ALVO
ASX: ALV

DRILLING UNDERWAY AT MAJOR GREENFIELDS TARGET - PELICANO

HIGHLIGHTS

- Diamond drilling is underway on the first "Discovery" greenfields regional target generated by Alvo's in-house technical team within the Palma VMS Project in Brazil.
- **The Pelicano prospect ("Pelicano") has been ranked by Alvo as a high priority new target based on a 1.2km long Fixed Loop Electromagnetic ("FLEM") conductor which is co-incident with a high chargeability Induced Polarisation ("IP") response and coincident anomalous geochemistry.**
- Pelicano is located approximately 1km west of the C3 deposit, on a similar orientation and in a similar geological setting.
- **Drilling was initiated in late January 2023 and Alvo expects to reach target depth by mid-February 2023.**

Alvo Minerals Limited (ASX: ALV) ("**Alvo**" or **the** "**Company**") is pleased announce it has commenced drill testing the high-priority greenfields Pelicano prospect, a new Volcanic hosted Massive Sulphide ("**VMS**") prospect within the Palma Project ("**Palma**" or "**the project**") located in central Brazil.

The Company has commenced a series of diamond holes to test this new target which is located in proximity to the high-grade C3 deposit and presents similar exploration characteristics.

Rob Smakman, Alvo's Managing Director commented on the Pelicano Prospect:

"We are incredibly excited to test this major anomaly, having first defined the Pelicano prospect in Q3 CY22 after completing a FLEM survey that showed an unexpected high tenor anomaly.

"After inversion of the FLEM, additional lines were completed and we quickly built an understanding of the extensive size of the conductor at Pelicano. At over 1.2km in strike length, it's the biggest anomaly we have seen to date at Palma. What makes Pelicano especially interesting is that the conductor wasn't identified through the historic aerial EM survey (VTEM) completed in 2008 due to the cover.

"We spent time building on our interpretation, including completing IP surveys, mapping and geochemistry. We are now at a point where we have multiple pieces of geological evidence that all support drill testing this highly compelling and major target. We are excited to be undertaking our first hole at this target as drilling will be the ultimate test of the conductor."

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PROJECT
Palma Project

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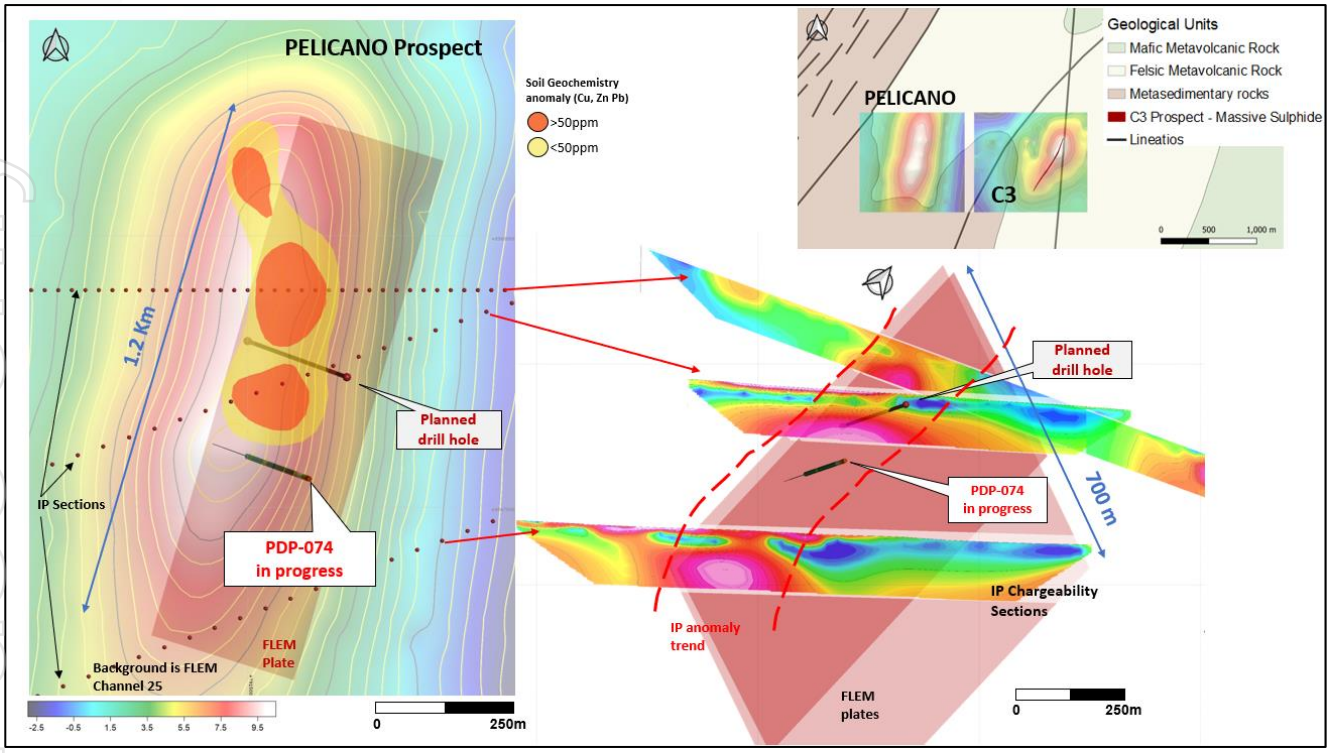

