ALVO
ASX: ALV

Agreement to Acquire Potential Tier 1 Ionic Clay Bluebush Rare Earth Project

HIGHLIGHTS

- Alvo Minerals Limited has entered into a binding agreement for the purchase of the highly prospective **Bluebush Rare Earth Element** ("**REE**") Project in Central Brazil, adjacent to Alvo's existing Palmeiropolis exploration base.
- **Bluebush is located adjacent to and in the same geological setting as the Serra Verde Ionic Clay REE Project, the only genuine Ionic Clay project currently in construction** outside of China.
- **Bluebush has been held privately by Mata Azul S/A since 2004** and was primarily explored for REEs associated with concentrates of alluvials, with the saprolite (clay) potential at an early stage of exploration.
- Early-stage exploration work completed by the vendors has confirmed high-grade REEs at shallow levels with values **up to 4,500ppm TREO in alluvials and 2,350ppm TREO in saprolite (clay).**
  - **Saprolite results recorded a very high magnet rare earth split averaging 35% (MREO/TREO)**
  - **Auger drilling focused on surface alluvial- average hole depth of 3.6m**
- Early-stage exploration completed (auger, channel and pit sampling) with intercepts of saprolite (clay) mineralisation from surface and ending in REE mineralisation (*hole ends in REE mineralisation), includes significant intercepts as below. Please refer to cautionary statement below for previous exploration results.
  - **6m @ 1,188ppm TREO (37% MREO)** auger ERRO273AGR from 1m* (Boa Vista 01)
  - **1m @ 1,355ppm TREO (29% MREO)** auger ERRO031AGR from 1m* (Ferradura)
  - **5m @ 1,139ppm TREO (36% MREO)** auger ERRO072AGR from 1m* (Fazendinha)
  - **13m @ 928ppm TREO (33% MREO)** auger ERRO017AGR from 0m* (Ferradura)
  - **6m @ 871ppm TREO (31% MREO)** auger ERRO142AGR from 0m* (Ferradura)
  - **7m @ 860ppm TREO (43% MREO)** auger MAZ-TR-011 from 1m* (Fazendinha)
  - **6m @ 796ppm TREO (34% MREO)** auger ERRO279AGR from 0m* (Boa Vista 1)
  - **5m @ 951ppm TREO (37% MREO)** auger ERRO136AGR from 1m* (Ferradura)
  - **4m @ 863ppm TREO (35% MREO)** auger ERRO095AGR from 1m* (Praiao 02)
- **Ability to purchase up to 100% of Bluebush** through staged payments based on project milestones.
- 6-month (+3 months) due diligence process underway following payment of BRL100,000 (A$30,530).
- **Due Diligence work will include auger drilling to extend existing mineralisation depth profile and strike extent** and sampling of saprolite to confirm Ionic Clay mineralisation.
- **Alvo's exploration team and inhouse equipment including truck mounted auger rigs are in place locally** and will proceed under guidance from international REE specialists.

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PROJECT
Palma VMS Cu/Zn Project

Shares on Issue	72,830,314
ASX Code	ALV

**Cautionary Statement: The exploration results reported in this announcement have been reported by the previous owner. The Exploration Results have not been reported in accordance with accordance with JORC Code 2012. A Competent Person has not done sufficient work to disclose the exploration results in accordance with the JORC Code 2012. It is possible that following further evaluation and/or exploration work that the confidence in the prior exploration results may be reduced when reported under the JORC Code 2012. Nothing has come to the attention of Alvo that causes it to question the accuracy or reliability of the former owner's exploration. The Company however has not independently validated the former owner's exploration results and therefore is not to be regarded as reporting, adopting or endorsing those results.*

Alvo Minerals Limited (ASX: ALV) ("**Alvo**" or **the** "**Company**") is extremely pleased to announce the signing of a binding agreement to purchase 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**").

Serra Verde is majority owned by US based private equity group, Denham Capital[1], and boasts a Mineral Resource[2] of 911Mt @ 1,200ppm Total Rare Earth Oxide ("**TREO**") and a Mineral reserve of 350Mt @ 1,500ppm TREO with high heavy and critical ratios of Magnet Rare Earth Oxide ("**MREO**"). Of significance is that Serra Verde is the only Ionic Clay project in construction outside of China, and the adjacent Bluebush Project exhibits many similar characteristics in terms of grades and REE ratios.

Bluebush is located within 10km of Alvo's exploration base where Alvo has the team, the tools and expertise to conduct a timely and cost-effective exploration program to rapidly advance the Bluebush Project.

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

"Brazil is emerging as a premier location for Rare Earth Elements and Alvo is incredibly excited by the acquisition of Bluebush, which is a potential 'Tier 1' Ionic-Clay rare earth project. Alvo is now entering the race to develop these critical minerals which are vital in the global energy transition.

"The Project itself is located adjacent to the Serra Verde mine, the largest and most advanced ionic-clay REE project outside of China, and many of the attributes at Bluebush appear similar. Bluebush hosts high grades at surface, broad zones of saprolite which have barely been tested, and the mix of Magnet or Critical REEs to Total REEs appears very similar to those at Serra Verde.

"The opportunity at Bluebush only became available to Alvo through our local presence, with the vendors only interested in dealing with a team with proven exploration execution capabilities as we have demonstrated at Palma. Being privately held and focused on cashflow, the vendors have concentrated on the alluvial potential of the Project and only scratched the surface for ionic clay hosted REEs. We plan to rapidly test the ionic clay mineralisation potential at Bluebush, which is such a similar exploration setting to that of Serra Verde.

"The Bluebush acquisition makes perfect sense for Alvo and is synergistic with existing exploration at Palma. Our exploration base and Brazilian head office are located a few kilometres from Bluebush, and we have existing relationships with the owners and local stakeholders. Couple that with the existing exploration team, the best tools for the exploration in country and consultants that can help us effectively explore, and we have what I believe is a winning formula for success.

"We are ready to immediately start our due-diligence on the Project, where we will test for the depth extents of the saprolite with our inhouse auger drill-rig and then run a series of tests on the mineralisation to confirm their ionic clay characteristics. We will be guided in our due diligence by international REE specialists Met-Chem Consulting."

[1] For more information about Denham Capital and its portfolio companies, please refer to company website: https://www.denhamcapital.com/portfolio/

[2] Refer to Serra Verde presentation: https://www.cetem.gov.br/antigo/images/palestras/2015/iiisbtr/05-denilson-fonseca.pdf

Bluebush REE Project

Alvo has signed a binding deal with MINERAÇÃO MATA AZUL S/A, ("**Mata Azul**") a Brazilian company with 8 granted exploration tenements over the Bluebush REE Project ("**Bluebush**" or the "**Project**") which cover a total of 12,034 hectares (120km^2).

The Bluebush Project neighbours are Alvo's Palma VMS Project and Cana Brava Ni/Cu/PGE Project (see Figure 1). The Project is considered highly prospective for Rare Earth Elements ("**REEs**") hosted in surficial saprolites, potentially of the highly-valued ionic clay classification.

Bluebush is along strike from, and on the biotite-rich granitic intrusion Serra Dourada, that hosts the Serra Verde ionic clay REE Project, which is the only ionic clay REE project currently in construction anywhere in the world outside of China. Serra Verde is in the final stages of construction[3] with production scheduled to begin in late CY2023.

Serra Verde has an estimated Mineral Resource of 911Mt @ 1,200ppm TREO and a Mineral reserve of 350Mt @ 1,500ppm TREO. With a high percentage of the higher value heavy and magnet REEs, Serra Verde is projecting a mine life of over 20 years initiating in late CY2023. Ionic clay hosted REE deposits are highly favoured due to the relatively simple processing required to create a REE concentrate and the high levels of Heavy[4] (HREO) or Magnet[5] (MREO) rare earth element oxides as compared to the Light[6] (LREO).

The Serra Verde deposit is hosted in the weathered saprolite profile of the Serra Dourada biotite granite, the same granite which is mapped on the Bluebush areas. Historical work by the vendors Mata Azul 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). It is worthwhile noting a similar percentage of the valuable MREOs that have been sampled to date at Bluebush and appear similar to the high percentage of MREOs at Serra Verde.

The vendors utilised auger drilling (258 holes for 923m, average depth of 3.6m - see Tables 1-4), channel sampling and pitting to test various prospects - *focusing on the alluvial potential of the main drainages within and shedding from the Serra Dourada Granite*. Exploration completed to date by the vendors has focussed on the alluvial and colluvial potential of the Bluebush areas where concentrates of minerals such as xenotime, monazite, illmenite and cassiterite collect in the prospective drainages (see Figure 2).

During this exploration (which included auger, trenching, channel and pit sampling), several mineralised saprolite clay horizons were intercepted, some up to 13m thick. The auger drilling would often stop once the saprolite clay horizon was intercepted (due partly to restrictions of the handheld equipment) and as such, the routine sampling of these horizons often ended in mineralisation (see Table 1 below).

The early-stage exploration completed by the vendors included multiple mineralised clay intercepts from the various prospects across Bluebush, reported in Table 1 below and include highlights such as:

- **6m @ 1,188ppm TREO (37% MREO)** auger ERRO273AGR from 1m* (Boa Vista 01)
- **1m @ 1,355ppm TREO (29% MREO)** auger ERRO031AGR from 1m* (Ferradura)
- **5m @ 1,139ppm TREO (36% MREO)** auger ERRO072AGR from 1m* (Fazendinha)
- **13m @ 928ppm TREO (33% MREO)** auger ERRO017AGR from 0m* (Ferradura)
- **6m @ 871ppm TREO (31% MREO)** auger ERRO142AGR from 0m* (Ferradura)
- **7m @ 860ppm TREO (43% MREO)** auger MAZ-TR-011 from 1m* (Fazendinha)

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

[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 often include scandium (Sc) and yttrium (Y). 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, Tb, Eu and Y and are some of the highest value REEs.

