

Diamond Drilling to Commence on Untested Priority Cu-Zn Targets at Palma

HIGHLIGHTS

- Delineation of a multiple new high-priority untested copper-zinc prospects at the Palma Volcanogenic Massive Sulphide ("VMS") Cu-Zn Project ("Palma").
- Pipeline of new prospects have been systematically refined and prioritised during CY23 through mapping, geophysics, soil sampling and auger drilling.
- Initial diamond drilling program of up to 5,000m set to begin in early May.
- Palma hosts VMS mineralisation which is polymetallic and can typically cluster, Alvo's district scale landholding hosts two JORC Resource deposits and a brownfields discovery made in late 2023.
 - C1 and C3 Deposits host an Inferred Mineral Resource Estimate (MRE) of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag.
 - The updated MRE will include approximately 21,500m diamond drilling at C1 and C3.
 - Maiden MRE is being prepared for C4, expected to be reported in combination with an updated MRE for C1 and C3 due in Q2 CY24.
- Detailed and multi-disciplinary exploration has refined three initial high priority prospects:
 - **Urubu:** the potential faulted northern extension of C3 Deposit. Urubu boasts a 1km long EM conductor, strong co-incident geochemistry and IP Chargeability.
 - <u>Anta:</u> 3km soil anomaly, parallel to mapped geological contacts, co-incident with EM, IP and auger drilling.
 - <u>C4-NE:</u> the recently announced Prospect adjacent to Alvo's C4 Brownfields discovery. Strong IP Chargeability on the right geological trend to C4.
- Exploration across the belt will continue as drilling is underway with additional work expected to advance prospects TG-01, C5, C5N and Anta SE to drill ready status.

Alvo Minerals Limited (ASX: ALV) ("**Alvo**" or "the **Company**") is pleased to announce the initiation of a major maiden diamond drilling program across several regional untested targets at the Palma VMS Project ("**Palma**" or "**the Project**"). Ongoing exploration over the last years at Palma has advanced, refined and prioritised multiple drill ready prospects and Alvo is excited about the potential these new prospects to become new discoveries.

REGISTERED ADDRESS

Alvo Minerals Limited ACN 637 802 496

Units 8-9, 88 Forrest Street Cottesloe WA 6011 Australia www.alvo.com.au

MANAGEMENT TEAM

Graeme Slattery – Non-Executive Chairman Rob Smakman – Managing Director Beau Nicholls – Non-Executive Director Mauro Barros – Non-Executive Director

E: info@alvo.com.au P: +61 3 9692 7222

PROJECTS

Palma VMS Cu/Zn Project Bluebush Ionic Clay REE Project Ipora REE Project

Shares on Issue115,987,457ASX CodeALV

1



Rob Smakman, Alvo's Managing Director commented:

"This maiden drill program to test a pipeline of untested VMS prospects is our most exciting to date, having been the culmination of countless hours of detailed data collection and interpretation to refine and priorities the large number of targets across the >70km of prospective strike at Palma.

"Our team has worked in the background over the past 18 months, bringing these new prospects to a point where drilling is the next logical step to confirm a discovery. Each of the chosen prospects has endured multiple phases of interrogation and the drillhole locations have been carefully chosen for maximum chance at delivering a new discovery.

"Our broader exploration model at Palma has always been to make discoveries of high-grade copper and zinc deposits on our district scale land package in a proven VMS belt. We believe this puts Alvo in a unique position as a junior explorer.

"VMS Districts are known to host clusters of deposits and we are confident there are more to be found just below the surface at Palma- exploration effectively stopped over 40 years ago. Alvo has the advantage of a motivated, credentialled and funded team that has utilised the best modern equipment and techniques available.

"We look forward to delivering on our strategy of discovery and adding to our already significant JORC compliant Inventory of Copper and Zinc at Palma."



