

## MULTIPLE HIGH-PRIORITY REGIONAL VMS TARGETS IDENTIFIED AT PALMA

### HIGHLIGHTS

- **First comprehensive regional exploration program at Palma VMS Project identifies three high-priority near drill-ready targets through a combination of auger geochemistry sampling and geophysical surveys**
  - **Urubu:** FLEM survey results show an extensive and coherent conductor with similar conductive and thickness values to C3, which closely coincides with the soil geochemistry and IP results
  - **C5:** Coincident soil sampling and IP anomalies, with historical CPRM reports referencing a single mineralised hole; to be followed up with FLEM surveys
  - **Condor:** Auger geochemical anomaly to be followed up with IP
- **Exploration to date has focused on only two of more than 20 late-time conductors** identified through the VTEM survey flown in 2008 covering over 60km of prospective strike
- **In-house equipment purchases** of mechanical auger drill rig, Electromagnetic (“EM”), Induced Polarisation (“IP”) and X-Ray Fluorescence analysing (“XRF”) allows for **flexible, fast and efficient exploration to progress targets**
- **First pass auger geochemical drilling planned at the new Afla VMS Project** (earn-in recently announced 28 March 2023), covering the existing roads and open fence lines
- **In CY2023 Alvo aims to incorporate Phase 1 & 2 drilling into expanding and upgrading the Palma Project MRE of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag**
  - Phase 1 drilling successfully confirmed and extended high-grade mineralisation at the C1 and C3 deposits, exceeding both grade and thickness expectations
  - Ongoing Phase 2 extensional drilling at C1 and C3 (completed) testing conductors identified by DHEM surveys that highlight the potential to significantly expand known mineralisation
- **Ongoing assessment of synergistic opportunities** in proximity Palma to expand Alvo’s project portfolio

**Alvo Minerals Limited (ASX: ALV)** (“Alvo” or the “Company”) is pleased to provide an update on its ongoing regional exploration program across the Palma Project (“Palma” or “the Project”) located in Central Brazil.

**Rob Smakman, Alvo’s Managing Director commented on the exploration underway at Palma:**

*“Exploration is accelerating, we are generating and refining prospects with the clear aim of making new discoveries in CY2023. Regional prospects are being advanced through auger geochemistry and geophysics that is efficient and low-cost exploration through our use of in-house equipment.*

*Whilst Phase 2 diamond drilling is ongoing at the C1 deposit following the successful program at C3, we have delivered exciting advances at regional prospects; Urubu, C5, Afla, Condor and C1 South.*

*We are confident we will soon have a pipeline of new prospects to the stage where we are compelled to drill.”*



#### REGISTERED ADDRESS

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#### MANAGEMENT TEAM

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#### PROJECT

Palma Project

Shares on Issue 72,830,314  
ASX Code ALV

## Palma Regional Exploration Strategy

Alvo is advancing a regional exploration program across the Palma Project which covers over 850km<sup>2</sup> of contiguous and highly prospective ground in a known Volcanogenic Massive Sulphides (“VMS”) district. The district is >80% controlled by Alvo has been largely idle for over 30 years since polymetallic mineralisation was first discovered in the 1970s. Exploration by the Brazilian Geological Survey (CPRM) was paused in the mid 1980’s, after which no modern exploration has been undertaken. Alvo firmly believes the large, highly prospective and under-explored district is an extraordinary opportunity to make new discoveries by applying modern and systematic exploration programs.

Exploration in CY2022 largely focused on successfully delivering exceptional results at the Company’s existing deposits, C1 and C3. These two existing deposits are only two of more than 20 late-time conductors identified through the VTEM survey flown in 2008 that covers over 60km of prospective strike.

VMS deposits typically occur in clusters, where multiple deposits can be located in similar geological districts. These districts can host tens of VMS deposits that range in size from less than 1Mt to exceeding 100Mt.