[6] **LREO Light rare earth oxides** are defined by lower atomic weights compared to heavy rare earth oxides. LREOs include lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), samarium (Sm), europium (Eu). Used as stabilisers in catalytic compounds and elements in hybrid batteries.

- **6m @ 796ppm TREO (34% MREO)** auger ERRO279AGR from 0m* (Boa Vista 1)
- **5m @ 951ppm TREO (37% MREO)** auger ERRO136AGR from 1m* (Ferradura)
- **4m @ 863ppm TREO (35% MREO)** auger ERRO095AGR from 1m* (Praiao 02)

Please note, these results were not reported in accordance with the JORC code, see cautionary note above and additional detail in Appendix 1.

Alvo intends to utilise the due diligence period to not only verify these results by auger drilling, but will apply systematic exploration across the tenure to better understand the potential of the project. No specific tests for ionic clay hosted mineralisation within the Bluebush have been conducted thus far, and these tests will also be undertaken as part of Alvo's due diligence process.

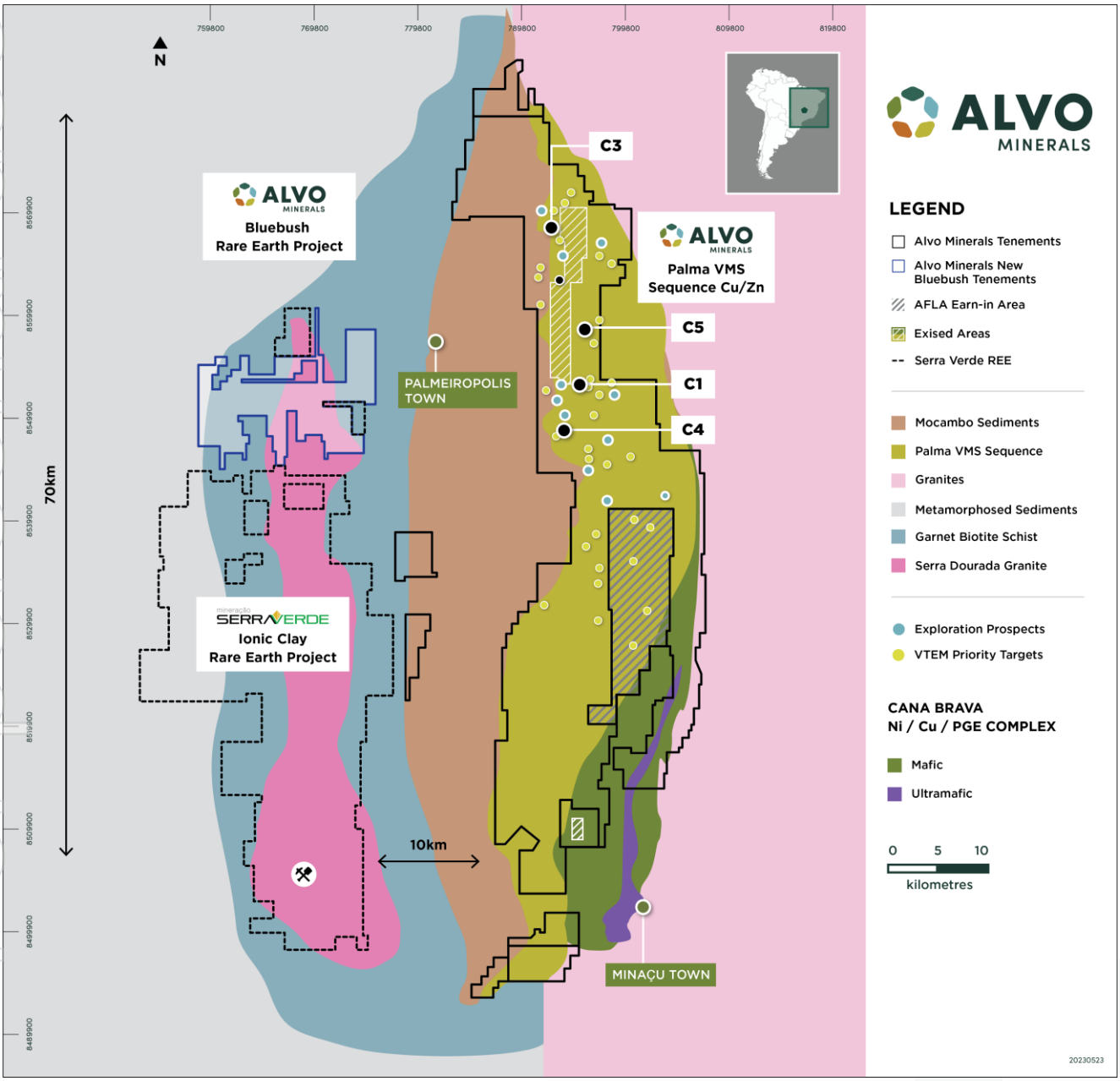

Figure 1: *Regional geology and tenement holdings for Alvo's Palma Project area and Bluebush REE Project area.*

Figure 2: *Photos from Mata Azul - Bluebush Exploration. Top left is an excavated pit with sampling intervals marked on left wall. Top right is measuring the thickness of an alluvial bank prior to sampling and the lower photo shows the handheld auger drilling.*

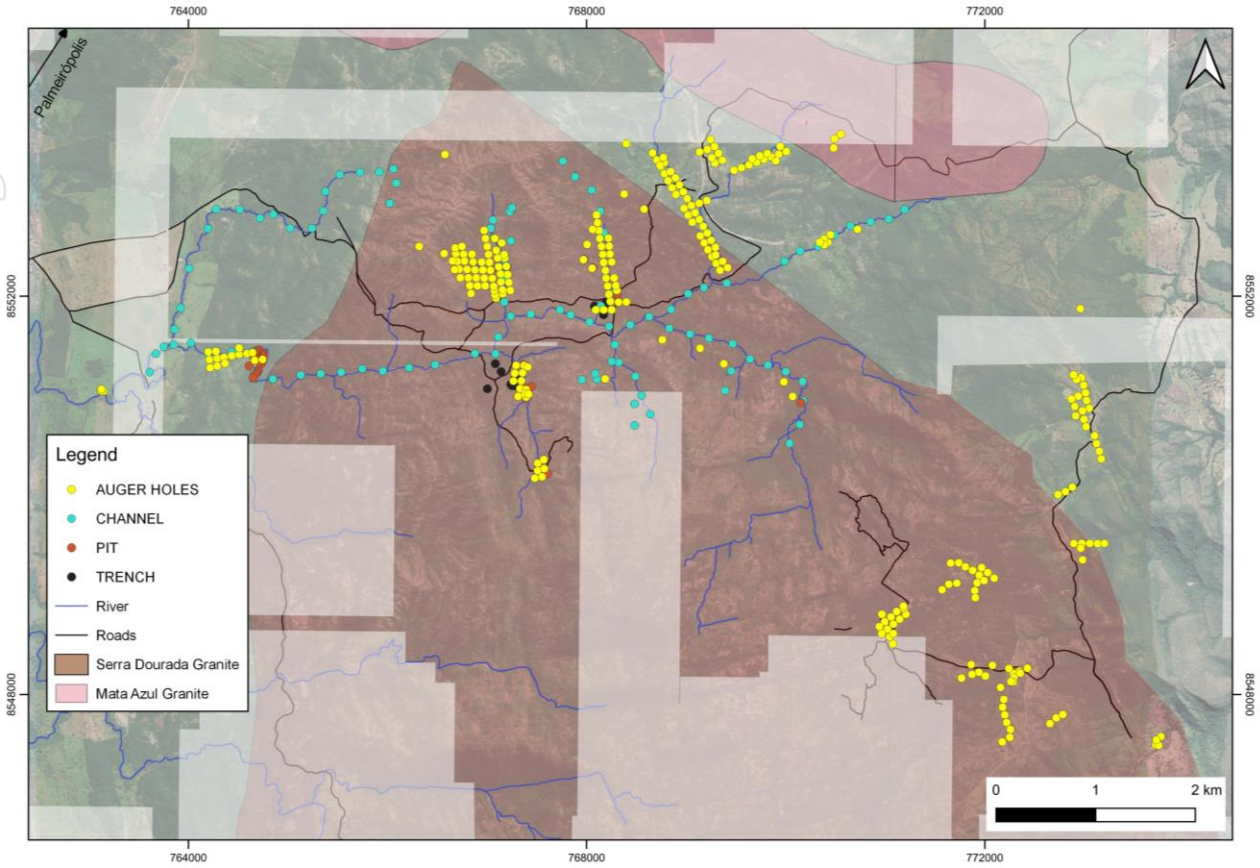

Figure 3: *Exploration completed by vendor across the Bluebush Project with locations of Auger, Channels, Pits and Trenches.*