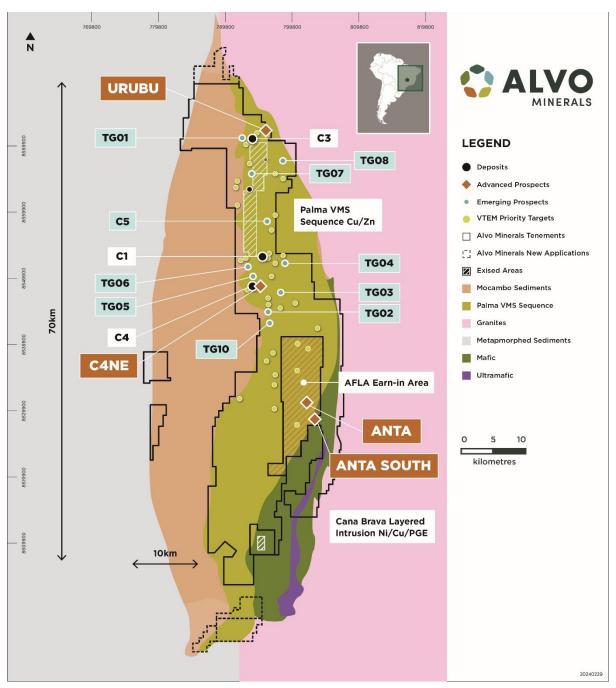


Figure 1: Palma Project – District Scale VMS with known deposits- C1 and C3 along with C4 Prospect (Maiden MRE pending) and drill-ready Prospects Urubu, Anta and C4-NE. Emerging prospects included in light blue.

Anta & Anta South Prospect

Anta and Anta South are new prospects towards the south of the Palma Project. Historically explored by BHP Billiton (ASX: BHP) and more recently by Votorantim (Brazilian mining and exploration company) for large scale copper, no historical data is available for the area, however several old drill collars at Anta and Anta South have been found, close to where Alvo's ongoing exploration has highlighted significant co-incident anomalies. Alvo has managed to clear one of the historical holes at Anta South and completed a DHEM survey to a depth of 170m on the hole. Interpretation is awaited for this DHEM survey, however it is expected to further refine the targeting of this area of Anta.



Anta is the most advanced of the two prospects, first highlighted by a VTEM anomaly, over which Alvo collected several campaigns of soil samples and mapping. Anta presents as a very large and linear soil anomaly (~3km long and 500m wide) where geological mapping has highlighted parallel contacts between amphibolite and schist units, along with several mineralised gossans in the area.

Follow-up auger drilling across the anomaly confirmed and tightened the soil anomalies and multiple FLEM and IP surveys across Anta has further narrowed the broad anomaly into a central trend approximately 1.5km long (see Figure 2). The FLEM surveys in particular have highlighted multiple conductors aligned with the IP, soil results, auger drilling and geological mapping.

Anta South exploration is still in progress, however expectation is that in coming weeks, the final FLEM and IP surveys will be complete and available to complement the geochemical sampling and Auger drilling currently underway.

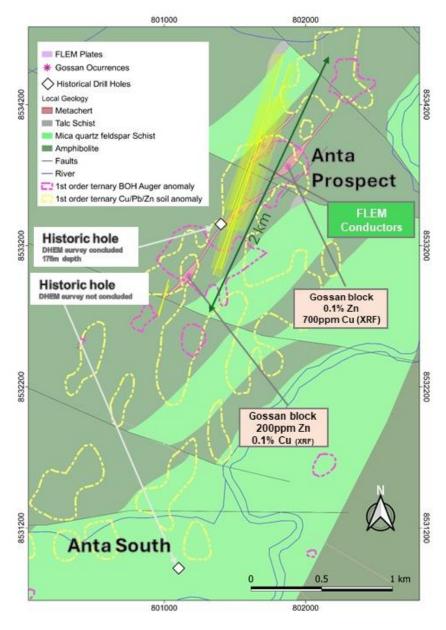


Figure 2: Prospectivity mapping at Anta and Anta South prospects.



Urubu Prospect

The Urubu Prospect is the interpreted faulted northeastern extension of the copper rich C3 Deposit. Located ~300m NE from C3, it has coincident EM, IP and auger geochemistry. Planned drilling at Urubu will target the FLEM conductivity plates that have been modelled after several FLEM surveys. These are generally co-incident with IP chargeability highs and auger geochemistry anomalous drilling (see Figures 3 & 4).

