSI		SAO BENTO
BLG0059	0.0	**11.0**							NSI		SAO BENTO

AUGER HOLE ID	From	Length (m)	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	TREO ppm	MREO ppm	Comments	% MREO / TREO	Target
BLG0062	0.0	**4.0**	160	50	17	3	850	229		**27%**	SAO BENTO
BLG0064	0.0	**8.0**							NSI		SAO BENTO
BLG0066	0.0	**4.0**	100	31	17	3	822	151		**18%**	SAO BENTO
	8.0	**2.0**	98	29	20	3	758	150	Ends in Mineralisation	**20%**	SAO BENTO
BLG0067	2.0	**4.0**	127	40	21	3	904	192		**21%**	SAO BENTO
BLG0069	0.0	**11.0**							NSI		SAO BENTO
BLG0072	0.0	**2.0**	132	41	24	4	975	200		**21%**	SAO BENTO
BLG0074	0.0	**2.0**	124	41	17	3	917	185		**20%**	SAO BENTO
BLG0075	0.0	**8.0**							NSI		SAO BENTO
BLG0076	0.0	**9.0**							NSI		SAO BENTO
BLG0078	0.0	**4.5**							NSI		SAO BENTO
BLG0079	0.0	**12.0**							NSI		SAO BENTO
BLG0082	0.0	**20.0**							NSI		SAO BENTO
BLG0085	2.0	**2.0**	120	37	19	3	883	178		**20%**	SAO BENTO
BLG0087	0.0	**2.0**	116	36	20	3	889	175		**20%**	SAO BENTO
BLG0088	0.0	**6.0**							NSI		SAO BENTO
BLG0091	0.0	**5.0**							NSI		SAO BENTO
BLG0095	8.0	**1.5**	154	48	17	3	865	222	Ends in Mineralisation	**26%**	SAO BENTO
BLG0098	0.0	**7.8**							NSI		SAO BENTO
BLG0101	0.0	**14.0**							NSI		SAO BENTO
BLG0102	0.0	**9.0**							NSI		SAO BENTO
BLG0104	0.0	**11.0**							NSI		SAO BENTO
BLG0108	0.0	**12.0**							NSI		SAO BENTO
BLG0114	0.0	**7.0**							NSI		SAO BENTO
BLG0116	0.0	**11.0**							NSI		SAO BENTO
BLG0118	0.0	**7.0**							NSI		SAO BENTO
BLG0120	2.0	**2.0**	67	20	35	4	798	126		**16%**	SAO BENTO
BLG0122	2.0	**2.0**	121	37	23	3	837	184		**22%**	SAO BENTO
BLG0124	0.0	**11.4**							NSI		SAO BENTO
BLG0125	2.0	**4.0**	106	32	23	3	794	164		**21%**	SAO BENTO
BLG0127	0.0	**2.0**	58	19	13	2	815	92		**11%**	SAO BENTO
BLG0129	2.0	**2.0**	134	41	23	4	**1,018**	202		**20%**	SAO BENTO
BLG0132	2.0	**2.0**	127	38	22	4	801	191		**24%**	SAO BENTO
BLG0136	0.0	**6.3**							NSI		SAO BENTO
BLG0139	0.0	**7.0**							NSI		SAO BENTO
BLG0149	0.0	**9.5**							NSI		SAO BENTO
BLG0150	0.0	**2.0**	151	48	21	4	**1,057**	224	Ends in Mineralisation	**21%**	SAO BENTO
BLG0153	0.0	**3.6**	115	35	17	3	884	170	Ends in Mineralisation	**19%**	SAO BENTO

AUGER HOLE ID	From	Length (m)	Nd_2O_3 ppm	Pr_6O_{11} ppm	Dy_2O_3 ppm	Tb_4O_7 ppm	TREO ppm	MREO ppm	Comments	% MREO / TREO	Target
BLG0154	2.0	**9.2**	129	39	21	3	908	193	Ends in Mineralisation	**21%**	SAO BENTO
BLG0159	2.0	**2.0**	87	27	20	3	752	136		**18%**	SAO BENTO
BLG0161	0.0	**15.0**							NSI		SAO BENTO
BLG0164	0.0	**22.0**							NSI		SAO BENTO
BLG0165	0.0	**20.0**							NSI		SAO BENTO
BLG0167	0.0	**22.0**							NSI		SAO BENTO
BLG0169	0.0	**10.0**							NSI		BOA VISTA
BLG0171	0.0	**13.0**							NSI		BOA VISTA
BLG0173	0.0	**6.0**							NSI		BOA VISTA
BLG0175	0.0	**17.0**							NSI		BOA VISTA

