ALVO
ASX: ALV

DRILLING AT PALMA EXPANDS POLYMETALLIC POTENTIAL

HIGHLIGHTS

- The Palma VMS Project continues to deliver significant base and precious metals results, as drilling at C3 intercepts polymetallic mineralisation, including:
  - **14.9m @ 2.22% Cu, 10.78% Zn,** 0.48% Pb, **34.0g/t Ag** & 0.11g/t Au from 74m in hole PD3-056
    - *Inc.* **5.0m @ 2.72% Cu, 17.46% Zn,** 0.87% Pb, **52.6g/t Ag** & 0.16g/t Au from 75m
  - **17.1m @ 1.23% Cu, 2.09% Zn**, 0.17% Pb, 11.5g/t Ag & 0.03g/t Au from 294m in hole PD3-053
  - **17.7m @ 1.12% Cu, 3.45% Zn**, 0.09% Pb, 5.4g/t Ag & 0.01g/t Au from 101m in hole PD3-054
    - *Inc.* ***2.9m @ 0.86% Cu, 13.13% Zn**, 0.41% Pb & 16.4g/t Ag from 102m*
  - **11.5m @ 0.35% Cu, 2.73% Zn**, 0.13% Pb &5.6g/t Ag from 52m in hole PD3-051
    - *Inc.* ***3.5m @ 0.48% Cu, 7.37% Zn**, 0.35% Pb &17.4g/t Ag from 58m*
- Extensional drilling is ongoing at C3, with aggressive step-outs at depth and along strike, aiming to significantly expand the existing JORC 2012 Mineral Resource Estimate (MRE) of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag
  - Drilling will specifically be targeting beneath the deepest holes drilled to date, including:
    - **36m @ 1.49% Cu, 8.58% Zn** 0.32% Pb, 19.1 g/t Ag & 0.04 g/t Au in PD3-012 from 285m
    - **16.0m @ 1.81% Cu, 14.23% Zn** 0.37% Pb, 20.5 g/t Ag & 0.04 g/t Au in PD3-014 from 252m
    - **19.65m @ 1.64% Cu, 9.72% Zn** 0.23% Pb, 18.8 g/t Ag & 0.06 g/t Au in PD3-008 from 291m
- Down-Hole Electromagnetic surveys (DHEM) at C3 has highlighted extensive conductive plates along strike and at depth, significantly enhancing the scale potential of the C3 deposit
- Phase 2 drilling is also targeting several new targets including Mafico, Ema, Pelicano and Pombo, clustered around the C3 prospect

Alvo Minerals Limited (ASX: ALV) ("**Alvo**" or **the** "**Company**") is pleased announce first assay results from its extensional diamond drill program at the C3 prospect, within the Palma Project ("**Palma**" or "**the project**") located in Central Brazil. The Company has now completed over 13,250m of diamond drilling at Palma, continuing uninterrupted since listing in October 2021.

Phase 2 drilling at the C3 prospect is ongoing and is aiming to significantly expand the existing JORC 2012 Resource of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag (see Figure 1). Phase 2 drilling follows an exceptional phase 1 drill program that delivered high-grade and thick VMS intercepts.

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PROJECT
Palma Project

Shares on Issue	72,830,314
Cash	$5.6M (at 30 Jun 2022)
ASX Code	ALV

Two diamond drill rigs are operating at and around the C3 cluster, testing extensions to the high-grade VMS mineralisation defined in phase 1 drilling. Phase 2 drilling will also target several new targets including Mafico, Ema, Pelicano and Pombo, clustered around the C3 prospect.

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

"We are now at a very exciting phase for the Palma Project, starting to drill test targets beyond the known high-grade mineralisation, with the aim of substantially expanding our existing resource base. The early drilling results from phase 2 at C3 give the Company confidence to be more aggressive in our step-out holes. We're seeing mineralisation expanding to the north, south and at depth.

"The DHEM and FLEM surveys both provides us a valuable targeting tool for VMS mineralisation and demonstrates the extensive scale potential of the C3 prospect. If successful, extensional drilling has the potential to add substantial tonnes to the resource base at Palma.