Figure 1: *Pelicano Prospect in plan view (left), 3D interpretation (right)and simplified geological setting top left. Image includes current drill location, IP Chargeability sections, FLEM results and interpreted electromagnetic conductor location.*

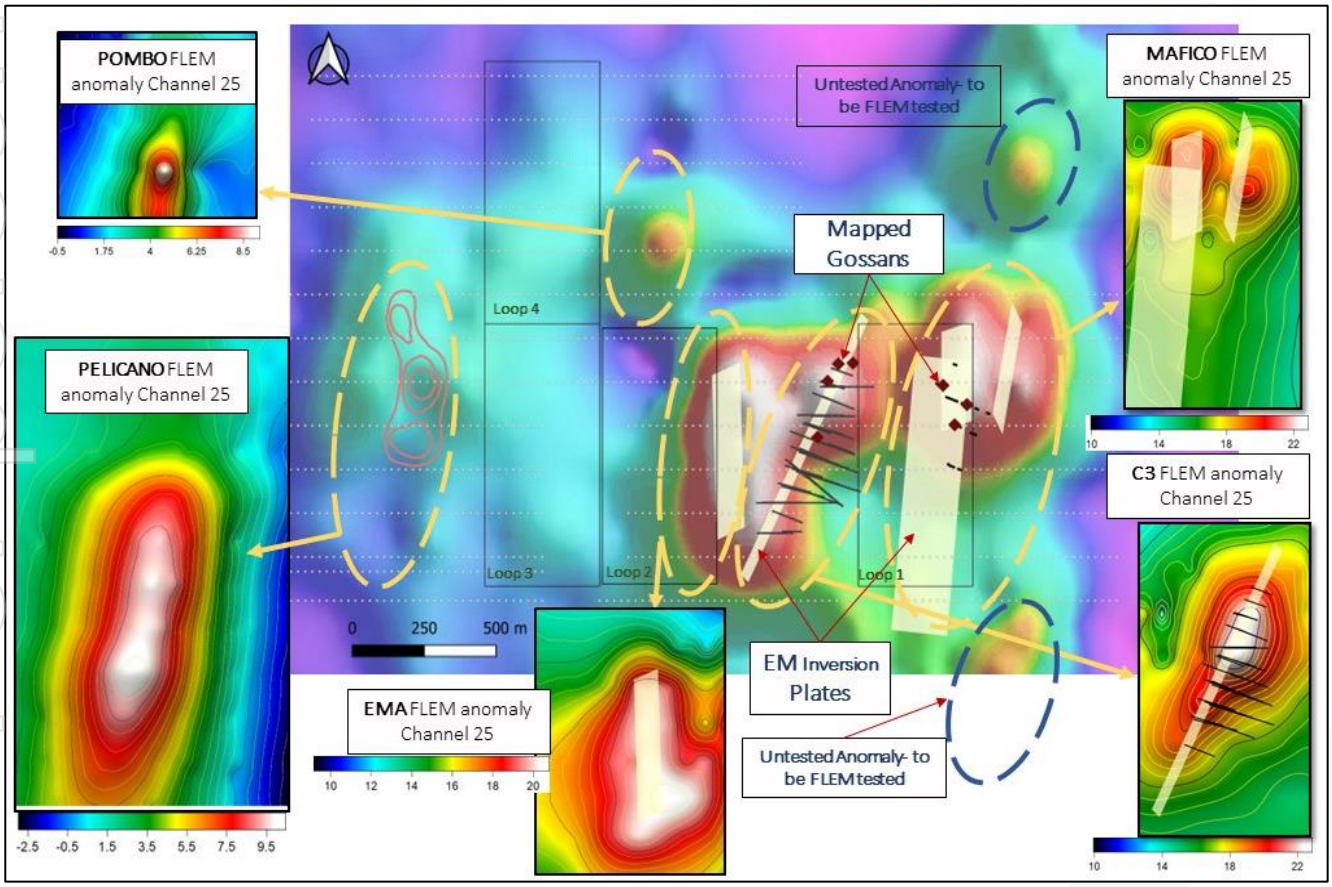

Figure 2: *Pelicano Prospect (west side) relative to the C3 'cluster'. Background image shows results from VTEM which didn't identify the massive Pelicano conductor.*

Diamond Drilling at Pelicano

Diamond drilling is underway on hole PDP-074 at the Pelicano Prospect, which is a new prospect within the Palma VMS project (see Figures 1 & 2). Drilling will target the anomalies generated by Alvo's Brazilian exploration team which have combined to form a compelling co-incident drill target.

Pelicano was identified through a review of historical geochemical sampling results where a co-incident, first order anomaly of Zn, Cu and Pb was noted over ~600m in strike length. Due to the presence of this discrete soil anomaly and its proximity to the high-grade C3 deposit, an additional FLEM survey loop (Loop 3 in Figure 2) was completed.

The FLEM survey conducted by Alvo's geophysical team identified the Pelicano anomaly which, when processed, shows a major electromagnetic conductor with a conductive thickness of ~200 siemens, a strike length of 1.2km (NNE dips moderately to the east), depth extent of up to 700m and which starts from ~250m below surface (see Figure 1).