Table 2: *Collar file of Alvo Auger drilling at Bluebush*

HOLE_ID	EASTING	NORTHING	RL	EOH	AZIMUTH	DIP	PROJECT	PROSPECT
BLG0001	771,877	8,548,313	778	4.10	0	-90	BLUEBUSH	BOA VISTA
BLG0002	771,047	8,548,584	811	5.70	0	-90	BLUEBUSH	BOA VISTA
BLG0003	771,089	8,548,611	809	6.70	0	-90	BLUEBUSH	BOA VISTA
BLG0004	771,117	8,548,681	802	11.00	0	-90	BLUEBUSH	BOA VISTA
BLG0005	771,352	8,548,477	825	13.70	0	-90	BLUEBUSH	BOA VISTA
BLG0006	771,450	8,548,448	818	12.10	0	-90	BLUEBUSH	BOA VISTA
BLG0007	771,548	8,548,413	806	9.00	0	-90	BLUEBUSH	BOA VISTA
BLG0008	771,640	8,548,373	801	22.00	0	-90	BLUEBUSH	BOA VISTA
BLG0009	772,322	8,548,323	761	10.00	0	-90	BLUEBUSH	BOA VISTA
BLG0012	772,322	8,548,719	766	6.00	0	-90	BLUEBUSH	BOA VISTA
BLG0014	772,282	8,548,916	766	11.00	0	-90	BLUEBUSH	BOA VISTA
BLG0016	772,248	8,549,120	748	7.80	0	-90	BLUEBUSH	BOA VISTA
BLG0024	772,415	8,547,904	787	15.50	0	-90	BLUEBUSH	BOA VISTA
BLG0027	772,414	8,547,604	799	6.00	0	-90	BLUEBUSH	BOA VISTA
BLG0028	772,413	8,547,510	805	16.00	0	-90	BLUEBUSH	BOA VISTA
BLG0031	772,190	8,547,325	818	9.70	0	-90	BLUEBUSH	BOA VISTA
BLG0034	771,963	8,547,126	837	21.40	0	-90	BLUEBUSH	BOA VISTA
BLG0038	771,729	8,547,053	832	14.00	0	-90	BLUEBUSH	BOA VISTA
BLG0040	771,661	8,547,227	820	16.00	0	-90	BLUEBUSH	BOA VISTA
BLG0044	771,747	8,546,713	844	6.80	0	-90	BLUEBUSH	BOA VISTA
BLG0048	772,649	8,548,241	759	9.00	0	-90	BLUEBUSH	BOA VISTA
BLG0051	772,853	8,548,484	723	6.00	0	-90	BLUEBUSH	BOA VISTA
BLG0052	772,955	8,548,458	713	6.00	0	-90	BLUEBUSH	BOA VISTA
BLG0053	765,136	8,552,781	437	5.00	0	-90	BLUEBUSH	PONTE VELHA
BLG0054	765,280	8,552,680	447	3.60	0	-90	BLUEBUSH	PONTE VELHA
BLG0055	765,398	8,552,608	463	12.00	0	-90	BLUEBUSH	PONTE VELHA
BLG0057	765,739	8,552,461	499	14.00	0	-90	BLUEBUSH	FERRADURA
BLG0058	765,745	8,552,279	475	13.00	0	-90	BLUEBUSH	FERRADURA
BLG0059	765,813	8,552,084	457	11.00	0	-90	BLUEBUSH	FERRADURA
BLG0062	766,236	8,551,968	446	6.00	0	-90	BLUEBUSH	FERRADURA
BLG0064	766,638	8,551,897	460	8.00	0	-90	BLUEBUSH	FERRADURA
BLG0066	766,835	8,551,885	446	10.00	0	-90	BLUEBUSH	FERRADURA
BLG0067	767,032	8,551,915	440	12.00	0	-90	BLUEBUSH	FERRADURA
BLG0069	767,305	8,551,979	430	12.00	0	-90	BLUEBUSH	FERRADURA
BLG0072	767,706	8,551,994	438	6.00	0	-90	BLUEBUSH	FAZENDINHA
BLG0074	768,081	8,552,003	445	4.80	0	-90	BLUEBUSH	FAZENDINHA
BLG0075	768,288	8,551,988	449	8.00	0	-90	BLUEBUSH	FAZENDINHA
BLG0076	768,326	8,551,793	439	9.00	0	-90	BLUEBUSH	FAZENDINHA
BLG0078	768,008	8,551,561	442	4.50	0	-90	BLUEBUSH	FAZENDINHA
BLG0079	770,054	8,550,770	477	12.00	0	-90	BLUEBUSH	CASA VELHA
BLG0082	769,986	8,551,148	466	20.00	0	-90	BLUEBUSH	CASA VELHA
BLG0085	769,421	8,551,302	469	18.50	0	-90	BLUEBUSH	CASA VELHA
BLG0087	769,103	8,551,556	449	9.00	0	-90	BLUEBUSH	CASA VELHA