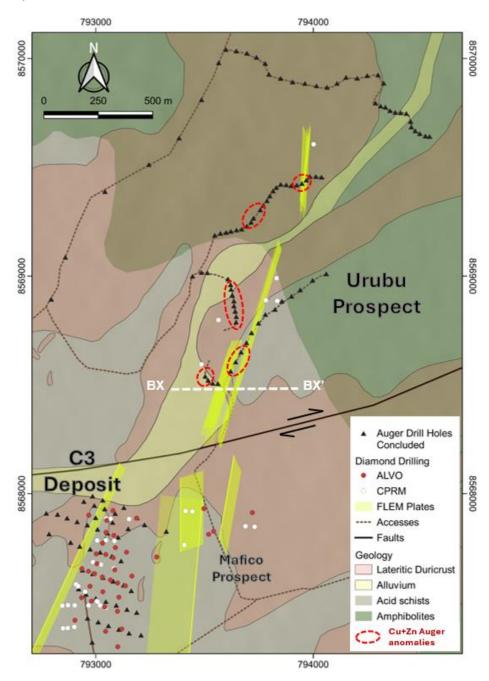


Figure 3: Geological map of Urubu Prospect and C3 deposit.



The Brazilian Geological Survey (CPRM) drilled several holes around the Urubu area – none of which intersect the interpreted FLEM Conductivity plates from Alvo's surveys. These holes have been located within the CPRM core library and an Alvo geologist is currently re-logging them. Several of these holes have also been located on the ground and attempts are being made to clean the holes to allow a downhole EM probe to be lowered- potentially allowing for a DHEM survey to be completed. If this is possible (along with the expected re-logging of the CPRM holes), it could enhance the drill planning of Urubu.

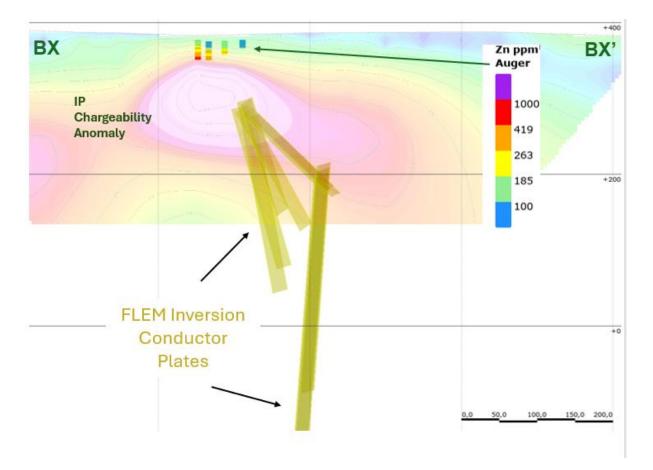


Figure 4: Urubu Cross-section showing IP Chargeability, auger drilling results (Zn only) and the interpreted EM conductivity plates.



C4-NE Prospect

The C4-NE prospect presents an exciting undrilled opportunity for Alvo to make a discovery within 300m of the C4 Prospect (see Figure 5). The work completed to date has included Alvo's multiple disciplinary approach to exploration advancing C4-NE to a point where drilling is the logical next step. The prospect has been developed despite being a blind anomaly (no outcrop) and utilises Alvo's in-house team and equipment along with the knowledge of the Palma VMS system, developed over the last 2 years of exploration across the district.

The work completed to date includes:

- **Geological mapping:** Careful attention is paid to lateritic cover which can complicate geochemical anomalies. Areas are also scanned for gossanous outcrops- being direct indicators of remnant sulphide mineralisation. Some anomalous gossans were mapped in the region, but none appear to be directly related to the mineralisation found at this stage.
- Soil Geochemistry: Soil sampling by both the CPRM (Brazilian Government Geological Survey) and Alvo covers the area, and detailed interpretation using proprietary techniques has located a co-incident Cu, Zn and Pb anomaly, closely associated with the IP survey described below.