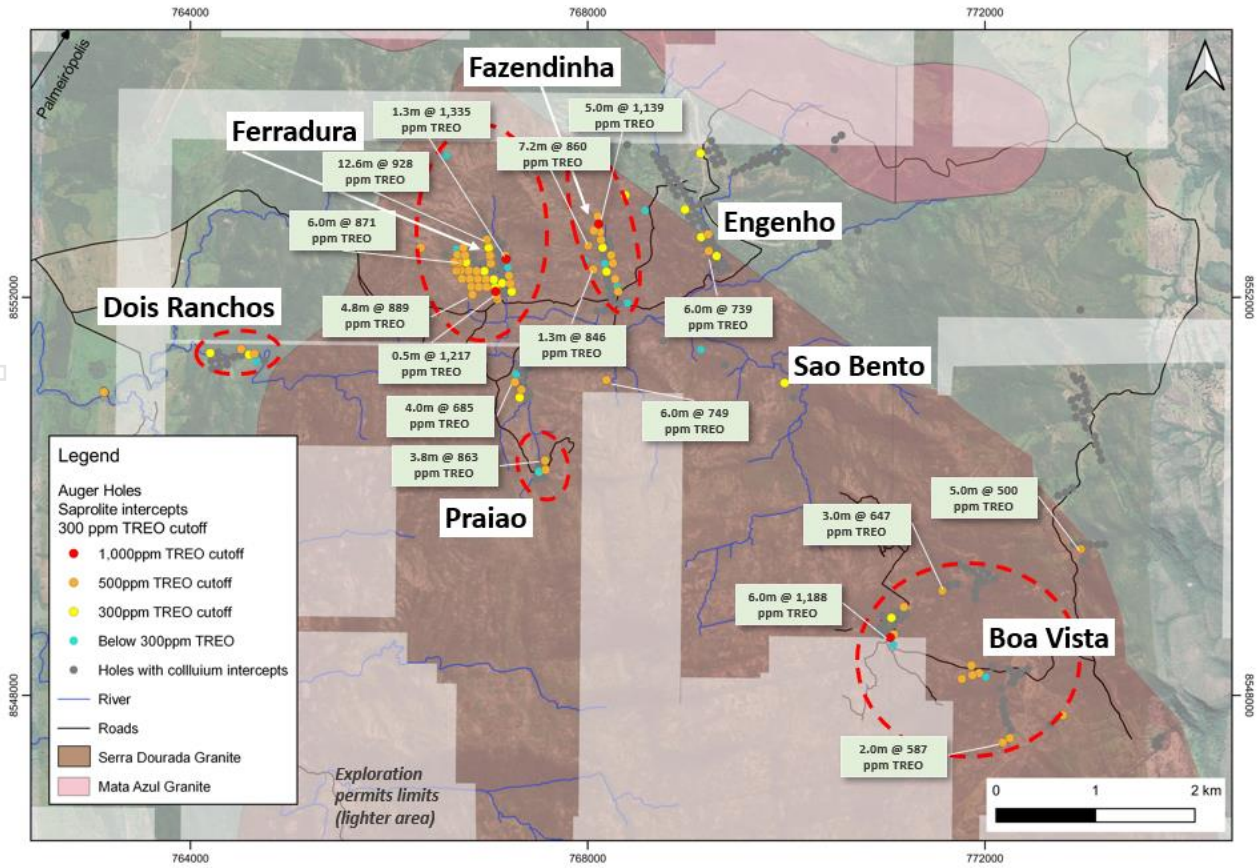

Figure 4: *Bluebush auger results completed by vendor with highlights of shallow saprolite (clay) drilling.*

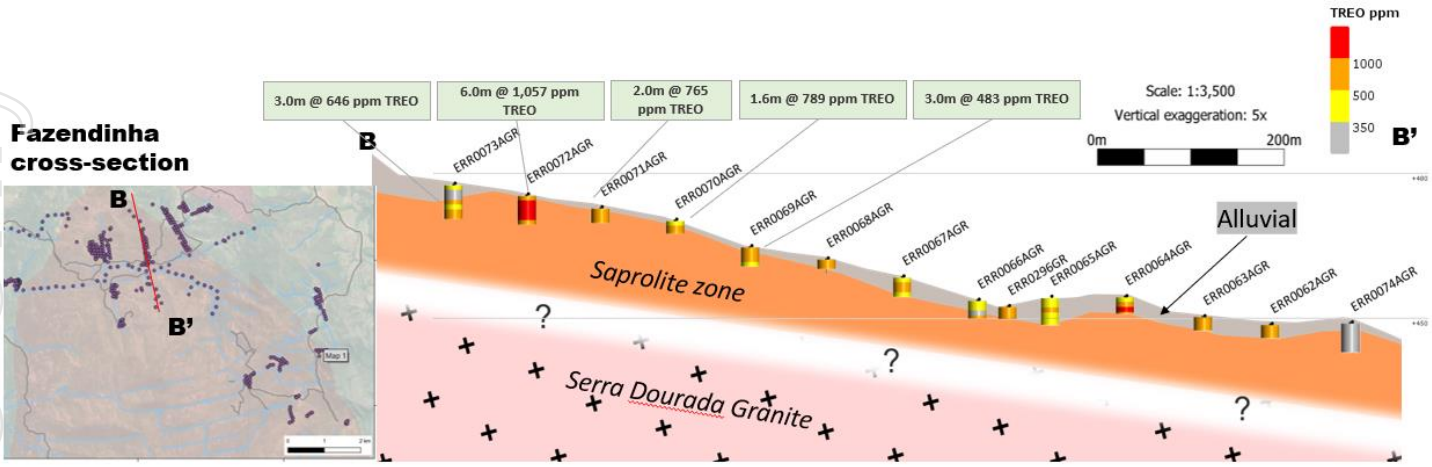

Figure 5: *Cross section through Fazendinha prospect at the Bluebush Project. Note the auger drilling rarely penetrates deeply into the saprolite zone.*

Figure 6: *Serra Verde plant construction (taken in May 2022).*

Integrating Bluebush into Alvo's Exploration Strategy and Future Work

Alvo is uniquely positioned to rapidly explore and advance the Bluebush REE Project 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 the wider exploration schedule, cognisant of the 6-month (extendable by agreement) due diligence period.

Alvo expects to significantly advance Bluebush within the due diligence period through activities including:

- Review the official Mata Azul company documents and tenements at the relevant governmental agencies.
- Initial field reconnaissance over the most prospective areas for thick and mineralised saprolite horizons. This phase will include obtaining access for auger drilling activities.
- Auger drilling using Alvo's truck-mounted auger drill rig that has completed 618 auger holes for 5,357m since mid-January 2023. The auger rig has a capacity up to 30m depth which should be sufficient to test the depth extent of the saprolite in the various prospects. Work by the vendors to date has included 258 auger holes at an average depth of 3.6m.
- Systematically sampling of the auger holes and transport the samples back to the field lab where they will be dried overnight, sieved, and analysed using Alvo's in house SciApps X-555 portable XRF analyzer. This analyzer has a higher voltage, providing higher sensitivity for strategic metals, including the REEs.
- A percentage of the samples collected will be sent to an independent lab in Brazil for analysis, along with any broad zones of mineralised clays. Should independent lab assays confirm the portable analysis, a selection of samples will be sent for testing for ionic clays.
- Alvo will also investigate the best geophysical techniques for mapping thickness of clays which may enhance the exploration planned across the tenement position.

Alvo expects that the time required to complete the planned work in the due diligence programme is sufficient, however the due diligence period can be extended by an additional 3 months by mutual agreement.

Exploration work is underway at Palma across multiple prospects with the aim of advancing prospects to drill-ready status. Field activities including geological mapping, soil sampling, auger drilling, Induced Polarisation Surveys ("**IP**") and Fixed Loop electromagnetic surveys ("**FLEM**") are underway. These activities are being undertaken concurrently within the district on various prospects identified by the Company from historical work completed to date.

Commercial Terms

Alvo's wholly owned Brazilian subsidiary Perth Recursos Minerais Ltda. has signed a binding purchase agreement with Mata Azul for 8 exploration permits in Goias and Tocantins state, Central Brazil.

Key terms of the purchase agreement are:

- Alvo has a binding 6-months exclusive purchase option over Mata Azul S/A the 100% owners of the Bluebush REE project, where Alvo can conduct detailed due diligence on the areas after paying a non-refundable BRL 100,000 signing fee. The due diligence period can be extended by 3 months by mutual agreement.
- Should Alvo decide to exercise the purchase option, Alvo will fund and execute exploration across the project designed to take the project from initial exploration, Mineral Resource Estimate ("**MRE**"), Scoping and Pre-feasibility studies ("**PFS**"). All exploration stages are to be completed according to the JORC code (and relevant Brazilian exploration codes), with the vendor having the right to audit all reports and stages at their expense. At the conclusion of the stages, Alvo will earn an increasing percentage of Mata Azul S/A. The stages are:

- Presentation of a maiden JORC compliant MRE on the Project (Alvo earns 51% in Mata Azul) with a payment of USD$800,000
- Presentation of Scoping Study on the Project (Alvo's interest increases to 70% in Mata Azul) with a payment of USD$800,000
- Presentation of a PFS on the Project (Alvo's interest increases to 80% in Mata Azul) with a payment of USD$1,000,000
- Once Alvo buys the 80% interest in Mata Azul, Alvo can purchase the remaining 20% interest in Mata Azul for 20% of the discounted NPV in the PFS, capped at a maximum value of USD$20 million (payable in stages).
- All payments to be made in cash or shares in Alvo (by mutual agreement).

- Additional normal terms have been agreed, which will be included in a purchase and sale contract to be celebrated on exercise of the Option.

Discovery Capital Partners acted as Corporate Advisor in relation to this transaction.

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 a base and precious metals exploration company, hunting high-grade copper and zinc at its flagship Palma Project, located in Central Brazil. The Palma Project has a JORC 2012 Inferred Mineral Resource Estimate - 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag.

Alvo is also exploring for Rare Earth Elements, with a binding agreement for the purchase of the highly prospective Bluebush REE Project in Central Brazil, 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. There are three phases to the exploration strategy – *Discover, Expand and Upgrade.*

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

Table 1: Auger drilling table of saprolite significant intercepts. Table was prepared using only intercepts >0.2m and >300ppm TREO, with up to 3m of consecutive internal dilution.