BLG0088	768,903	8,551,592	446	6.00	0	-90	BLUEBUSH	FAZENDINHA
BLG0091	768,368	8,551,446	461	5.00	0	-90	BLUEBUSH	FAZENDINHA
BLG0095	768,606	8,551,928	449	9.50	0	-90	BLUEBUSH	FAZENDINHA
BLG0098	769,077	8,552,090	451	7.80	0	-90	BLUEBUSH	FAZENDINHA
BLG0101	769,390	8,552,193	451	14.00	0	-90	BLUEBUSH	ENGENHO
BLG0102	769,575	8,552,307	462	9.00	0	-90	BLUEBUSH	ENGENHO
BLG0104	769,964	8,552,529	490	11.00	0	-90	BLUEBUSH	ENGENHO
BLG0108	769,186	8,552,892	466	12.00	0	-90	BLUEBUSH	ENGENHO
BLG0114	768,756	8,553,145	493	7.00	0	-90	BLUEBUSH	ENGENHO
BLG0115	768,694	8,552,977	505	3.50	0	-90	BLUEBUSH	ENGENHO
BLG0116	768,699	8,552,803	505	11.00	0	-90	BLUEBUSH	ENGENHO

HOLE_ID	EASTING	NORTHING	RL	EOH	AZIMUTH	DIP	PROJECT	PROSPECT
BLG0118	768,666	8,552,407	478	7.00	0	-90	BLUEBUSH	ENGENHO
BLG0120	768,391	8,552,108	454	11.20	0	-90	BLUEBUSH	ENGENHO
BLG0122	767,612	8,551,611	441	6.00	0	-90	BLUEBUSH	PRAIAO
BLG0124	767,302	8,551,412	417	11.40	0	-90	BLUEBUSH	PRAIAO
BLG0125	767,198	8,551,241	432	9.40	0	-90	BLUEBUSH	PRAIAO
BLG0127	767,272	8,551,155	434	19.30	0	-90	BLUEBUSH	PRAIAO
BLG0129	767,139	8,550,811	466	4.00	0	-90	BLUEBUSH	PRAIAO
BLG0131	766,998	8,551,237	433	7.00	0	-90	BLUEBUSH	PRAIAO
BLG0132	766,857	8,551,116	434	5.80	0	-90	BLUEBUSH	PRAIAO
BLG0136	766,154	8,551,087	415	6.30	0	-90	BLUEBUSH	PRAIAO
BLG0139	765,834	8,550,694	432	7.00	0	-90	BLUEBUSH	PRAIAO
BLG0149	765,906	8,551,969	447	9.50	0	-90	BLUEBUSH	FERRADURA
BLG0150	766,034	8,551,812	425	2.00	0	-90	BLUEBUSH	FERRADURA
BLG0153	766,381	8,551,689	431	3.60	0	-90	BLUEBUSH	FERRADURA
BLG0154	766,577	8,551,487	419	11.20	0	-90	BLUEBUSH	FERRADURA
BLG0159	766,897	8,551,681	434	6.00	0	-90	BLUEBUSH	FERRADURA
BLG0164	771,321	8,553,379	680	22.00	0	-90	BLUEBUSH	ENGENHO 2
BLG0165	771,413	8,553,337	676	20.00	0	-90	BLUEBUSH	ENGENHO 2
BLG0167	770,992	8,553,307	666	22.00	0	-90	BLUEBUSH	ENGENHO 2
BLG0169	773,019	8,548,728	678	10.00	0	-90	BLUEBUSH	BOA VISTA
BLG0171	772,954	8,549,134	633	13.00	0	-90	BLUEBUSH	BOA VISTA
BLG0173	772,890	8,549,494	612	6.00	0	-90	BLUEBUSH	BOA VISTA
BLG0175	772,742	8,549,849	657	17.00	0	-90	BLUEBUSH	BOA VISTA

Appendix 1 JORC Tables

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections, note data in this section is extracted from historic reports)

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 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 Nickel that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Alvo auger drilling: Auger geochemical sampling was completed on 1 or 2 metres continuous samples. The samples are homogenised on a tarp and a representative sample of approximately 1kg is bagged and labelled. Sample information is collected in the field on a tablet. • The samples are dispatched to the independent external lab- SGS Geosol in Goiania. • Sampling was supervised by Alvo Minerals field technicians who described the material of each sample as soil, saprolite or weathered rock.