Auger drilling across the prospect can penetrate the laterite cover and provide a more accurate geochemical test, and the same proprietary interpretation techniques have also highlighted a first order anomaly on the bottom of hole sample.

• **Geophysical Surveys**: Pole-dipole IP lines arranged across the area in order to identify areas of high chargeability and low resistivity. 3D interpretation of the chargeability anomalies appears to be strongly coincident with the disseminated mineralisation at C4 and the anomaly at C4-NE appears to extend from C4.

FLEM surveys completed showed weak electromagnetic response and the signal was unable to be interpreted into a conductor plate.

Alvo intends to target near surface mineralisation with 1-3 holes planned in the initial program, additional drilling will be planned on success.



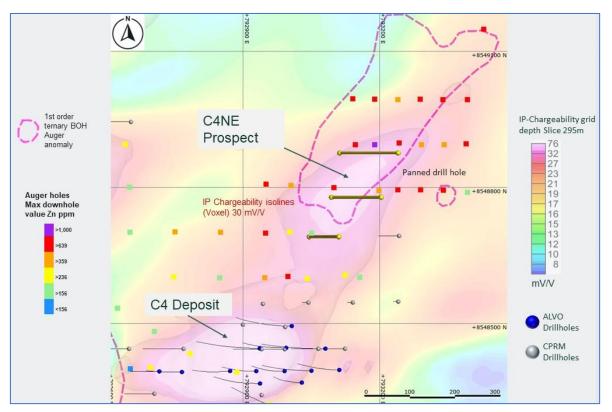


Figure 5: C4-NE location and prospectivity mapping. 3D chargeability anomaly extends from towards the northeast of C4, indicating potential for broad disseminated mineralisation. Soils and 'bottom of hole auger' are represented as 1st order anomalies.

The VMS Exploration Model

Volcanogenic massive sulphide (VMS) ore deposits are associated with submarine volcanic activities and precipitation of metals from high temperature acid aqueous solutions. The deposit style consists in generally stratiform accumulations of polymetallic massive and disseminated sulphides, that form at or below the sea floor. The host rock can be the hydrothermally altered volcanic rock or sedimentary units intercalated within volcanic rocks. The VMS deposits are polymetallic, contain variable amounts of Cu, Zn, Pb, subordinately Ag, Au, Cd, Se, Sn, Bi and other metals.

VMS deposits generally consist of two parts: a mound shaped, massive sulphide tabular lens, which accounts for the major part of the sulphide minerals, and discordant vein-type or disseminated sulphide mineralization, called the stringer or stockwork zone, located within an envelope of altered footwall volcanic or sedimentary rocks. In some deposits, the stratiform massive sulphide lens comprises the entire economic deposit, but significant quantities of ore are also mined from the stockwork zone. VMS may occur in multiple ore bodies on a single stratigraphic level or rarely stacked at multiple levels. VMS are regularly spaced on 5-20km and closely clustered lenses occur in some cases.

The Palma VMS District display many of the characteristics typical of VMS districts around the world (see Figure 6). Other districts of similar scale have generally had significantly more exploration by many companies over decades and have multiple significant deposits resulting from the exploration.



At Palma, where Alvo has the majority of the district (>850km²) under 100% ownership, modern exploration was completed mainly by the Brazilian Geological Survey who discovered and explored for around 10 years from the mid 1970's. The Deposits discovered (C1, C2, C3 and C4) during that period were basically outcropping. Alvo has already added significantly to the exploration in the District by using a systematic approach with the most modern equipment and techniques, including the geophysical and geochemical surveys designed to discover new deposits 'under cover' (see Figure 7).

The Company is excited about testing these targets with drilling, which is considered the ultimate test for any exploration prospect. Any one of these prospects could be a 'company making' discovery and contribute to a growing mining inventory at Palma.