Since estimating the Maiden Mineral Resource Estimate<sup>1</sup> (“MRE”) at IPO in 2021 of **4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag** (based on historical drill results completed by the CPRM), Alvo has completed >19,500m of diamond drilling and 1,467m of Reverse Circulation (“RC”) drilling. In addition, the Company has completed extensive geological logging, multiple geophysical surveys (IP, FLEM and DHEM) and completed over 4,100m of regional auger geochemical drilling across the 70+ km of prospective geology.

This information gathered has enhanced Alvo’s technical team’s knowledge and understanding of the Palma VMS district, enabling the team to continue effective exploration across the regional target area.

Exploration work is underway across multiple prospects with the aim of advancing a pipeline of prospects to drill-ready status. Field activities including geological mapping, soil sampling, auger geochemical drilling (“Auger”), IP surveys and fixed loop electromagnetic surveys (“FLEM”) are being undertaken concurrently on various prospects within the district. Sampling (soils, trenching and auger geochemistry) is typically processed in Alvo’s core shed where preparation includes drying (several drying ovens have been built), screening and then samples are tested with a hand-held XRF. Utilising the Company’s in-house equipment allows for flexible, fast and efficient exploration that is significantly less expensive than contracted exploration, as the only material expense is labour.

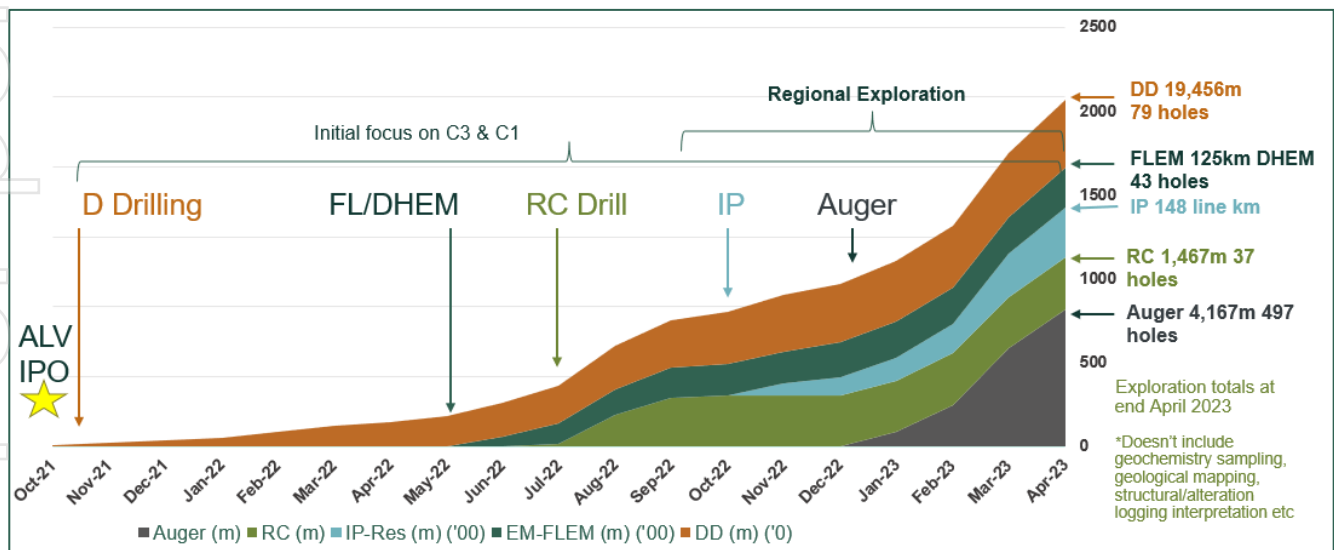


Figure 1: Exploration by Alvo at Palma VMS after the IPO in October 2021

<sup>1</sup> Full details of the Palma Project MRE including JORC tables is contained within the Company’s Prospectus lodged with ASX on 18 October 2021