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).*	• Auger drilling was completed using a hydraulic auger drilling machine with a 4.5" auger bit and 2m helicoidal rods. The drilling is open hole, meaning there is a significant chance of contamination from the surface and other parts of the auger hole. Holes are vertical and not oriented.
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.*	• No recoveries are recorded. • The operator observes the volume of each metre and notes any discrepancy. • No relationship is believed to exist between recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All holes were logged by Alvo Minerals 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. • Qualitative logging only, no systematic photography • All auger drilling is logged onsite by Alvo field technicians. Logs include hole number, hole location, date drilled, collar location, dip and azimuth as well as qualitative data such as rock type, and descriptions of the colour, alteration, weathering, grain size, mineralisation and texture.
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.*	• All the sampling procedures were conducted by the Alvo Minerals geologists and technicians. • Auger sampling is completed on site. Samples are collected from a modified bucket around the mouth of the hole and then each sample is homogenised and quartered, with a sample bagged on site and sent to the independent lab (SGS Geosol). • Sampling is considered to be appropriate for the material being collected.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The samples were dispatched to SGS in Goiania, where the physical preparation was done and analysed in the SGS Geosol laboratory in Vespasiano city – Minas Gerais state, Brazil. The SGS Geosol lab sample preparation includes drying, crushing with P75 of 3mm, homogenised, quartered and pulverized of 300g with P95 below 150#. The SGS Geosol analytical procedures include standard lithium metaborate fusion assays by IPC-MS, according to standard industry practices. In the SGS Geosol lab the sample were analysed using the methods ICP-MS (IMS95A). The elements analysed were Ce, Co, Cs, Cu, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Mo, Nb, Nd, Ni, Pr, Rb, Sm, Sn, Ta, Tb, Th, Tl, Tm, U, W, Y and Yb. • No sample duplicates. The Standards and Blanks showed acceptable values.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Verification of sampling and assaying</td><td>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.</td><td>Significant intercept tables are prepared by Alvo personal and checked by at least one other Company geologist.