Electromagnetic conductors are an indication of rocks that have a relatively higher conductance than the surrounding rocks, at levels that are either massive/semi-massive conductive sulphide species or a conducting lithological unit. The Company has yet to encounter significant conductive lithological units in its exploration around Palma, however several drillholes have intercepted unmineralized semi-massive sulphides.

Several IP lines (arranged in pole-dipole) have been surveyed across the Pelicano prospect and all the lines have demonstrated a strong chargeability anomaly above the FLEM conductor- on a similar strike orientation. This chargeability anomaly is closely associated with low resistivity, indicating the anomaly could be associated with disseminated sulphides.

Dependant on initial results, Alvo plans to complete Downhole Electromagnetic (**"DHEM"**) surveys on initial diamond holes to build on the overall interpretation of the Pelicano prospect.

Next Steps and Upcoming News flow

- Extensional diamond drilling at C3 prospect targeting significant extensions along strike and at depth to high-grade VMS mineralisation – **Ongoing**
- Diamond drilling at new targets within the C3 cluster, including Ema and Pelicano – **Ongoing**
- Auger Drilling using Alvo's new truck mounted mechanical Auger – **Underway**
- DHEM surveys at C3 and C1, on diamond holes completed during phase 1 and phase 2 drill programs – **Ongoing**
- FLEM surveys on regional targets across Palma – **Ongoing**
- Geochemical sampling across known exploration prospects – **Ongoing**
- Metallurgical test work at C3 – **Ongoing**
- Metallurgical test work at C1 – **Proposed to commence in Q1 2023**
- Induced Polarisation (**"IP"**) surveys at C3, C1 and regional targets – **Ongoing**