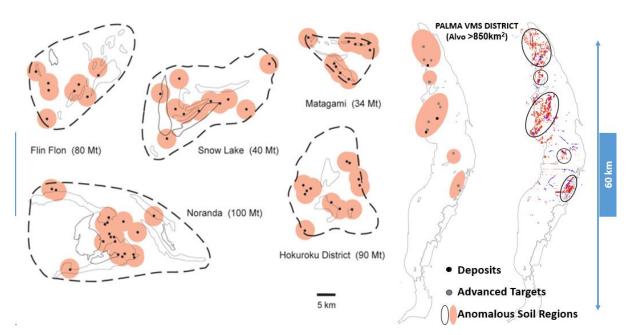


Figure 6: VMS Districts from around the world with historic mined tonnages, compared to the footprint of the Palma Project- with known Deposits and Advanced Prospects (after Galley et al 2007).



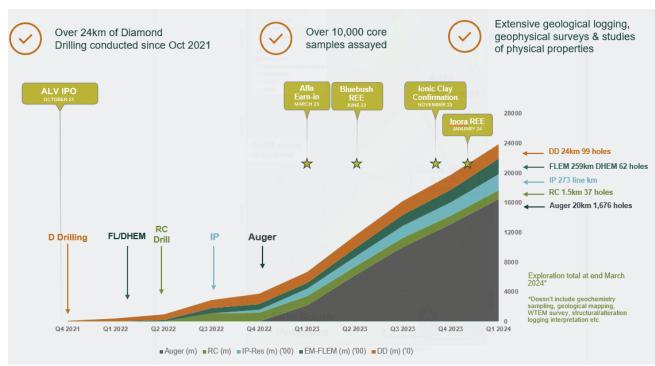


Figure 7: Exploration statistics from Alvo's work in Brazil since IPO in 2021.

*CuEq & ZnEq: Copper and Zinc Equivalent Calculation The copper and or zinc equivalent grades (CuEq & ZnEq) are based on copper, zinc, silver, lead and gold prices of US\$7,782/t Copper, US\$3,189/t Zinc, US\$1,980/t Lead, US\$19.30/oz Silver, and US\$1,696/oz (price deck based on 3-month LME as 7/11/22) Recoveries of 81%, 83%, 70%, 50% and 50% respectively (recoveries based on ASX Metallurgical testwork released 9 November 2022). The copper equivalent calculation is as follows: Cu Eq = Cu grade% * Cu recovery + ((Pb grade % * Pb recovery % * (Pb price \$/t/Cu price\$/t)) + (Zn grade % * Zn recovery % * (Zn price \$/t/Cu price \$/t)) + (Ag grade g/t /31.103 * Ag recovery % * (Ag price \$/oz/Cu price \$/t) + (Au grade g/t /31.103 * Au recovery % * (Au price \$/oz/Cu price \$/t). Reported on 100% Basis.

Next Steps and Upcoming News flow

- Maiden diamond drill program to test new high-priority regional targets underway at Palma;
 - Urubu Prospect- Imminent
 - o C4-NE Imminent
 - o Afla Prospect Imminent
- FLEM and IP surveys on regional targets across Palma Ongoing
- Geochemical sampling across known exploration prospects across Palma- Ongoing
- Maiden Mineral Resource Estimate update for C4 prospect Q2 CY2024
- Mineral Resource Estimate update for C3 and C1 deposits Q2 CY2024
- Auger Drilling at Bluebush REE Project Underway
- Results from Bluebush REE auger and diamond drilling expected shortly Imminent and
 Ongoing



ENQUIRIES

For more information contact:

Rob Smakman Managing Director Alvo Minerals Limited rob@alvo.com.au +61 402 736 773 Media or broker enquiries:

Fiona Marshall

Senior Communications Advisor White Noise Communications fiona@whitenoisecomms.com +61 400 512 109

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

References to Previous ASX Announcements

Reference in this report is made to previous announcements including:

As reported in the announcement "Prospectus" dated 18 October 2021 issued by Alvo Minerals Limited As reported in the announcement "Preliminary Metallurgical Testwork Indicates Excellent Recoveries" dated 9 November 2022 issued by Alvo Minerals Limited

As reported in the announcement "New VMS Discovery at Palma Delivers Broadest Base Metals Intercept to date" dated 1 August 2023 issued by Alvo Minerals Limited

In relation to the MRE and other exploration results or estimates cross-referenced above, 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.