"We are also starting our program of drilling new high-priority conductive targets around the C3 prospect. Clustering of VMS deposits are seen in other districts all around the world and we are using this model in our systematic exploration program.

"With a busy program of metallurgical testwork, ongoing DHEM and FLEM surveys and Geochem at exploration targets, it is shaping up to be our most exciting quarter of drilling and exploration."

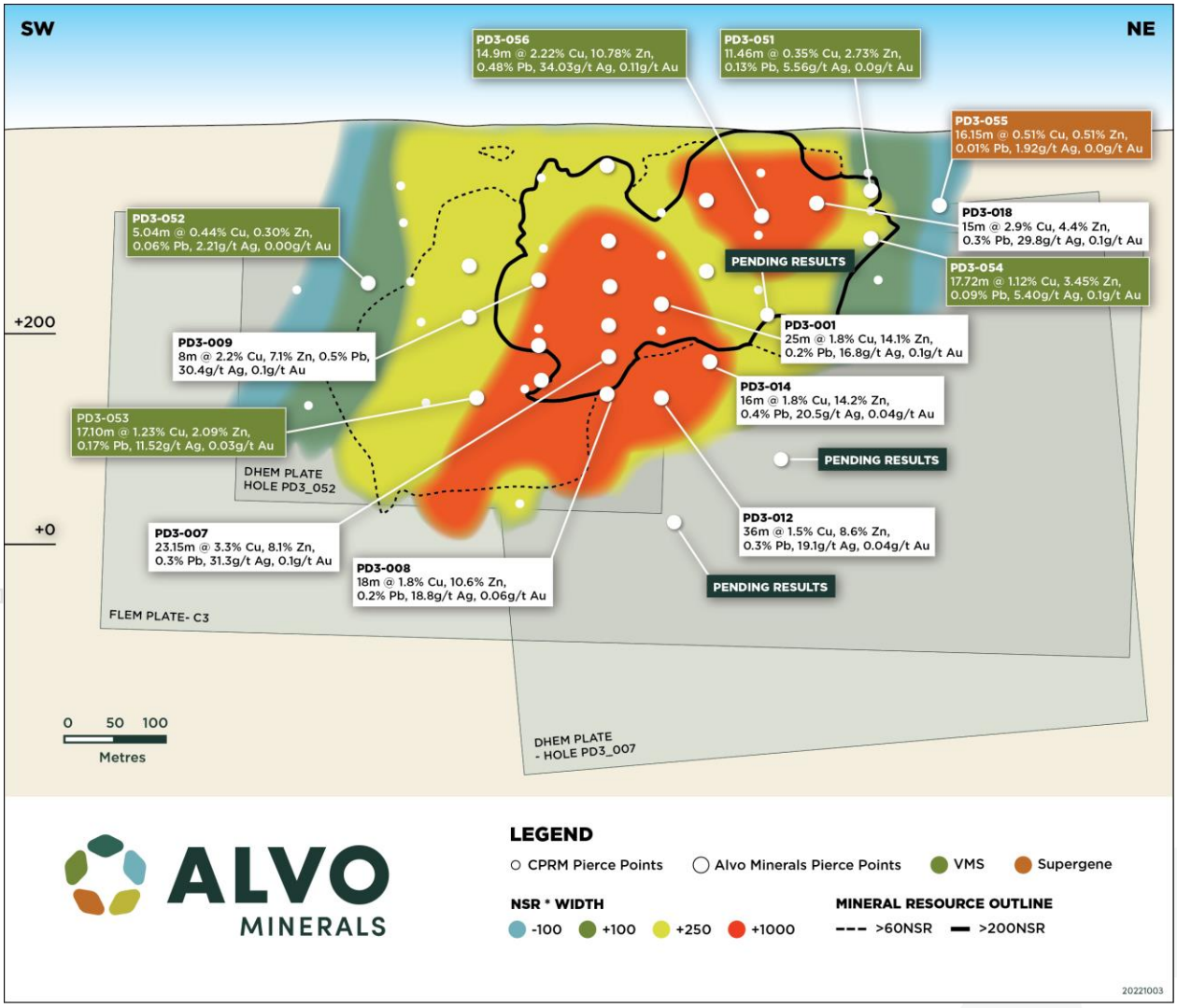

Figure 1: *C3 Long section illustrating selected significant intercepts, DHEM plates and Phase 2 drilling*