Prospect	Auger Hole #	From (m)	To (m)	Min Interval (m)	TREO (ppm)	MREO/TREO	TREO EOH (ppm)
FERRADURA	ERR0002AGR	1.0	1.8	**0.8**	**594**	33%	594
FERRADURA	ERR0003AGR	1.0	3.4	**2.4**	**538**	44%	643
FERRADURA	ERR0004AGR	0.4	0.9	**0.5**	**1217**	28%	1217
FERRADURA	ERR0005AGR	1.0	5.0	**4.0**	**325**	42%	366
FERRADURA	ERR0007AGR	1.0	6.0	**5.0**	**399**	44%	231
FERRADURA	ERR0011AGR	0.0	2.6	**2.6**	**657**	39%	942
FERRADURA	ERR0013AGR	0.0	4.0	**4.0**	**692**	36%	1038
FERRADURA	ERR0015AGR	0.0	7.8	**7.8**	**363**	40%	225
FERRADURA	ERR0017AGR	0.0	12.6	**12.6**	**928**	33%	1113
FERRADURA	ERR0023AGR	1.0	9.0	**8.0**	**472**	37%	128
FERRADURA	ERR0025AGR	0.0	1.5	**1.5**	**547**	33%	690
FERRADURA	ERR0027AGR	1.0	3.0	**2.0**	**761**	36%	947
FERRADURA	ERR0031AGR	1.0	2.3	**1.3**	**1355**	29%	609
FERRADURA	ERR0033AGR	2.0	4.0	**2.0**	**864**	37%	889
FAZENDINHA	ERR0036AGR	4.0	5.0	**1.0**	**562**	43%	562
FAZENDINHA	ERR0038AGR	1.0	3.0	**2.0**	**542**	38%	457
FAZENDINHA	ERR0040AGR	1.0	1.8	**0.8**	**575**	44%	575
FAZENDINHA	ERR0041AGR	3.0	4.0	**1.0**	**599**	33%	599
FERRADURA	ERR0047AGR	0.0	6.0	**6.0**	**419**	43%	269
FAZENDINHA	ERR0066AGR	2.0	3.7	**1.7**	**458**	50%	678
FAZENDINHA	ERR0069AGR	1.0	4.0	**3.0**	**483**	45%	382
FAZENDINHA	ERR0070AGR	1.0	2.6	**1.6**	**789**	35%	969
FAZENDINHA	ERR0071AGR	1.0	3.0	**2.0**	**765**	34%	944
FAZENDINHA	ERR0072AGR	1.0	6.0	**5.0**	**1139**	36%	874
FAZENDINHA	ERR0073AGR	4.0	7.0	**3.0**	**646**	35%	835
PRAIAO 01	ERR0085AGR	0.0	4.0	**4.0**	**685**	30%	632
PRAIAO 01	ERR0087AGR	3.0	5.0	**2.0**	**610**	52%	587
PRAIAO 01	ERR0088AGR	2.0	4.7	**2.7**	**384**	37%	213
PRAIAO 02	ERR0092AGR	4.0	7.0	**3.0**	**302**	49%	236
PRAIAO 02	ERR0095AGR	1.0	4.8	**3.8**	**863**	35%	1279
PRAIAO 02	ERR0096AGR	2.0	4.0	**2.0**	**678**	37%	589
DOIS RANCHOS	ERR0109AGR	2.0	3.8	**1.8**	**357**	38%	319
DOIS RANCHOS	ERR0110AGR	1.0	6.0	**5.0**	**662**	44%	552
DOIS RANCHOS	ERR0117AGR	3.0	6.7	**3.7**	**309**	40%	253
FERRADURA	ERR0136AGR	1.0	6.0	**5.0**	**951**	37%	665
FERRADURA	ERR0137AGR	4.0	4.8	**0.8**	**599**	37%	599
FERRADURA	ERR0138AGR	0.0	7.0	**7.0**	**747**	36%	652
FERRADURA	ERR0139AGR	0.0	4.6	**4.6**	**715**	56%	394
FERRADURA	ERR0140AGR	0.0	4.0	**4.0**	**775**	31%	745
FERRADURA	ERR0141AGR	0.0	6.0	**6.0**	**512**	37%	358

Prospect	Auger Hole #	From (m)	To (m)	Min Interval (m)	TREO (ppm)	MREO/TREO	TREO EOH (ppm)
FERRADURA	ERR0142AGR	0.0	6.0	**6.0**	**871**	31%	681
FERRADURA	ERR0143AGR	0.0	4.0	**4.0**	**546**	30%	515
FERRADURA	ERR0147AGR	4.0	6.7	**2.7**	**710**	34%	627
FERRADURA	ERR0148AGR	0.0	3.0	**3.0**	**604**	37%	546
FERRADURA	ERR0149AGR	1.0	6.0	**5.0**	**355**	43%	267
FERRADURA	ERR0150AGR	1.0	4.0	**3.0**	**793**	36%	796
FERRADURA	ERR0151AGR	1.0	7.0	**6.0**	**824**	36%	753
FERRADURA	ERR0152AGR	1.0	6.7	**5.7**	**538**	41%	472
FERRADURA	ERR0153AGR	1.0	5.0	**4.0**	**861**	34%	1024
FERRADURA	ERR0154AGR	0.0	7.0	**7.0**	**399**	45%	823
FERRADURA	ERR0155AGR	0.0	4.8	**4.8**	**889**	39%	754
FERRADURA	ERR0156AGR	1.0	4.6	**3.6**	**776**	36%	893
FERRADURA	ERR0157AGR	1.0	5.7	**4.7**	**660**	40%	630
FERRADURA	ERR0158AGR	0.0	6.0	**6.0**	**390**	46%	343
FERRADURA	ERR0161AGR	0.0	1.0	**1.0**	**507**	36%	507
ENGENHO VELHO 01	ERR0167AGR	1.0	7.0	**6.0**	**739**	39%	795
ENGENHO VELHO 01	ERR0169AGR	0.0	1.0	**1.0**	**324**	53%	324
ENGENHO VELHO 01	ERR0173AGR	2.0	4.6	**2.6**	**329**	39%	250
ENGENHO VELHO 01	ERR0176AGR	3.0	5.7	**2.7**	**309**	66%	156
ENGENHO VELHO 01	ERR0179AGR	1.0	3.7	**2.7**	**613**	38%	177
ENGENHO VELHO 02	ERR0209AGR	4.0	7.0	**3.0**	**439**	32%	356
DOIS RANCHOS	ERR021AGR	0.0	1.0	**1.0**	**759**	36%	759
BOA VISTA 06	ERR0259AGR	0.0	5.0	**5.0**	**500**	36%	659
BOA VISTA 01	ERR0273AGR	1.0	7.0	**6.0**	**1188**	37%	1185
BOA VISTA 01	ERR0277AGR	3.0	4.0	**1.0**	**477**	37%	477
BOA VISTA 01	ERR0279AGR	0.0	6.0	**6.0**	**796**	34%	928
BOA VISTA 01	ERR0291AGR	1.0	2.4	**1.4**	**789**	36%	964
BOA VISTA SUL	ERR0303AGR	3.0	4.0	**1.0**	**682**	36%	682
BOA VISTA SUL	ERR0304AGR	3.0	5.0	**2.0**	**587**	35%	407
BOA VISTA OESTE	ERR0319AGR	1.0	4.0	**3.0**	**647**	36%	637
CENTRO SUL	ERR0322AGR	2.0	4.0	**2.0**	**726**	33%	790
BOA VISTA 02	MAZ-TR-0004	1.0	2.3	**1.3**	**728**	40%	593
BOA VISTA 02	MAZ-TR-0005	1.0	1.2	**0.2**	**860**	13%	860
BOA VISTA 02	MAZ-TR-0007	1.0	2.4	**1.4**	**619**	26%	588
BOA VISTA 02	MAZ-TR-0008	1.0	3.0	**2.0**	**819**	26%	805
FAZENDINHA	MAZ-TR-0009	1.0	2.3	**1.3**	**846**	33%	1088
FAZENDINHA	MAZ-TR-0011	1.0	8.2	**7.2**	**860**	43%	640
FAZENDINHA	MAZ-TR-0012	1.0	2.2	**1.2**	**779**	36%	739
FAZENDINHA	MAZ-TR-0014	3.0	5.5	**2.5**	**342**	28%	301
SAO BENTO	MAZ-TR-0016	1.0	5.0	**4.0**	**409**	34%	396
SAO BENTO	MAZ-TR-0020	1.0	7.0	**6.0**	**749**	36%	789
SAO BENTO	MAZ-TR-0024	1.0	2.0	**1.0**	**654**	32%	654

Table 2: Pit sampling table of saprolite significant intercepts.
Table was prepared using only intercepts >300ppm TREO, with no internal dilution.

Prospect	Pit #	From (m)	To (m)	Min Interval (m)	TREO (ppm)	MREO/TREO	TREO EOH (ppm)
PRAIAO 01	ERR0001PIT	0.0	3.0	**3.0**	**557**	35%	609
PRAIAO 01	ERR0008PIT	0.0	2.6	**2.6**	**430**	35%	445
PRAIAO 02	ERR0010PIT	2.0	4.3	**2.3**	**515**	40%	427
PRAIAO 02	ERR0013PIT	0.0	6.0	**6.0**	**688**	36%	489

Table 3: Channel sampling table of saprolite significant intercepts.
Table was prepared using only intercepts >300ppm TREO, with no internal dilution

Prospect	CHANNEL #	From (m)	To (m)	Min Interval (m)	TREO (ppm)	MREO/TREO	TREO EOH (ppm)
SAO BENTO	ERR0252GR	1.3	1.6	**0.3**	**659**	29%	659
SAO BENTO	ERR0259GR	0.6	1.5	**0.9**	**463**	27%	463
SAO BENTO	ERR0278GR	1.6	1.7	**0.1**	**1026**	26%	1026
SAO BENTO	ERR0285GR	0.6	1.1	**0.6**	**441**	25%	441
SAO BENTO	ERR0286GR	0.1	1.3	**1.2**	**801**	27%	801
SAO BENTO	ERR0293GR	0.6	2.2	**1.6**	**369**	31%	369
SAO BENTO	ERR0294GR	1.0	2.0	**1.0**	**360**	32%	360
SAO BENTO	ERR0295GR	3.5	3.7	**0.2**	**346**	28%	346
FAZENDINHA	ERR0301GR	0.7	1.3	**0.6**	**380**	29%	380
SAO BENTO	ERR0305GR	0.6	1.8	**1.2**	**304**	29%	321
SAO BENTO	ERR0312GR	0.0	1.5	**1.5**	**617**	30%	162
SAO BENTO	ERR0315GR	0.0	0.8	**0.8**	**499**	26%	499

Table 4: Collar file of auger, trench, channel and pit sampling.