No twinned holes are being reported.
All data was received from Mata Azul in an Access database and checked against lab files (excel and PDF).
Adjustments to the data were made- transforming the elemental values into the oxide values. The conversion factors used are included in the table below. Only intervals of saprolite Weighted averages were used to calculate significant intercepts.
<table>
<tr><th>Element</th><th>Oxide</th><th>Factor</th></tr>
<tr><td>Sc</td><td>Sc2O3</td><td>1.5338</td></tr>
<tr><td>Ce</td><td>CeO2</td><td>1.1713</td></tr>
<tr><td>La</td><td>La2O3</td><td>1.1728</td></tr>
<tr><td>Sm</td><td>Sm2O3</td><td>1.1596</td></tr>
<tr><td>Nd</td><td>Nd2O3</td><td>1.1664</td></tr>
<tr><td>Pr</td><td>Pr6O11</td><td>1.2082</td></tr>
<tr><td>Dy</td><td>Dy2O3</td><td>1.1477</td></tr>
<tr><td>Eu</td><td>Eu2O3</td><td>1.1579</td></tr>
<tr><td>Y</td><td>Y2O3</td><td>1.2699</td></tr>
<tr><td>Tb</td><td>Tb4O7</td><td>1.1762</td></tr>
<tr><td>Gd</td><td>Gd2O3</td><td>1.1526</td></tr>
<tr><td>Ho</td><td>Ho2O3</td><td>1.1455</td></tr>
<tr><td>Er</td><td>Er2O3</td><td>1.1435</td></tr>
<tr><td>Tm</td><td>Tm2O3</td><td>1.1421</td></tr>
<tr><td>Yb</td><td>Yb2O3</td><td>1.1387</td></tr>
<tr><td>Lu</td><td>Lu2O3</td><td>1.1371</td></tr>
</table></td></tr>
<tr><td>Location of data points</td><td>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
Specification of the grid system used.
Quality and adequacy of topographic control.</td><td>A GPS are used to locate and records the auger drill collars. No auger drill holes are downhole surveyed.
All location data has been recorded SAD69 (South America 1969 Datum) UTM zone 22S.
Topographic control is adequate for the stage of exploration at Bluebush.</td></tr>
<tr><td>Data spacing and distribution</td><td>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.</td><td>Auger drillholes are variably spaced with auger locations targeting alluvial and colluvial accumulations.
Trench, channel and pit spacing were variably spaced.
The results reported may be considered in an MRE.
No compositing has been applied to the results- apart from weighted averages</td></tr>
<tr><td>Orientation of data in relation to geological structure</td><td>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.</td><td>Drilling is shallow and considered as a first pass sampling - generally lines are oriented across the assumed geological terrain. No bias is believed to have occurred. Sampling lengths were generally 0.5-2m downhole, unless there was a specific geological control required by the technician.