Forward Looking Statements

Statements regarding plans with respect to Alvo's exploration programs 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.



ABOUT ALVO

Alvo Minerals (ASX: ALV) is an active critical minerals exploration company, with an established exploration base in central Brazil.

The Company was founded to explore for base and precious metals, hunting high-grade copper and zinc at its Palma Project, adjacent to the Company's Bluebush REE Project. The Palma Project has a JORC 2012 Inferred Mineral Resource Estimate of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag.

Alvo is also exploring for Rare Earth Elements (**REE**) at the Bluebush Ionic Clay REE Project in Central Brazil. Bluebush is adjacent to and along strike from the privately-owned Serra Verde Ionic Clay REE Project, which is the only Ionic Clay REE project in commercial production outside of China.

Alvo's Ipora REE Project is an exciting greenfields exploration project targeting the Iporá alkaline intrusive complex, considered highly prospective for REEs, potentially of the highly valued ionic clay type. The Ipora REE Project is located in the State of Goias and is on similar geology and located adjacent to the PCH REE Project (Appia Rare Earths and Uranium Corporation, CSE:API).

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.



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. 	
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, photography of the spill piles in the field are recorded. 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 Alvo's core shed facility. A representative sample of ~10% are sent to an independent lab (SGS Geosol) for checking against the XRF results. 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. 	 SGS Geosol Laboratorios Ltda (SGS) are used for multi element on auger samples. The lab techniques described below are considered appropriate for the style of mineralisation at the Palma Project Samples are dried, crushed until 75% passing 3mm, homogenised and split with 250-300g pulverised until 95% passing 150# Multi element (including Cu, Zn, Pb and Ag) are determined by multi-acid digestion and ICP-OES. Sample results over detection limit (1% Zn, Cu, Pb or 100 g/t Ag) are re-tested using a higher lower detection limit. Samples above 5% Pb are re-tested using a higher detection limit. The QA/QC data includes standards, blanks, duplicates and laboratory checks. Alvo inserts internationally certified standards at a rate of 1 in 10 samples, blanks 1 in ~25 samples. Duplicates are selected from the crushed samples at a rate of 1 in 20 samples and follow the same assaying procedure. Alvo has reviewed the QA/QC data for all lab samples and are satisfied the results are within acceptable limits Alvo has also compared the accuracy of the XRF assays compared to the Lab assay results and found them to be relatively acceptable for interpretation as anomalies.



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 No significant tables are reported as these are considered geochemical samples and are important from a local anomaly basis only. No twinned holes are being reported. All data is received from the laboratories and uploaded into excel spreadsheets where it is checked and uploaded into cloud storage. Once QA/QC procedures have been completed, the data is loaded into an Access database. No adjustments to the data were made.
Location of data points	 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. 	 Alvo is using GPS to locate and record the soil sample locations and auger drillhole collar locations. All location data has been recorded SIRGAS 2000 UTM zone 22S. Topographic control is adequate for the exploration at Palma.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Auger drillholes are variably spaced with holes typically 50-400m apart on section (which follow open access and hence may not be perpendicular to the anomaly orientation). Drill sections are variably spaceda Drill spacing and assay methodology is considered insufficient to estimate a Mineral Resource under the JORC 2012 guidelines.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Drilling was planned along open access- which can include roads, fence lines and open fields. Where possible, drill lines were oriented to intercept anomalies as perpendicular as possible. No bias is believed to have occurred. Sampling lengths were generally 1-2m downhole, unless there was a specific geological control required by the geologist. Mineralisation orientation is unknown and therefore true widths are unknown.
Sample security	The measures taken to ensure sample security.	 Samples are transported from the field daily to a locked facility by Alvo staff. Samples are prepared in the coreshed by Alvo staff and transported to the lab by a dedicated transport company.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 No audits of the techniques or data has been undertaken at this stage.