Diamond Drilling and DHEM Surveys at C3

Phase 2 diamond drilling at the C3 prospect is ongoing, with the majority of holes targeting extensions to the mineralisation drilled historically by the Brazilian Government geological survey (**CPRM**) and more recently by Alvo in 2021 and 2022 (see Figures 1 & 2, Tables 1 & 2). Phase 1 drilling by Alvo successfully verified the historical work and the results received strongly endorsed the historical work. The widths of the intercepts were typically wider and the grades of the polymetallic mineralisation higher.

C3 Upgrade Drilling

Some of the early holes in the Phase 2 drill program were drilled following review of Phase 1 drilling, with several upgrade holes targeting areas where there was low density of Alvo drilling. PD3-056 (along with PD3-059 and PD3-063 - results pending) were completed on a section that was >100m between Alvo drill lines (see Figure 3). PD3-056 returned excellent shallow results including:

- 14.55m @ 0.47% Cu & 0.45% Zn from 36m depth in hole PD3-056 (Supergene).
- **14.89m @ 2.22%Cu, 10.78%Zn,** 0.48%Pb, **34.03g/t Ag** & 0.11g/t Au from 74.11m in hole PD3-056
    - Inc **5m @ 2.72%Cu, 17.46%Zn, 0.87%Pb, 52.60g/t Ag, and 0.16g/t Au** from 75.00m

C3 Drilling- Northern Extension

Phase 2 Drilling also targeted mineralisation extending to the north, where holes PD3-051, PD3-054 and PD3-055 were completed. Holes 51 and 54 were drilled on the edge of the main zone, on a section that could extend at depth. Hole 54 was drilled towards the SE as a 'scissor hole' to better understand the geometry of the mineralisation, which is steeply dipping in the north.

Better results from the drilling into the northern extensions include:

- **11.5m @ 0.35% Cu, 2.73% Zn**, 0.13% Pb & 5.6g/t Ag from 52m in hole PD3-051
- **17.7m @ 1.12% Cu, 3.45% Zn**, 0.09% Pb & 5.4g/t Ag from 101m in hole PD3-054
    - *Inc. **2.9m @ 0.86% Cu, 13.13% Zn**, 0.41% Pb & 16.4g/t Ag from 102m; and*
    - *Inc. **1m @ 4.25% Cu, 1.21% Zn**, 0.02% Pb, 12.0g/t Ag & 0.02g/t Au from 115m*

Hole 55 was drilled a further 50m to the north (from holes 51 and 54) and intercepted a broad supergene interval and significant alteration, although no significant VMS intercepts were returned. Notably, Alvo geologists have interpreted an E-W fault zone in this area which could have displaced the mineralisation to the east. An untested VTEM anomaly to the NE will be followed up with a FLEM survey to test this theory.

C3 Drilling- Southern Extension

Phase 2 Drilling on the southern extensions of C3 was initially tested with holes PD3-052 and PD3-053. Hole PD3-052 is the most southerly of holes drilled by Alvo, in an area of weak historical results. The FLEM surveys indicated the mineralisation extends in this direction and this was confirmed through hole PD3-052, successfully intercepting a broad alteration zone with some modest significant intercepts.

Hole PD3-053 was drilled at depth to the SW in the interpreted structural plunge extension of the main zone (see Figure 4). This area had sparse historical drilling that had traditionally intercepted weakly mineralised intervals. PD3-053 intercepted a broad zone of semi-massive mineralisation, with relatively higher amounts of chalcopyrite - resulting in a higher relative proportion of copper vs zinc.