No relationship between mineralisation and drilling orientation is known at this stage.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• The auger samples were collected and split in the field and the remaining material was discarded. The quarter was sent to the SGS Geosol, the pulps returned for storage in Palmeiropolis -TO.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit to date.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

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 prospects described in the report are all located in Brazil on tenements owned by Mineracao Mata Azul S/A, over which Perth Minerals (Alvo's 100% owned Brazilian Subsidiary) has signed a binding purchase option for up to 100% of the shares in Mata Azul S/A. Processo | Titular | Área | Fase do processo 864.251/2004 | Mineração Mata Azul S A | 1827,85 | Autorização de Pesquisa 864.381/2011 | Mineração Mata Azul S A | 1456,99 | Autorização de Pesquisa 864.170/2007 | Mineração Mata Azul S A | 1070,8 | Autorização de Pesquisa 864.059/2012 | Mineração Mata Azul S A | 787,88 | Autorização de Pesquisa 860.066/2009 | Mineração Mata Azul S A | 1796,62 | Autorização de Pesquisa 860.067/2009 | Mineração Mata Azul S A | 1875,6 | Autorização de Pesquisa 864.056/2010 | Mineração Mata Azul S A | 95,64 | Autorização de Pesquisa 864.612/2008 | Mineração Mata Azul S A | 3122,48 | Autorização de Pesquisa TOTAL | 12033,86 • Alvo has reviewed the publicly available information on the government websites and is comfortable the tenements are in good standing. Additional work will be completed during the due diligence period to verify the veracity of the tenement status and ownership.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was mainly completed by Mata Azul S/A (Project vendors). The work was completed to a high standard for the time and included auger drilling, pitting, trenching and channel sampling. Much of the focus of the historical exploration was completed looking for alluvial and colluvial deposits of REE minerals. • Some work was completed by GE21, an independent exploration services company based in Brazil. This work included pitting and auger drilling, comparing against the earlier work of Mata Azul. The work overall appeared to replicate the older work and focussed more on the alluvial potential of the Project. • Airborne geophysics. There have been several combined aeromagnetic and radiometric surveys which cover the area, generally flown by Brazilian Government Agencies. These are generally broad spaced and useful for regional context. Maps of radiometrics and magnetics flown by a third party- believed to be Mining Ventures Brazil, covered the area, although the source information is not available.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The REE occurrences at Bluebush are located on the Serra Dourada Granite (GSD), which is part of the Goiás Staniferous Province. The GSD is an oval and elongated batholith approximately 55km long in the N-S direction by 12km wide. In the intrusion, there have been various phases of post-magmatic alteration identified that generated albitites and greisens mineralized in Sn (Ta-Nb-W), pegmatites mineralized in Be and tourmaline. These granites are generally enriched in U, Th, Nb, F, Li, Ga, Zn and REE including Y with progressive enrichment of the HREE in relation to the LREE in the most metasomatized phases. • Alvo is targeting the saprolite horizon above the granite where enrichment and transformation into ionic adsorption clay REE's may have occurred. Alvo believes the Bluebush project may have the same properties as the Serra Verde Project located 40km to the south.
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.*	• See Collar table in report.
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.*	• The significant intercepts were calculated using values > 750ppm TREO only in consecutive intervals of saprolite or soil samples originally sampled meter by meter. No upper cuts were considered. • To calculate the Total Rare Earth Oxide (TREO) values, the values of CeO2, La2O3, Sm2O3, Nd2O3, Pr6O11, Dy2O3, Eu2O3, Tb4O7, Gd2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, Lu2O3 and Y2O3 were summed. • To calculate the Magnet Rare Earth Oxide (MREO) values, the values of, Nd2O3, Pr6O11, Dy2O3 and Tb4O7 were summed. • Weighted averages were calculated for all intercepts.
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').*	• Mineralisation orientation is not known at this stage, although assumed to be generally flat lying. • The downhole depths are reported, true widths are not known at this stage.

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See diagrams reported in the announcement
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 to avoid misleading reporting of Exploration Results.*	• All results are reported above the cut-offs described above.
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.*	• Historical work has been reported previously by Alvo, where work completed generally did not target the clay horizon, more alluvial accumulations of the minerals hosting primary REE's. • No other data is considered relevant at this time.
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.*	• Alvo intends to sample the auger drilling and in areas of high prospectivity, samples will also be tested for their ionic clay potential. • Alvo will conduct soil sampling across the project, once an orientation program is complete- especially in areas of difficult access. A handheld auger has also been purchased and will be utilised to test saprolite horizons in areas of difficult access. • Alvo has recently purchased a Loupe Geophysical mobile electromagnetic equipment, which should be able to map the depth of the saprolite to the granite (soon to be imported). • Alvo has in-house electromagnetic and Induced polarisation survey equipment and is performing FLEM, DHEM and IP surveys in the region. These techniques or others may be utilised during the due diligence period and beyond. • Alvo will geologically map and occasionally dig trenches/pits to better understand the under-surface geology and geochemistry.