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 C4NE prospect is located on exploration tenement 860.317/1984 and the Urubu Prospect is located on exploration tenement 800.744/1978 which are a part of the agreement Alvo has with the CPRM (Geological Survey of Brazil). Alvo has the right to explore and eventually transfer 100% of this and other tenements, subject to several staged payments, drilling and payment of 1.71% royalty (above statutory government royalties). The Anta and Anta South prospects are located on exploration tenements 860.909/2018 and 860.332/2020 which are a part of an earn-in agreement with Afla Mineracao Itda. Alvo is required to drill a minimum of 1,000m of diamond before September 2024 to earn 50% of the earn-in areas (which include another 3 exploration tenements). Alvo is confident the tenements are in good standing and no known impediments exist for further exploration or eventual mining, apart from normal statutory reporting, local access agreements and state and federal approvals.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Exploration was mainly completed by the CPRM at C4NE. The work was completed to a high standard for the time and Alvo was able to estimate an inferred JORC compliant Mineral Resource Estimate based on the information and work completed by the CPRM (on the C1 and C3 deposits). The interpretation of this historical work has guided some of the drilling and exploration to date which has been successful in upgrading and extending the geological potential. Work at Anta and Anta South was allegedly completed by BHP and Voltorantim, who were exploraing for Copper in the 1980's and early 2000's. No firm data is available from this historic exploration campaigns.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Palma polymetallic project is located principally in the Palmeiropolis volcano-sedimentary sequences (PVSS), composed of a series of bimodal volcanic rocks and associated sedimentary units, regionally metamorphosed to amphibolite facies. The mineralisation is of a Volcanogenic Massive Sulphide (VMS) type, occurring at or near the contact between a metamafic volcanic unit and meta-sedimentary schist and comprises pyrite, pyrrhotite, sphalerite, chalcopyrite, galena, occurring as disseminated, brecciated and massive form.
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. 	 No drilling is being reported. Information is excluded as the anomalies reported are relative rather than absolute.



Criteria	JORC Code explanation	Commentary
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. 	No specific results are reported.
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'). 	No relationships are known
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.	 No specific results are being reported. Maps are prepared showing the higher zones of anomalism only, in order to highlight targets for further exploration.
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. 	 Extensive exploration data and information has been completed at the Palma Project and previously reported. A summary is provided below; 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. In 2008, private groups Lara Minerals and Voltorantim SA flew an heliborne VTEM survey across the area which highlighted multiple conductors. These may be related to massive sulphide accumulations, however most of these potential conductors were not followed up. Drilling: Drilling by the CPRM was completed in the '70's and '80's and is included in this summary for the C1 and C3 prospects. CPRM also drilled other targets at C2, C4 and C5 where they discovered mineralisation. CPRM also drilled several targets that did not intersect economic mineralisation. JICA drilled 7 holes in



Criteria	JORC Code explanation	Commentary
		the 1980's mainly around the C4 target. Lara/Votorantim drilled 11 holes into targets they defined from the VTEM survey.
		• Metallurgical testwork: The CPRM completed several phases of metallurgical testwork including bench and pilot plant scale. This testwork is summarised in the Prospectus issued by Alvo Minerals Ltd in 2021. No testwork was completed on C4 mineralisation to date.
		• Alvo estimated a JORC compliant MRE for the C1 and C3 deposits (2021).
		 Ground geophysics has been completed by Alvo across these prospects. Surveys have included fixed loop electromagnetic surveys (FLEM), Downhole electromagnetic surveys (DHEM) and Induced Polarisation Surveys (IP).
Further work	• The nature and scale of planned	Alvo will continue diamond drilling across the wider Palma Project
	further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Alvo will continue exploring other prospects in order to upgrade them to drill ready prospects. There are multiple prospects that have high geological probability of hosting mineralised sulphides.
• 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 has in-house electromagnetic and Induced polarisation survey equipment and is performing FLEM, DHEM and IP surveys. It is expected these surveys will enhance the drilling program by delineating possible extensions of the highly conductive mineralisation. 	
	 Alvo has purchased a truck mounted mechanical Auger drill rig allowing fast and effective Geochem sampling across the companies tenure. 	
		 Alvo routinely soil sampling across the tenure, geologically maps and occasionally trenches prospects to better understand the under-surface geology and geochemistry.