Better results from the drilling into the southern extensions include:

- **5.0m @ 0.44% Cu, 0.30% Zn**, 0.06% Pb & 2.2g/t Ag from 294m in hole PD3-052
- **17.1m @ 1.23% Cu, 2.09% Zn**, 0.17% Pb, 11.5g/t Ag & 0.03g/t Au from 294m in hole PD3-053

Downhole Electromagnetic (DHEM) Surveys

DHEM surveys are ongoing, initially completed on drill holes from phase 1 drilling and using the companies new, in-house equipment. Inversion and interpretation of this data has closely matched the known VMS mineralisation, however the DHEM has also shown potential broad extensions. The conductive plates are interpreted to extend hundreds of metres at depth and along strike.

Alvo is drilling 2 deeper holes below significant intercepts (PD3-008 PD3-012 & PD3-014) drilled during Phase 1. These holes intercepted mineralisation outside of the JORC 2012 MRE and included outstanding high-grade VMS mineralisation, results including:

- PD3-008: **19.7m @ 1.64% Cu, 9.72% Zn**, 0.22% Pb, 17.0g/t Ag & 0.06g/t Au from 291m
  - Inc. **14.1m @ 1.89% Cu, 13.51% Zn**, 0.23% Pb, 17.0g/t Ag & 0.06g/t Au from 292m
- PD3-012: **36.0m @ 1.49% Cu, 8.58% Zn**, 0.32% Pb, 19.0g/t Ag & 0.04g/t Au from 285m
  - Inc. **14.0m @ 1.74% Cu, 14.84% Zn**, 0.44% Pb, 27.0g/t Ag & 0.04g/t Au from 306m
- PD3-014: **16.0m @ 1.81% Cu, 14.23% Zn**, 0.37% Pb, 20.5g/t Ag & 0.04g/t Au from 252m
  - Inc. **7.4m @ 2.20% Cu, 23.13% Zn**, 0.60% Pb, **30.3g/t Ag** & 0.06g/t Au from 259m

Table 1: *Significant intercepts C3 Diamond drilling program*

Hole ID	Length (m)	From (m)	Cu %	Zn %	Pb %	Ag g/t	Au g/t	Comment
PD3-051	20.20	8.00	0.33	0.17	0.01	2.66	0.00	***Supergene***
PD3-051	**11.46**	52.36	**0.35**	**2.73**	0.13	5.56	0.00	VMS
including	3.48	57.52	0.48	**7.37**	0.35	17.36	0.01	VMS
PD3-052	5.04	177.96	0.44	0.30	0.06	2.21	0.00	VMS
PD3-053	**17.10**	293.90	**1.23**	**2.09**	0.17	11.52	0.03	*VMS*
PD3-053	4.00	312.00	0.30	0.19	0.01	0.00	0.00	Stringer
PD3-054	28.10*	11.90	0.54	0.51	0.05	1.77	0.00	***Supergene***
PD3-054	0.92*	78.98	0.47	0.53	**4.40**	**203.00**	0.22	VMS (Quartz galena vein
PD3-054	**17.72***	100.98	**1.12**	**3.45**	0.09	5.40	0.01	VMS* not true width
PD3-055	16.15	8.85	0.51	0.51	0.01	1.92	0.00	***Supergene***
PD3-056	14.55	36.00	0.47	0.45	0.00	0.00	0.00	***Supergene***
PD3-056	**14.89**	**74.11**	**2.22**	**10.78**	0.48	**34.03**	0.11	VMS
including	5.00	75.00	2.72	17.46	0.87	52.60	0.16	VMS

*Table of significant intercepts calculated using a 0.1% Cu or 0.5% Zn or 0.1 g/t Au lower cut-off, minimum interval of 1m and a maximum of 2m of internal dilution. *Hole PD3-54 was drilled as a scissor hole to test the orientation of the mineralisation at the northern end of the C3 prospect*

Table 2: *Collar details. Coordinates are in SIRGAS_2000 Zone22S. *Hole abandoned due to drilling conditions*