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0001PIT	PRAIAO 01	PIT	4.2	767456	8551334	427
ERR0002AGR	FERRADURA	AUGER	1.8	767140	8552024	446
ERR0002PIT	PRAIAO 01	PIT	3.3	767413	8551355	420
ERR0003AGR	FERRADURA	AUGER	3.4	767129	8552058	449
ERR0004AGR	FERRADURA	AUGER	0.9	767122	8552101	448
ERR0004PIT	PRAIAO 01	PIT	2.5	767441	8551019	432
ERR0005AGR	FERRADURA	AUGER	5.0	767117	8552141	447
ERR0005PIT	PRAIAO 01	PIT	2.0	767426	8551121	427
ERR0006PIT	PRAIAO 01	PIT	2.5	767420	8551078	429
ERR0007AGR	FERRADURA	AUGER	6.0	767102	8552221	457
ERR0008PIT	PRAIAO 01	PIT	2.6	767496	8551136	396
ERR0009AGR	FERRADURA	AUGER	3.0	767085	8552302	457
ERR0010PIT	PRAIAO 02	PIT	4.3	767573	8550317	448
ERR0011AGR	FERRADURA	AUGER	2.6	767074	8552382	458
ERR0013AGR	FERRADURA	AUGER	4.0	767065	8552461	463
ERR0013PIT	PRAIAO 02	PIT	6.0	767657	8550260	483

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0015AGR	FERRADURA	AUGER	7.8	767051	8552541	466
ERR0017AGR	FERRADURA	AUGER	12.6	767034	8552621	471
ERR0019AGR	FERRADURA	AUGER	7.0	767020	8552703	482
ERR0023AGR	FERRADURA	AUGER	9.0	767284	8552099	449
ERR0025AGR	FERRADURA	AUGER	1.5	767269	8552180	446
ERR0027AGR	FERRADURA	AUGER	3.0	767256	8552259	435
ERR0029AGR	FERRADURA	AUGER	3.6	767245	8552341	444
ERR0031AGR	FERRADURA	AUGER	2.3	767228	8552426	451
ERR0033AGR	FERRADURA	AUGER	4.0	767221	8552460	460
ERR0035AGR	FERRADURA	AUGER	3.9	767197	8552576	460
ERR0036AGR	FAZENDINHA	AUGER	5.0	768354	8552101	438
ERR0037AGR	FAZENDINHA	AUGER	6.2	768343	8552149	449
ERR0038AGR	FAZENDINHA	AUGER	3.0	768326	8552225	455
ERR0040AGR	FAZENDINHA	AUGER	1.8	768302	8552385	447
ERR0041AGR	FAZENDINHA	AUGER	4.0	768285	8552465	461
ERR0044AGR	FERRADURA	AUGER	2.4	767208	8552066	441
ERR0045AGR	FERRADURA	AUGER	3.6	767205	8552105	443
ERR0047AGR	FERRADURA	AUGER	6.0	767189	8552185	449
ERR0049AGR	FERRADURA	AUGER	3.0	767185	8552266	449
ERR0051AGR	FERRADURA	AUGER	2.0	767166	8552336	452
ERR0053AGR	FERRADURA	AUGER	2.0	767157	8552425	461
ERR0055AGR	FERRADURA	AUGER	4.0	767143	8552503	464
ERR0058AGR	FERRADURA	AUGER	1.3	767127	8552622	462
ERR0059AGR	FAZENDINHA	AUGER	2.0	768277	8552545	466
ERR0060AGR	FAZENDINHA	AUGER	2.0	768268	8552625	469
ERR0061AGR	FAZENDINHA	AUGER	4.0	768370	8551982	453
ERR0062AGR	FAZENDINHA	AUGER	2.7	768288	8551990	447
ERR0063AGR	FAZENDINHA	AUGER	2.8	768274	8552061	447
ERR0064AGR	FAZENDINHA	AUGER	3.5	768262	8552144	450
ERR0065AGR	FAZENDINHA	AUGER	5.6	768246	8552223	450
ERR0066AGR	FAZENDINHA	AUGER	3.7	768239	8552301	452
ERR0067AGR	FAZENDINHA	AUGER	4.0	768221	8552380	468
ERR0068AGR	FAZENDINHA	AUGER	3.0	768212	8552461	470
ERR0069AGR	FAZENDINHA	AUGER	4.0	768199	8552542	469
ERR0070AGR	FAZENDINHA	AUGER	2.6	768182	8552621	473
ERR0071AGR	FAZENDINHA	AUGER	3.0	768174	8552701	473
ERR0072AGR	FAZENDINHA	AUGER	6.0	768160	8552779	473
ERR0073AGR	FAZENDINHA	AUGER	7.0	768149	8552857	475
ERR0074AGR	FAZENDINHA	AUGER	6.0	768302	8551905	456
ERR0075AGR	FAZENDINHA	AUGER	1.0	768221	8551905	451
ERR0076AGR	FAZENDINHA	AUGER	2.0	768142	8551905	448
ERR0079AGR	FAZENDINHA	AUGER	5.0	768450	8551984	461
ERR0080AGR	PRAIAO 01	AUGER	2.0	767394	8551192	420
ERR0081AGR	PRAIAO 01	AUGER	2.0	767406	8551272	416
ERR0082AGR	PRAIAO 01	AUGER	3.6	767423	8551346	420

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0083AGR	PRAIAO 01	AUGER	2.0	767342	8551347	425
ERR0084AGR	PRAIAO 01	AUGER	3.3	767328	8551268	417
ERR0085AGR	PRAIAO 01	AUGER	4.0	767315	8551190	426
ERR0087AGR	PRAIAO 01	AUGER	5.0	767381	8551114	426
ERR0088AGR	PRAIAO 01	AUGER	4.7	767363	8551036	432
ERR0089AGR	PRAIAO 01	AUGER	2.0	767443	8551029	425
ERR0090AGR	PRAIAO 01	AUGER	3.0	767443	8551105	429
ERR0091AGR	PRAIAO 02	AUGER	1.0	767559	8550365	469
ERR0092AGR	PRAIAO 02	AUGER	7.0	767558	8550291	475
ERR0093AGR	PRAIAO 02	AUGER	4.5	767602	8550228	474
ERR0094AGR	PRAIAO 02	AUGER	3.0	767529	8550215	469
ERR0095AGR	PRAIAO 02	AUGER	4.8	767620	8550401	480
ERR0096AGR	PRAIAO 02	AUGER	4.0	767625	8550310	479
ERR0104AGR	DOIS RANCHOS	AUGER	1.5	764260	8551405	360
ERR0105AGR	DOIS RANCHOS	AUGER	1.7	764338	8551417	378
ERR0106AGR	DOIS RANCHOS	AUGER	4.0	764407	8551428	379
ERR0107AGR	DOIS RANCHOS	AUGER	4.0	764485	8551443	385
ERR0108AGR	DOIS RANCHOS	AUGER	1.7	764560	8551458	388
ERR0109AGR	DOIS RANCHOS	AUGER	3.8	764639	8551466	384
ERR0110AGR	DOIS RANCHOS	AUGER	6.0	764694	8551475	384
ERR0111AGR	DOIS RANCHOS	AUGER	6.0	764267	8551323	386
ERR0112AGR	DOIS RANCHOS	AUGER	1.8	764339	8551340	387
ERR0113AGR	DOIS RANCHOS	AUGER	6.0	764418	8551367	399
ERR0117AGR	DOIS RANCHOS	AUGER	6.7	764248	8551482	384
ERR0118AGR	DOIS RANCHOS	AUGER	5.0	764326	8551488	381
ERR0134AGR	DOIS RANCHOS	AUGER	4.0	764715	8551398	393
ERR0135AGR	DOIS RANCHOS	AUGER	5.0	764795	8551407	388
ERR0136AGR	FERRADURA	AUGER	6.0	767022	8552224	450
ERR0137AGR	FERRADURA	AUGER	4.8	766941	8552227	451
ERR0138AGR	FERRADURA	AUGER	7.0	766929	8552306	458
ERR0139AGR	FERRADURA	AUGER	4.6	766849	8552311	459
ERR0140AGR	FERRADURA	AUGER	4.0	766769	8552313	463
ERR0141AGR	FERRADURA	AUGER	6.0	766724	8552309	468
ERR0142AGR	FERRADURA	AUGER	6.0	766752	8552391	468
ERR0143AGR	FERRADURA	AUGER	4.0	766735	8552469	471
ERR0144AGR	FERRADURA	AUGER	4.0	766619	8552470	474
ERR0145AGR	FERRADURA	AUGER	6.9	766627	8553465	474
ERR0146AGR	FERRADURA	AUGER	5.0	766729	8552527	473
ERR0147AGR	FERRADURA	AUGER	6.7	766814	8552463	468
ERR0148AGR	FERRADURA	AUGER	3.0	766797	8552542	466
ERR0149AGR	FERRADURA	AUGER	6.0	766824	8552394	466
ERR0150AGR	FERRADURA	AUGER	4.0	766704	8552397	475
ERR0151AGR	FERRADURA	AUGER	7.0	766862	8552227	462
ERR0152AGR	FERRADURA	AUGER	6.7	766782	8552227	469
ERR0153AGR	FERRADURA	AUGER	5.0	766876	8552148	466