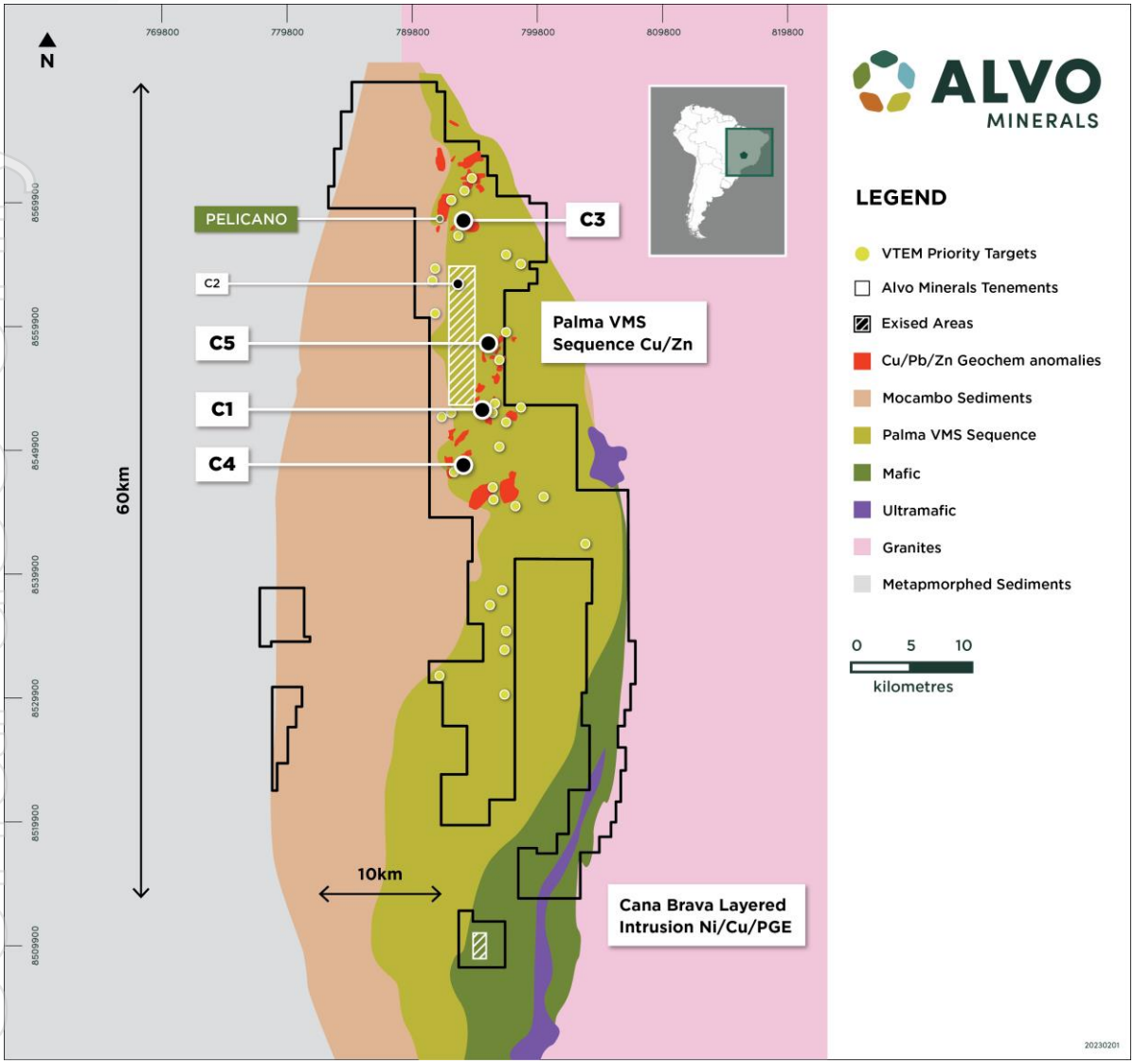

***Figure 3**: Plan view of the Palma Project with Pelicano Prospect highlighted adjacent to C3*

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

ENQUIRIES

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References to Previous ASX Announcements

Reference in this report is made to previous announcements including:

As reported in the announcement "ALVO LAUNCHES MAIDEN DRILL PROGRAM AT C3" dated 26 October 2021 issued by Alvo Minerals Limited

As reported in the announcement "ALVO INTERCEPTS BROAD ZONE IN TE FIRST HOLE AT C3" dated 4 November 2021 issued by Alvo Minerals Limited

As reported in the announcement "ALVO TO INITIATE EM SURVEY AND SECURES ADDITIONAL RIG FOR 2022" dated 8 December 2021 issued by Alvo Minerals Limited

As reported in the announcement "C3 DELIVERS EXCEPTIONAL DRILL RESULTS INCLUDING 10.57m @ 6.27% COPPER & 14.76% ZINC" dated 14 February 2022 issued by Alvo Minerals Limited

As reported in the announcement "FURTHER OUTSTANDING DRILL RESULTS INCLUDING 36m @ 1.49% COPPER & 8.58% ZINC" dated 30 March 2022 issued by Alvo Minerals Limited

As reported in the announcement "MULTIPLE DISCOVERY AND EXTENSIONAL TARGETS HIGHLIGHTED BY EM SURVEYS" dated 8 July 2022 issued by Alvo Minerals Limited

As reported in the announcement "FLEM CONDUCTORS & MINERALISED GOSSANS DEFINE HIGH PRIORITY TARGETS, DRILLING UNDERWAY" dated 16 August 2022 issued by Alvo Minerals Limited

As reported in the announcement "ALVO DELIVERS DRILLING INTERCEPTS UP TO 4.3% Cu, 17% Zn & 184g/t Ag" dated 30 August 2022 issued by Alvo Minerals Limited

As reported in the announcement "DRILLING AT PALMA EXPANDS POLYMETALLIC POTENTIAL" dated 18 October 2022 issued by Alvo Minerals Limited

As reported in the announcement "DRILLING IDENTIFIES NEW SHALLOW HIGH-GRADE COPPER ZONE" dated 6 December 2022 issued by Alvo Minerals Limited

As reported in the announcement "LARGE HIGH GRADE COPPER EXTENSIONS" dated 19 January 2023 issued by Alvo Minerals Limited

In relation to the Mineral Resource Estimate (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 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.

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'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.

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.*	• No sampling is reported
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).*	• No drilling reported
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 drilling reported

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.*	• No logging reported
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.*	• No sampling reported
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.*	• No sampling reported
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.*	• N/A

Criteria	JORC Code explanation	Commentary
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 geophysical survey 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.*	• Survey spacing was variable. FLEM Surveys were done on 150m spaced lines with station as sparse as 50m and as close as 12.5m. • IP Lines were up 400m apart with stations generally at 25m.
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.*	• Surveys were oriented perpendicular to the assumed geological strike. No bias is believed to have occurred however on a regional scale, geological and geophysical evidence suggests folding and faulting has occurred.
Sample security	• *The measures taken to ensure sample security.*	• No sampling reported
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 Pelicano prospect is located on exploration tenement 800.744/1978 which is 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). • Alvo is confident the tenement is 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.*	• The only historical exploration was mainly completed by the CPRM. The work included a broad spaced geochemical sampling that was completed to high standard for the time.
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.

Criteria	JORC Code explanation	Commentary

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.*
		• None reported

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.*	• None 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').*	• Unknown
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

Criteria	JORC Code explanation	Commentary
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All results are reported above the cut-offs described above. Not all of the holes are sampled.
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 heli-borne 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 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. • Alvo estimated a JORC compliant MRE for the C1 and C3 prospects. • 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 further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Alvo will continue the diamond drilling program. The program will evolve as results are received and will focus on upgrading and expanding the inferred MRE. Potential exists both along strike and at depth. Alvo has also started drilling on new prospects that have high geological probability of hosting mineralised sulphides. • Alvo has in-house electromagnetic survey equipment and is performing both FLEM and DHEM surveys. It is expected these surveys will enhance the drilling program by delineating possible extensions of the highly conductive mineralisation. • Alvo is also in the process of purchasing a full Induced Polarisation (**IP**) equipment in order to undertake IP surveys across the tenement package.