Hole ID	Prospect	Easting	Northing	RL	Depth	Azimuth	Dip	Comment
PD3-051	C3	793050	8567877	388	**157.5**	290	-60	Expand
PD3-052	C3	792904	8567418	399	**211.5**	290	-60	Expand
PD3-053	C3	793041	8567479	396	**367.8**	290	-60	Expand
PD3-054	C3	792968	8567901	390	**162.4**	110	-60	Expand
PD3-055	C3	793079	8567922	390	**151.1**	290	-60	Expand
PD3-056	C3	793031	8567772	391	**167.0**	290	-60	Upgrade
PDF-057	Mafico	793519	8567813	390	**60.9***	285	-60	Discovery

Hole ID	Prospect	Easting	Northing	RL	Depth	Azimuth	Dip	Comment
PDF-058	Mafico	793542	8567827	390	**243.8**	285	-60	Discovery
PD3-059	C3	793090	8567752	392	**274.2**	290	-60	Upgrade

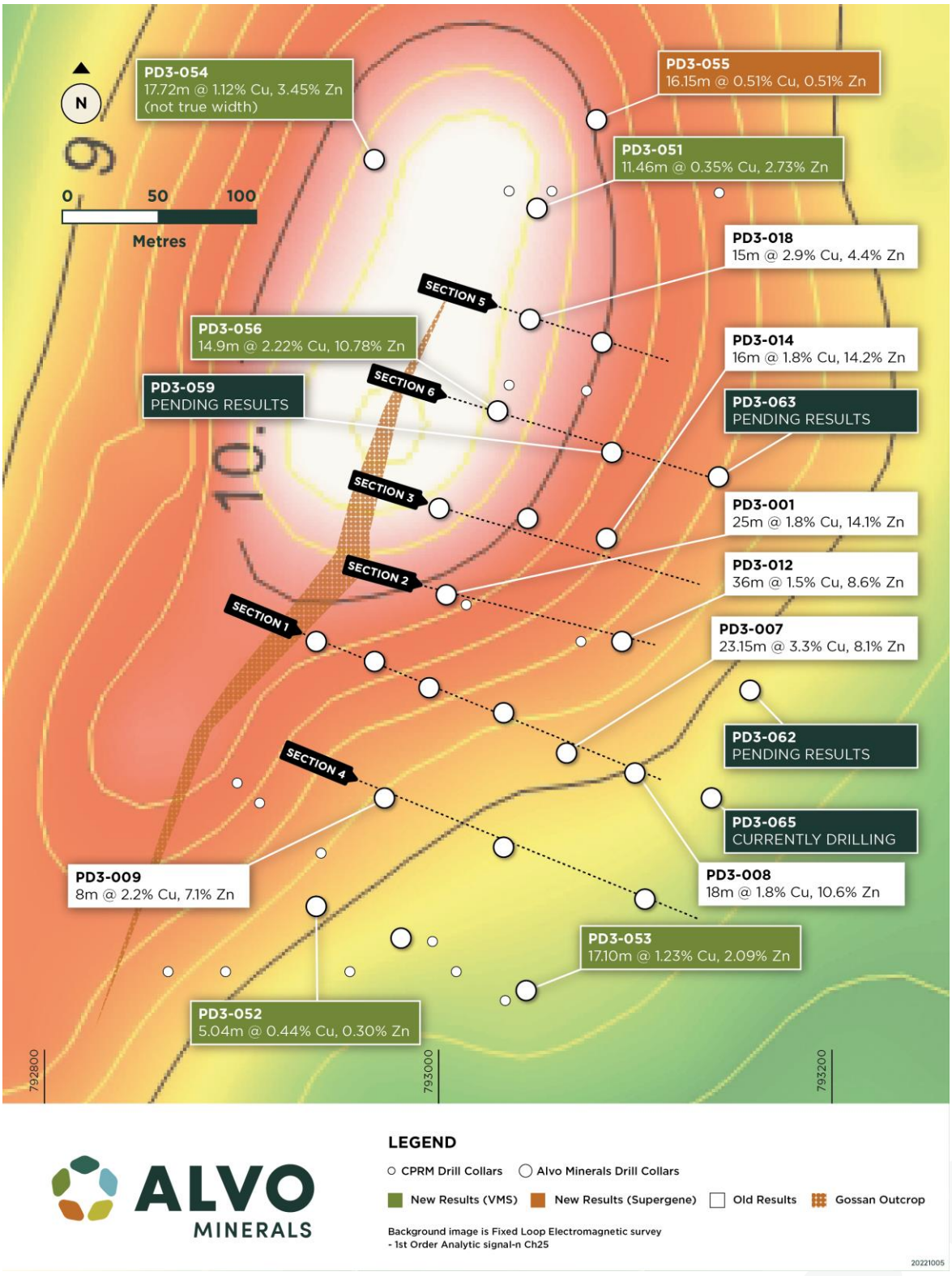

Figure 2: *Drill plan at C3 including current and historical drilling*

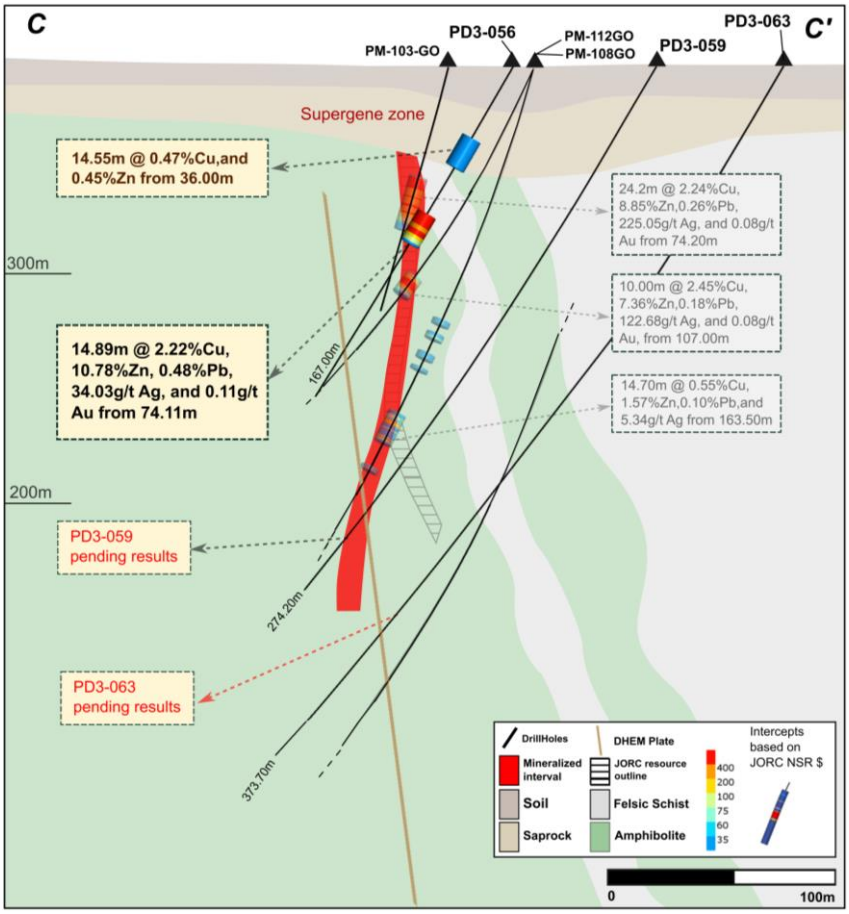

***Figure 3**: Cross section #6 from C3 prospect*

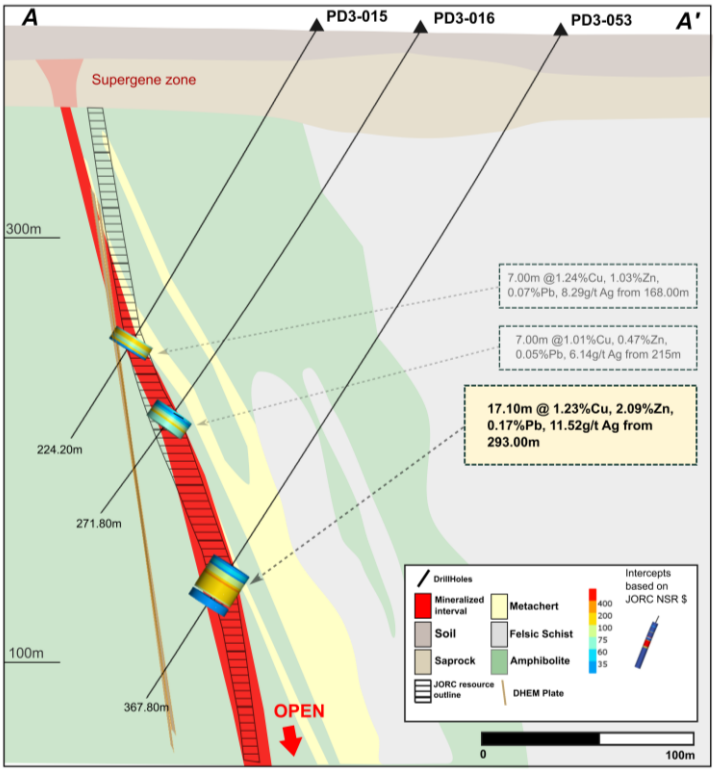

***Figure 4**: Cross section #7 from C3 prospect*

Next Steps and Upcoming Newsflow:

- 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 Mafico, Ema, Pelicano and Pombo - **Ongoing**
- 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, defined by the previously completed VTEM surveys - **Ongoing**
- Geochemical sampling across known exploration prospects – **Ongoing**
- Metallurgical test work at C3 – **Scheduled to be complete early Q4 2022**
- Metallurgical test work at C1 – **Proposed to commence Q4 2022**
- Induced Polarisation (IP) surveys at C3 and C1 – **Proposed to commence early Q4 2022**

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 "RC DRILLING DOWNHOLE AND FIXED LOOP EMSURVEYS TO COMMENCE AT C3" dated 24 May 2022 issued by Alvo Minerals Limited

As reported in the announcement "C1 DELIVERS OUTSTANDING HIGH-GRADE POLYMETALLIC DRILL RESULTS"

dated 14 June 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

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.