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0154AGR	FERRADURA	AUGER	7.0	766888	8552069	464
ERR0155AGR	FERRADURA	AUGER	4.8	766888	8552069	459
ERR0156AGR	FERRADURA	AUGER	4.6	766954	8552146	457
ERR0157AGR	FERRADURA	AUGER	5.7	767032	8552146	457
ERR0158AGR	FERRADURA	AUGER	6.0	767008	8552305	462
ERR0159AGR	FERRADURA	AUGER	2.7	766995	8552384	461
ERR0161AGR	FERRADURA	AUGER	1.0	766368	8552541	464
ERR0162AGR	FERRADURA	AUGER	5.0	766898	8552464	467
ERR0163AGR	FERRADURA	AUGER	4.0	766910	8552386	463
ERR0164AGR	ENGENHO VELHO 01	AUGER	2.8	769390	8552302	455
ERR0165AGR	ENGENHO VELHO 01	AUGER	3.4	769351	8552371	448
ERR0166AGR	ENGENHO VELHO 01	AUGER	3.0	769310	8552440	465
ERR0167AGR	ENGENHO VELHO 01	AUGER	7.0	769268	8552508	464
ERR0168AGR	ENGENHO VELHO 01	AUGER	8.0	769231	8552578	471
ERR0169AGR	ENGENHO VELHO 01	AUGER	7.0	769191	8552647	476
ERR0171AGR	ENGENHO VELHO 01	AUGER	3.0	769111	8552785	488
ERR0172AGR	ENGENHO VELHO 01	AUGER	7.0	769070	8552856	492
ERR0173AGR	ENGENHO VELHO 01	AUGER	4.6	769029	8552924	485
ERR0174AGR	ENGENHO VELHO 01	AUGER	2.0	769466	8552328	454
ERR0175AGR	ENGENHO VELHO 01	AUGER	2.4	769417	8552392	454
ERR0176AGR	ENGENHO VELHO 01	AUGER	5.7	769347	8552457	445
ERR0177AGR	ENGENHO VELHO 01	AUGER	3.0	769344	8552533	460
ERR0178AGR	ENGENHO VELHO 01	AUGER	2.6	769301	8552603	468
ERR0179AGR	ENGENHO VELHO 01	AUGER	3.7	769263	8552676	475
ERR0180AGR	ENGENHO VELHO 01	AUGER	3.0	769222	8552744	479
ERR0181AGR	ENGENHO VELHO 01	AUGER	3.0	769183	8552813	474
ERR0182AGR	ENGENHO VELHO 01	AUGER	2.0	769140	8552880	471
ERR0183AGR	ENGENHO VELHO 01	AUGER	3.0	769103	8552953	469
ERR0184AGR	ENGENHO VELHO 01	AUGER	2.7	769062	8553021	470
ERR0185AGR	ENGENHO VELHO 01	AUGER	3.0	769182	8552975	469
ERR0186AGR	ENGENHO VELHO 01	AUGER	3.0	769258	8553003	474
ERR0187AGR	ENGENHO VELHO 01	AUGER	2.5	769022	8553091	478
ERR0188AGR	ENGENHO VELHO 01	AUGER	3.0	768983	8553160	481
ERR0189AGR	ENGENHO VELHO 01	AUGER	4.0	768943	8553230	482
ERR0190AGR	ENGENHO VELHO 01	AUGER	2.0	768868	8553201	480
ERR0191AGR	ENGENHO VELHO 01	AUGER	2.0	768908	8553132	476
ERR0192AGR	ENGENHO VELHO 01	AUGER	3.6	768947	8553063	481
ERR0193AGR	ENGENHO VELHO 01	AUGER	0.5	768832	8553272	483
ERR0194AGR	ENGENHO VELHO 01	AUGER	2.0	768894	8553293	480
ERR0195AGR	ENGENHO VELHO 01	AUGER	2.0	768793	8553341	485
ERR0196AGR	ENGENHO VELHO 01	AUGER	4.0	768831	8553382	475
ERR0197AGR	ENGENHO VELHO 01	AUGER	2.0	768755	8553411	486
ERR0198AGR	ENGENHO VELHO 01	AUGER	2.9	768822	8553436	482
ERR0199AGR	ENGENHO VELHO 01	AUGER	2.9	768713	8553479	483
ERR0200AGR	ENGENHO VELHO 01	AUGER	4.0	768788	8553354	483

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0201AGR	ENGENHO VELHO 01	AUGER	2.7	768448	8553574	485
ERR0202AGR	ENGENHO VELHO 02	AUGER	2.0	769294	8553614	518
ERR0203AGR	ENGENHO VELHO 02	AUGER	4.0	769335	8553545	519
ERR0204AGR	ENGENHO VELHO 02	AUGER	4.0	769376	8553477	517
ERR0205AGR	ENGENHO VELHO 02	AUGER	2.0	769414	8553407	517
ERR0206AGR	ENGENHO VELHO 02	AUGER	1.7	769339	8553378	521
ERR0207AGR	ENGENHO VELHO 02	AUGER	1.5	769309	8553432	523
ERR0208AGR	ENGENHO VELHO 02	AUGER	7.0	769261	8553515	528
ERR0209AGR	ENGENHO VELHO 02	AUGER	7.0	769185	8553490	529
ERR0210AGR	ENGENHO VELHO 03	AUGER	2.0	769531	8553306	527
ERR0211AGR	ENGENHO VELHO 03	AUGER	2.0	769606	8553332	515
ERR0212AGR	ENGENHO VELHO 03	AUGER	2.0	769681	8553361	514
ERR0213AGR	ENGENHO VELHO 03	AUGER	3.0	769757	8553387	516
ERR0214AGR	ENGENHO VELHO 03	AUGER	3.0	769831	8553415	517
ERR0215AGR	ENGENHO VELHO 03	AUGER	2.8	769905	8553441	521
ERR0216AGR	ENGENHO VELHO 03	AUGER	1.5	769980	8553468	524
ERR0217AGR	ENGENHO VELHO 03	AUGER	7.0	770056	8553495	530
ERR0218AGR	ENGENHO VELHO 03	AUGER	2.6	769995	8553546	525
ERR0219AGR	ENGENHO VELHO 03	AUGER	2.8	769866	8553476	519
ERR021AGR	FERRADURA	AUGER	1.0	764559	8551522	387
ERR0220AGR	ENGENHO VELHO 03	AUGER	2.0	769951	8553401	522
ERR0221AGR	ENGENHO VELHO 03	AUGER	3.0	769790	8553452	520
ERR0222AGR	ENGENHO VELHO 03	AUGER	3.0	769714	8553423	519
ERR0223AGR	CABANA	AUGER	2.0	770472	8552582	484
ERR0224AGR	CABANA	AUGER	5.0	770532	8553530	489
ERR0225AGR	CABANA	AUGER	3.0	770540	8553624	484
ERR0226AGR	CABANA	AUGER	5.0	770604	8553670	489
ERR0227AGR	CABANA	AUGER	6.0	777071	8552714	494
ERR0228AGR	CABANA	AUGER	3.0	770500	8552659	484
ERR0229AGR	CABANA	AUGER	2.0	770432	8552616	480
ERR0230AGR	CABANA	AUGER	2.6	770438	8552559	481
ERR0231AGR	CABANA	AUGER	2.0	770392	8552583	479
ERR0232AGR	BOA VISTA 04	AUGER	1.0	773100	8550917	616
ERR0232GR	SAO BENTO	CHANNEL	3.0	763660	8551279	382
ERR0233AGR	BOA VISTA 04	AUGER	2.0	773074	8550994	624
ERR0233GR	SAO BENTO	CHANNEL	2.5	763723	8551465	376
ERR0234AGR	BOA VISTA 04	AUGER	3.0	773063	8551071	625
ERR0234GR	SAO BENTO	CHANNEL	2.6	763904	8551555	380
ERR0235AGR	BOA VISTA 04	AUGER	4.4	773043	8551147	629
ERR0235GR	SAO BENTO	CHANNEL	3.5	764074	8551575	380
ERR0236AGR	BOA VISTA 04	AUGER	5.0	773020	8551224	631
ERR0236GR	SAO BENTO	CHANNEL	3.2	764246	8551470	376
ERR0237AGR	BOA VISTA 04	AUGER	6.0	772972	8551205	631
ERR0237GR	SAO BENTO	CHANNEL	2.9	764485	8551481	357
ERR0238AGR	BOA VISTA 04	AUGER	5.0	772941	8551253	632