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

ENQUIRIES

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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.*	• Half diamond core was sampled and submitted for analysis, ensuring representivity of the sample zones. Sampling was typically 1m in mineralised zones unless the geologist determined a different length was appropriate. Areas away from the main mineralised zones may have been sampled as 2m composite samples. • Sampling was supervised by Alvo geologists who selected the sampling zones. • Geologists log the mineralisation as massive, semi-massive disseminated, stringer, brecciated or barren. These logs were used to determine the main mineralisation zones, which dictated the sampling. Mineralisation was also logged as potentially supergene mineralised in the oxidised zone.
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).*	• Standard-tube diamond drilling by independent drill contractor. Drillhole diameter was variable- HW for collar and friable material, HQ diameter was generally used until the base of complete oxidation and then the diameter reduced to NQ. All holes are down-hole oriented using Reflex Gyro tool. Drill core is oriented using NQ ACT 3 orienting tool from Reflex.
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.*	• Recoveries are recorded by both the driller's assistant (on site) and Alvo field assistant once the core has been received at the core shed. Recoveries are measured by comparing the length of the drill run with the amount of core actually recovered. Recovery has averaged >95% for all drilling to date. • Drillers are penalised for poor recovery and are constantly supervised at the rig to ensure care is taken to ensure high recoveries. • 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 have been geologically logged by Alvo geologists, to a