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0238GR	SAO BENTO	CHANNEL	3.2	764697	8551486	437
ERR0239AGR	BOA VISTA 04	AUGER	1.0	772989	8551038	623
ERR0239GR	SAO BENTO	CHANNEL	4.1	764714	8551283	394
ERR0240AGR	BOA VISTA 04	AUGER	1.6	772921	8551009	619
ERR0240GR	SAO BENTO	CHANNEL	3.0	764897	8551210	393
ERR0241AGR	BOA VISTA 04	AUGER	1.5	773010	8551916	618
ERR0241GR	SAO BENTO	CHANNEL	2.1	765179	8551250	391
ERR0242AGR	BOA VISTA 04	AUGER	1.8	772953	8550935	614
ERR0242GR	SAO BENTO	CHANNEL	3.3	765380	8551263	390
ERR0243AGR	BOA VISTA 04	AUGER	2.4	773031	8550891	613
ERR0243GR	SAO BENTO	CHANNEL	2.6	765585	8551279	395
ERR0244AGR	BOA VISTA 04	AUGER	2.7	772964	8550840	610
ERR0244GR	SAO BENTO	CHANNEL	1.5	765797	8551314	390
ERR0245AGR	BOA VISTA 04	AUGER	2.0	773047	8550805	608
ERR0245GR	SAO BENTO	CHANNEL	1.6	766004	8551292	386
ERR0246AGR	BOA VISTA 04	AUGER	2.8	773068	8550731	604
ERR0246GR	SAO BENTO	CHANNEL	1.1	766266	8551324	394
ERR0247AGR	BOA VISTA 04	AUGER	3.0	773153	8550642	605
ERR0247GR	SAO BENTO	CHANNEL	1.5	766528	8551353	406
ERR0248AGR	BOA VISTA 04	AUGER	2.0	773171	8550562	600
ERR0248GR	SAO BENTO	CHANNEL	1.8	766928	8551467	420
ERR0249AGR	BOA VISTA 04	AUGER	3.0	773200	8550485	599
ERR0249GR	SAO BENTO	CHANNEL	2.1	767134	8551464	408
ERR0250AGR	BOA VISTA 04	AUGER	2.0	773221	8550408	600
ERR0250GR	SAO BENTO	CHANNEL	2.4	767163	8551633	419
ERR0251AGR	BOA VISTA 05	AUGER	2.0	772930	8550124	622
ERR0251GR	SAO BENTO	CHANNEL	2.4	767288	8551841	420
ERR0252AGR	BOA VISTA 05	AUGER	2.0	772861	8550080	624
ERR0252GR	SAO BENTO	CHANNEL	1.6	767489	8551862	426
ERR0253AGR	BOA VISTA 05	AUGER	1.0	772786	8550050	628
ERR0253GR	SAO BENTO	CHANNEL	1.8	767784	8551905	433
ERR0254AGR	BOA VISTA 06	AUGER	2.0	772945	8549559	585
ERR0254GR	SAO BENTO	CHANNEL	1.9	767889	8551855	429
ERR0255AGR	BOA VISTA 06	AUGER	4.0	773025	8549560	586
ERR0255GR	SAO BENTO	CHANNEL	1.9	768080	8551783	431
ERR0256AGR	BOA VISTA 06	AUGER	3.0	773105	8549559	583
ERR0256GR	SAO BENTO	CHANNEL	2.7	768276	8551739	431
ERR0257AGR	BOA VISTA 06	AUGER	2.8	773184	8549557	584
ERR0257GR	SAO BENTO	CHANNEL	1.1	768489	8551754	430
ERR0258AGR	BOA VISTA 06	AUGER	2.0	773252	8549560	579
ERR0258GR	SAO BENTO	CHANNEL	2.0	768678	8551836	437
ERR0259AGR	BOA VISTA 06	AUGER	5.0	773014	8549512	594
ERR0259GR	SAO BENTO	CHANNEL	1.5	768898	8551908	438
ERR0260AGR	BOA VISTA 06	AUGER	1.0	773033	8549395	600
ERR0260GR	SAO BENTO	CHANNEL	0.8	769070	8552067	451

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0261AGR	PAREDAO	AUGER	2.0	773768	8547537	589
ERR0261GR	SAO BENTO	CHANNEL	1.8	769229	8552129	442
ERR0262AGR	PAREDAO	AUGER	2.0	773798	8547532	588
ERR0262GR	SAO BENTO	CHANNEL	2.0	769458	8552174	454
ERR0263AGR	PAREDAO	AUGER	1.0	773819	8547619	585
ERR0264AGR	PAREDAO	AUGER	2.0	773773	8547585	578
ERR0265AGR	BOA VISTA O2	AUGER	3.0	772478	8548306	748
ERR0265GR	SAO BENTO	CHANNEL	1.1	770037	8552393	470
ERR0266AGR	BOA VISTA O2	AUGER	5.0	772396	8548275	756
ERR0266GR	SAO BENTO	CHANNEL	1.8	770196	8552495	475
ERR0267AGR	BOA VISTA 02	AUGER	2.8	772337	8548253	755
ERR0267GR	SAO BENTO	CHANNEL	1.3	770378	8552543	488
ERR0268AGR	BOA VISTA 02	AUGER	1.0	772342	8548211	753
ERR0268GR	SAO BENTO	CHANNEL	1.2	770537	8552658	490
ERR0269AGR	BOA VISTA 02	AUGER	2.0	772335	8548167	764
ERR0269GR	SAO BENTO	CHANNEL	2.6	770701	8552748	497
ERR0270AGR	BOA VISTA 02	AUGER	4.0	772313	8548171	755
ERR0270GR	SAO BENTO	CHANNEL	1.8	770903	8552789	510
ERR0271AGR	BOA VISTA O2	AUGER	3.0	772408	8548256	752
ERR0271GR	SAO BENTO	CHANNEL	1.2	771085	8552818	524
ERR0272AGR	BOA VISTA 01	AUGER	3.0	771126	8548550	807
ERR0272GR	SAO BENTO	CHANNEL	1.5	771245	8552914	551
ERR0273AGR	BOA VISTA 01	AUGER	7.0	771096	8548623	802
ERR0273GR	SAO BENTO	CHANNEL	2.8	768881	8551720	467
ERR0274AGR	BOA VISTA 01	AUGER	3.0	771071	8548698	800
ERR0274GR	SAO BENTO	CHANNEL	1.5	769089	8551662	456
ERR0275AGR	BOA VISTA 01	AUGER	5.0	771044	8548773	799
ERR0275GR	SAO BENTO	CHANNEL	1.9	769279	8551620	455
ERR0276AGR	BOA VISTA 01	AUGER	4.0	771016	8548848	802
ERR0276GR	SAO BENTO	CHANNEL	1.7	769519	8551565	457
ERR0277AGR	BOA VISTA 01	AUGER	4.0	771108	8548821	801
ERR0277GR	SAO BENTO	CHANNEL	1.6	769691	8551411	455
ERR0278AGR	BOA VISTA 01	AUGER	4.0	771166	8548876	802
ERR0278GR	SAO BENTO	CHANNEL	1.7	769872	8551349	450
ERR0279AGR	BOA VISTA 01	AUGER	6.0	771132	8548654	805
ERR0279GR	SAO BENTO	CHANNEL	1.7	770051	8551285	454
ERR0280AGR	BOA VISTA 01	AUGER	4.0	771133	8548748	802
ERR0280GR	SAO BENTO	CHANNEL	1.6	770220	8551184	452
ERR0281AGR	BOA VISTA 01	AUGER	2.7	771195	8548799	801
ERR0281GR	SAO BENTO	CHANNEL	1.8	770225	8550992	452
ERR0282AGR	BOA VISTA 01	AUGER	4.0	771257	8548848	799
ERR0282GR	SAO BENTO	CHANNEL	1.8	770192	8550753	456
ERR0283AGR	BOA VISTA 01	AUGER	4.0	771237	8548906	799
ERR0283GR	SAO BENTO	CHANNEL	2.0	767222	8551984	439
ERR0284GR	SAO BENTO	CHANNEL	1.3	767222	8552206	441

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0285AGR	BOA VISTA 01	AUGER	4.0	771015	8548654	787
ERR0285GR	SAO BENTO	CHANNEL	1.1	767225	8552409	450
ERR0286GR	SAO BENTO	CHANNEL	1.3	767290	8552599	464
ERR0287GR	SAO BENTO	CHANNEL	1.2	767278	8552891	517
ERR0288GR	SAO BENTO	CHANNEL	1.8	767109	8552806	488
ERR0289GR	SAO BENTO	CHANNEL	1.5	767086	8552724	469
ERR0290AGR	BOA VISTA 01	AUGER	2.0	770991	8548724	808
ERR0290GR	SAO BENTO	CHANNEL	1.3	767118	8552625	463
ERR0291AGR	BOA VISTA 01	AUGER	2.4	771233	8548929	802
ERR0291GR	SAO BENTO	CHANNEL	1.1	767190	8552440	456
ERR0292GR	SAO BENTO	CHANNEL	1.0	767301	8552930	543
ERR0293GR	SAO BENTO	CHANNEL	2.2	770090	8550565	470
ERR0294GR	SAO BENTO	CHANNEL	2.0	768193	8551946	451
ERR0295AGR	BOA VISTA 02	AUGER	2.0	772292	8548304	760
ERR0295GR	SAO BENTO	CHANNEL	3.7	768336	8552085	454
ERR0296AGR	BOA VISTA 02	AUGER	3.0	772208	8543113	765
ERR0296GR	SAO BENTO	CHANNEL	2.5	768245	8552269	456
ERR0297AGR	BOA VISTA 02	AUGER	4.0	772127	8548335	771
ERR0297GR	SAO BENTO	CHANNEL	2.7	768273	8552461	462
ERR0298AGR	BOA VISTA SUL	AUGER	4.0	772309	8547691	787
ERR0298GR	SAO BENTO	CHANNEL	1.1	768221	8552682	463
ERR0299AGR	BOA VISTA SUL	AUGER	3.0	772270	8547761	784
ERR0299GR	SAO BENTO	CHANNEL	2.0	768187	8552895	469
ERR0300AGR	BOA VISTA SUL	AUGER	4.0	772251	8547838	779
ERR0300GR	SAO BENTO	CHANNEL	1.4	768100	8553108	490
ERR0301AGR	BOA VISTA SUL	AUGER	2.0	772229	8547915	774
ERR0301GR	SAO BENTO	CHANNEL	1.3	767934	8553242	530
ERR0302AGR	BOA VISTA SUL	AUGER	2.0	772241	8547993	770
ERR0302GR	SAO BENTO	CHANNEL	0.9	767811	8553399	571
ERR0303AGR	BOA VISTA SUL	AUGER	4.0	772301	8547612	792
ERR0303GR	SAO BENTO	CHANNEL	0.8	768373	8551377	459
ERR0304AGR	BOA VISTA SUL	AUGER	5.0	772226	8547567	796
ERR0304GR	SAO BENTO	CHANNEL	1.1	768540	8551238	463
ERR0305AGR	BOA VISTA 03	AUGER	3.0	772144	8549210	741
ERR0305GR	SAO BENTO	CHANNEL	1.8	768603	8551045	468
ERR0306AGR	BOA VISTA 03	AUGER	4.0	772080	853266	743
ERR0306GR	SAO BENTO	CHANNEL	3.3	768689	8550857	489
ERR0307AGR	BOA VISTA 03	AUGER	5.0	772019	8549317	747
ERR0307GR	SAO BENTO	CHANNEL	1.6	768531	8550745	497
ERR0308AGR	BOA VISTA 03	AUGER	3.0	771995	8549240	744
ERR0308GR	SAO BENTO	CHANNEL	0.7	768532	8550960	475
ERR0309AGR	BOA VISTA 03	AUGER	3.0	771973	8549164	743
ERR0309GR	SAO BENTO	CHANNEL	1.4	768334	8551556	446
ERR0310AGR	BOA VISTA 03	AUGER	3.0	771949	8549086	745
ERR0310GR	SAO BENTO	CHANNEL	1.6	768304	8551387	460