detail relevant for inclusion in an MRE. Care is taken to ensure metallurgical factors are included (specifically the % of and type of sulphides present). Basic geotechnical logging is standard. • Logging and core processing is both qualitative and quantitative. Core is photographed wet and dry, measured for magnetic susceptibility, conductivity, density, RQD and basic geotechnical logging. All core is structurally logged by geologists to look for planar and linear features. Measurements of these are taken on both oriented and non-oriented core. • All drilling results reported have been logged onsite by Alvo geologists. Logs include hole number, hole location, date drilled, collar, dip and azimuth as well as qualitative data such as rock type, and descriptions of the colour, alteration, weathering, grainsize, mineralisation and texture. • At Phase 2 drill program, targeting the C3 cluster, 1,735m in 9 holes have been drilled to date. All metreage reported have been logged.
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.*	• Drill core is sawn in half and one half (consistently the same half) of the core is sampled. The remaining half is stored by Alvo in its dedicated facility. • Sample size, being generally 1m sample intervals, is appropriate to the material being sampled and considered to be representative.
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 and gold analyses on half diamond core. The lab techniques described below are considered appropriate for the style of mineralisation at the Palma Project ○ Half drill core samples are dried, crushed until 75% pass 3mm, homogenised and split with 250-300g pulverised until 95% passing 150# ○ Gold is determined by 30g fire assay ○ Multi element (including Cu, Zn, Pb and Ag) are determined by multi-acid digestion and ICP-OES. Samples ab ove 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

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.*	• Significant intercept tables are prepared by Alvo personal and checked by at least one other geologist. • 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. Weighted averages were used to calculate significant intercepts. For duplicates, the first sample is recorded for intercepts.
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 drillhole collar locations. All drillholes are downhole surveyed using the Gyro tool from Reflex. • 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.*	• Drillholes were variably spaced- aimed at infilling between historical holes drilled by the CPRM. The drilling aims to fill between 100m spaced section lines and between 30-50m on section. • Drill spacing is considered sufficient to complement the previously reported Inferred JORC 2012 MRE. Results will improve the geological and grade continuity. • No compositing has been applied to the results (beyond weight averaging the results). Some sampling at 2m intervals was applied in areas away from the main VMS mineralisation.
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 oriented to intercept mineralisation as perpendicular as possible. No bias is believed to have occurred however geological and geophysical evidence suggests folding and faulting has occurred. Sampling lengths were generally 1m downhole, unless there was a specific geological control required by the geologist. Several 'scissor holes' (holes drilled in the opposite azimuth to the normal) were drilled in order to aid understanding of geological continuity and or ore-body orientation. C1 is folded and its complex geometry is aided by the occasional scissor hole. • All intercepts recorded are downhole intervals and may not equal true width. Scissor holes are reported the same and normally oriented holes.
Sample security	• *The measures taken to ensure sample security.*	• Drillcore is transported from the field to a locked facility by Alvo or drilling staff daily. 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 C3 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.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration by other parties form much of the work completed on the project. The work was completed to 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. The interpretation of this historical work has guided much of the drilling and exploration to date which has been successful in upgrading and extending the geological potential.
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.*	• See Table 2- Collar table. All drilling from C3 is included in Table 2.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• The significant intercepts were calculated using minimum sample length of 1m, with up to 2m of consecutive dilution, samples included with values > 0.2%Cu or >0.5% Zn or >0.1g/t Au. No upper cuts were considered. • Weighted averages were calculated for all intercepts. • No metal equivalents 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.*	• At C3, the mineralised domain dips moderately to steeply towards east-southeast with the drill holes planned to cut the mineralised domain in a perpendicular manner. The downhole depths are reported, true width is not accurately known at this stage. • The downhole depths are reported, true widths* is not accurately known at this stage.

Criteria	JORC Code explanation	Commentary
	• *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').*	• *Hole PD3-054 was drilled as a scissor hole to better gain information about the overall geometry in the northern zone. Reported intercepts for this hole are therefore not true width- the intercept of 17.72m is likely to be ~ 6m.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See diagrams reported in the announcement
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All results are reported above the cut-offs described above. 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.
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. Additional sampling and or drilling will be considered for the supergene mineralisation. Alvo has also started drilling on new prospects that have high geological probability of hosting mineralised sulphides. • Alvo has initiated a 4,000m RC drilling program targeted at shallow VMS mineralisation and supergene mineralisation. • 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.