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
ERR0311AGR	BOA VISTA 03	AUGER	5.9	771955	8549014	749
ERR0311GR	SAO BENTO	CHANNEL	0.5	768153	8551206	479
ERR0312AGR	BOA VISTA 03	AUGER	3.0	772043	8549186	743
ERR0312GR	SAO BENTO	CHANNEL	1.5	768136	8551266	472
ERR0313AGR	BOA VISTA 03	AUGER	2.0	771928	8549288	740
ERR0313GR	SAO BENTO	CHANNEL	0.9	768003	8551203	494
ERR0314AGR	BOA VISTA 03	AUGER	2.0	771856	8549324	745
ERR0314GR	SAO BENTO	CHANNEL	0.9	769503	8551291	459
ERR0315AGR	BOA VISTA 03	AUGER	2.0	771788	8549365	751
ERR0315GR	SAO BENTO	CHANNEL	0.8	769442	8551094	471
ERR0316AGR	BOA VISTA 03	AUGER	3.0	771707	8549362	757
ERR0317AGR	BOA VISTA OESTE	AUGER	2.0	771769	8549160	755
ERR0318AGR	BOA VISTA OESTE	AUGER	2.0	771689	8549149	766
ERR0319AGR	BOA VISTA OESTE	AUGER	4.0	771621	8549094	771
ERR0320AGR	CENTRO SUL	AUGER	6.0	772705	8547750	761
ERR0321AGR	CENTRO SUL	AUGER	1.0	772767	8547807	768
ERR0322AGR	CENTRO SUL	AUGER	4.0	772835	8547842	757
ERR2000GR	SAO BENTO	CHANNEL	1.9	763803	8551535	376
ERR2001GR	SAO BENTO	CHANNEL	1.8	763909	8551710	373
ERR2002GR	SAO BENTO	CHANNEL	0.8	763972	8551925	379
ERR2004GR	SAO BENTO	CHANNEL	1.1	764057	8552321	391
ERR2006GR	SAO BENTO	CHANNEL	0.4	764246	8552721	400
ERR2007GR	SAO BENTO	CHANNEL	1.2	764329	8552916	401
ERR2008GR	SAO BENTO	CHANNEL	1.2	764566	8552913	409
ERR2009GR	SAO BENTO	CHANNEL	1.0	764770	8552826	423
ERR2010GR	SAO BENTO	CHANNEL	0.8	764902	8552864	417
ERR2011GR	SAO BENTO	CHANNEL	1.8	765073	8552726	421
ERR2012GR	SAO BENTO	CHANNEL	1.3	765291	8552724	442
ERR2013GR	SAO BENTO	CHANNEL	1.2	765405	8552899	452
ERR2014GR	SAO BENTO	CHANNEL	1.1	765426	8553095	463
ERR2015GR	SAO BENTO	CHANNEL	1.1	765569	8553264	477
ERR2016GR	SAO BENTO	CHANNEL	0.7	765775	8553286	469
ERR2017GR	SAO BENTO	CHANNEL	1.6	765968	8553290	477
ERR2018GR	SAO BENTO	CHANNEL	1.4	766138	8553178	490
ERR2019GR	SAO BENTO	CHANNEL	1.1	766073	8552975	503
ERR2020GR	SAO BENTO	CHANNEL	2.0	766109	8553320	476
JC-T1	FAZENDINHA	TRENCH	20.0	768238	8551968	400
JC-T2	FAZENDINHA	TRENCH	20.0	768216	8551936	400
JC-T3	FAZENDINHA	TRENCH	21.0	768220	8551856	400
JC-T4	FAZENDINHA	TRENCH	17.0	768129	8551942	400
P.MA.T PÇ10	DOIS RANCHOS	PIT	1.4	764659	8551340	400
P.MA.T PÇ11	DOIS RANCHOS	PIT	3.7	764778	8551360	400
P.MA.T PÇ12	DOIS RANCHOS	PIT	3.7	764798	8551392	400
P.MA.T PÇ13	DOIS RANCHOS	PIT	4.2	764800	8551423	400
P.MA.T PÇ14	DOIS RANCHOS	PIT	4.8	764805	8551458	400

Type_ID	Prospect	Type	Length	UTM_X	UTM_Y	Elevation
P.MA.T PÇ15	DOIS RANCHOS	PIT	4.1	764788	8551471	400
P.MA.T PÇ16	DOIS RANCHOS	PIT	4.9	764764	8551500	400
P.MA.T PÇ17	DOIS RANCHOS	PIT	5.0	764746	8551500	400
P.MA.T PÇ18	DOIS RANCHOS	PIT	3.7	764735	8551484	400
P.MA.T PÇ19	DOIS RANCHOS	PIT	3.3	764731	8551467	400
P.MA.T PÇ20	DOIS RANCHOS	PIT	1.3	764728	8551448	400
P.MA.T PÇ21	DOIS RANCHOS	PIT	2.6	764717	8551438	400
P.MA.T PÇ22	DOIS RANCHOS	PIT	2.8	764710	8551426	400
P.MA.T PÇ23	DOIS RANCHOS	PIT	1.7	764699	8551449	400
P.MA.T PÇ5	DOIS RANCHOS	PIT	1.0	764752	8551297	400
P.MA.T PÇ6	DOIS RANCHOS	PIT	2.5	764741	8551282	400
P.MA.T PÇ7	DOIS RANCHOS	PIT	1.5	764729	8551268	400
P.MA.T PÇ8	DOIS RANCHOS	PIT	2.4	764715	8551250	400
P.MA.T PÇ9	DOIS RANCHOS	PIT	2.5	764701	8551222	400
T1	PRAIAO 01	TRENCH	11.0	767353	8551180	400
T2	PRAIAO 01	TRENCH	10.0	767053	8551112	400
T3	PRAIAO 01	TRENCH	22.0	767133	8551364	400
T4	PRAIAO 01	TRENCH	29.0	767334	8551220	400
T5	PRAIAO 01	TRENCH	23.0	767367	8551220	400
T6	PRAIAO 01	TRENCH	22.0	767289	8551156	400
T7	PRAIAO 01	TRENCH	16.0	767299	8551144	400
T8	PRAIAO 01	TRENCH	20.7	767339	8551140	400
T9	PRAIAO 01	TRENCH	13.0	767191	8551284	400

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.*	• Mata Azul auger: Auger geochemical sampling was generally completed on 1 metre samples respecting the lithological contacts, which were quartered in the field and approximately 4kg samples were dispatched to an independent external lab: 2010 to the ACME Labs and from 2011 to 2013 to ALS Chemex lab. • In Trench and Pit sampling, the samples are collected in a vertical channel in the wall. Channels had a 10cm width and 5cm in depth with samples collected every 1 metre, respecting the lithological contacts. All materials are collected in bags and sent to the external lab. The pits and trenches are opened with an excavator. • In channel sampling, the channel has done in natural slopes with 10cm width and 5cm depth with samples every 1 metre, respecting the lithological contacts. All materials are collected in bags and sent to the external lab. • Sampling was supervised by Mata Azul geologists or field assistants who selected the sampling zones, noting the difference between alluvial, colluvial and saprolite.
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 handheld auger with a 5" auger bit. The drilling is an 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 Mata Azul 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. It is assumed the logging was not done to a level that would support a Mineral Resource Estimate unless significant check drilling was completed in order to confirm the results. • Qualitative logging only, no systematic photography • All auger drilling is logged onsite by Mata Azul 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 Mata Azul Geologists and technicians. • Auger sampling is completed on site. Samples are collected from a tarp around the mouth of the hole and then each sample is quartered, and a quarter is taken for analysing at an independent lab. • In Trench and Pit sampling, the samples are collected in a vertical channel in the wall. The channel has 10cm width and 5cm depth with samples every 1 metre, respecting the lithological contacts. Samples are collected from a tarp secured below the sample interval and then each sample is quartered, and a quarter is taken for analysing at an independent lab. In channel sampling, the channel has done in natural slopes with 10cm width and 5cm depth with samples every 1 metre, respecting the lithological contacts. Samples are collected from a tarp secured below the sample interval and then each sample is quartered, and a quarter is taken for analysing at an independent lab. • 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.*	• Until 2010 the samples were analysed in the ACMELabs, and from 2011 to 2013 were sent to assays in the ALS Chemex lab. The ACMELabs analytical procedures include four acid digest for the sample preparation and assays by IPC-MS, according to standard industry practices. In the ALS Chemex, the lab sample preparation includes sample crushing with 70% <2mm, split, and pulverised to 85% <75µm. The samples were analysed using the methods ICP-MS (ME-MS61r). The elements analysed were Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn and Zr. • No duplicate samples were taken by Mata Azul. REE Standards (OREAS 146) (38 samples in the database) and certificate blanks (32 samples in the database) were inserted into the samples submitted to the labs. 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 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>
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</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>

Mata Azul used GPS to locate and record the auger, trench, Pit and channel sample locations. No auger drillholes 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.
None of the results reported will be considered in a 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>
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Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• The samples (auger, pit, trench and channels) were collected and split (1/4) in the field and the remaining material was discarded. The quarter was sent to the ALS Chemex lab from 2011 to 2013, the pulps returned for storage in Palmeiropolis -TO.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• In 2020, independent Brazilian consultants GE21 carried out sampling in 13 exploration pits, 10 of which were sampled in pits opened by GE21 and 3 in pits from the previous campaign (Mata Azul). Additionally, a natural exposure of saprolite was sampled. The pits opened in the 2020 campaign were carried out near to auger holes drilled by Mineração Mata Azul, in 2004. In addition, twin pits to the auger's drills of the 2020 campaign were opened. The results were considered similar to the earlier results.

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

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