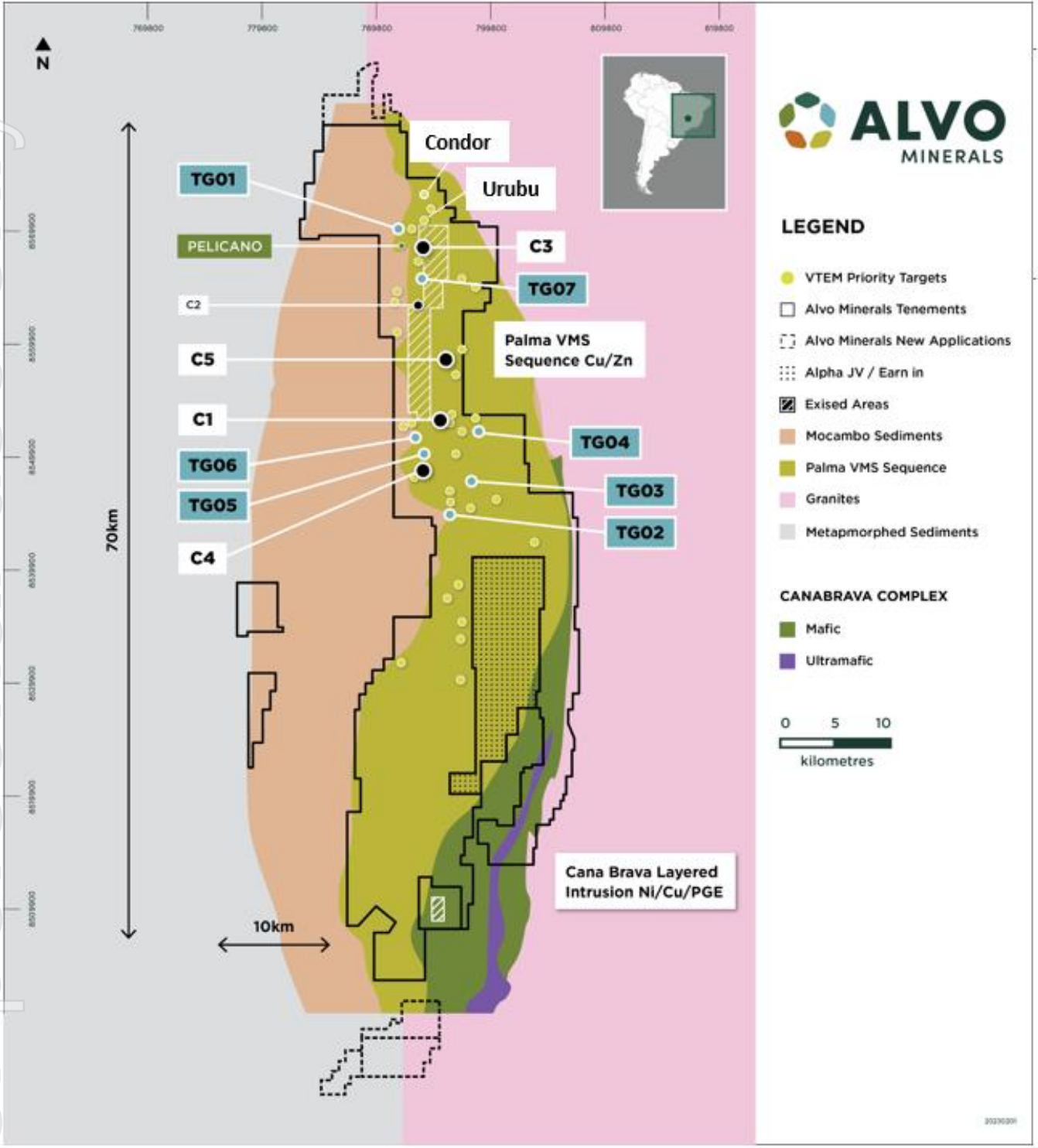


Figure 2: Palma Regional map with tenement areas and selected prospects

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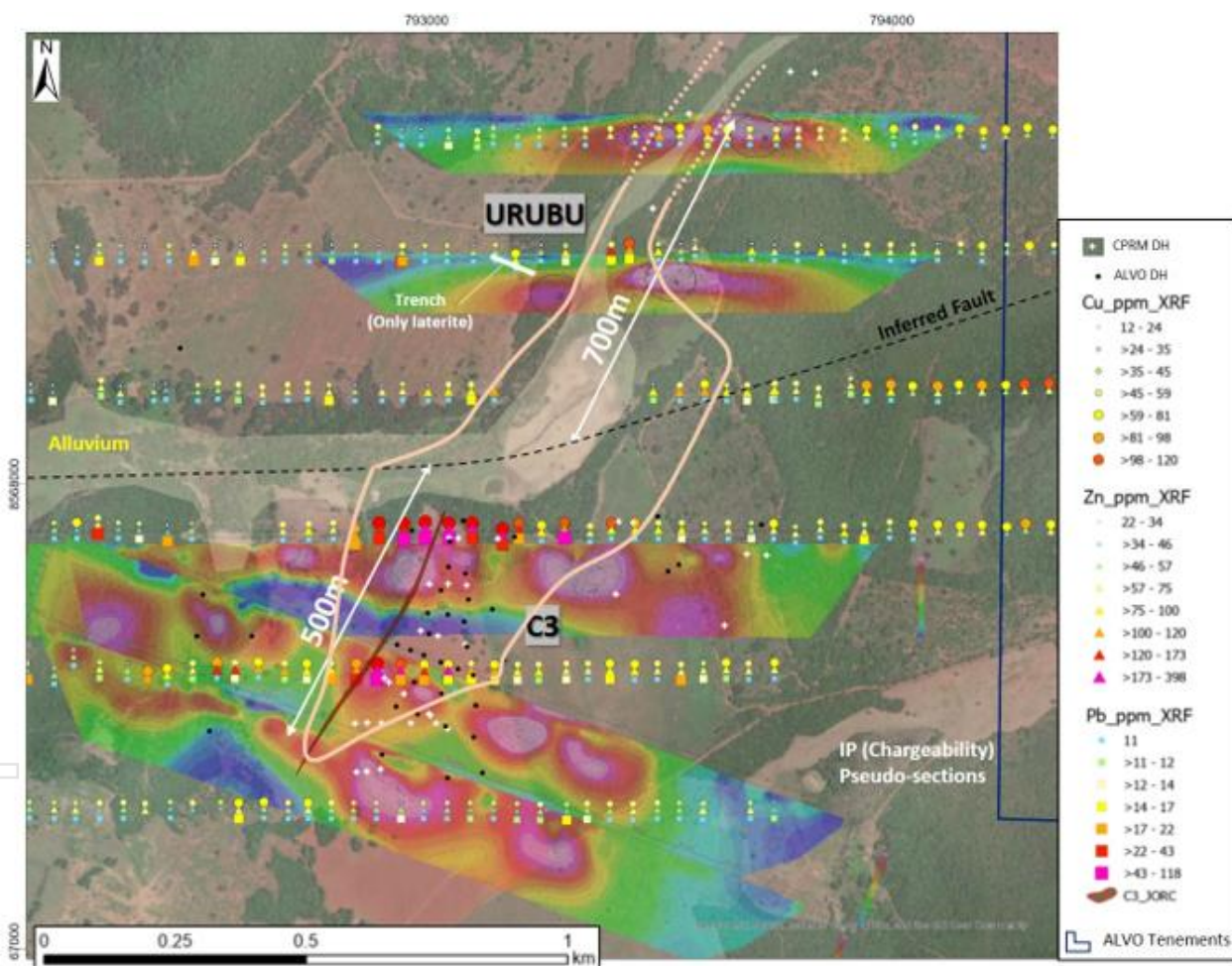


### Urubu Prospect – Possible Northern Extension of C3 Deposit

Exploration at the Urubu prospect has been ongoing over the last few months with recent data combining into a compelling near drill-ready exploration target. In Figure 3 below, a combined image of soil geochemistry and a series of IP surveys demonstrates the potential for Urubu to be an offset northern extension of the C3 deposit. The soil geochemical anomaly is weaker than C3, however transported cover in drainage (alluvium) inhibits effective soil sampling so auger geochemistry will be utilised.

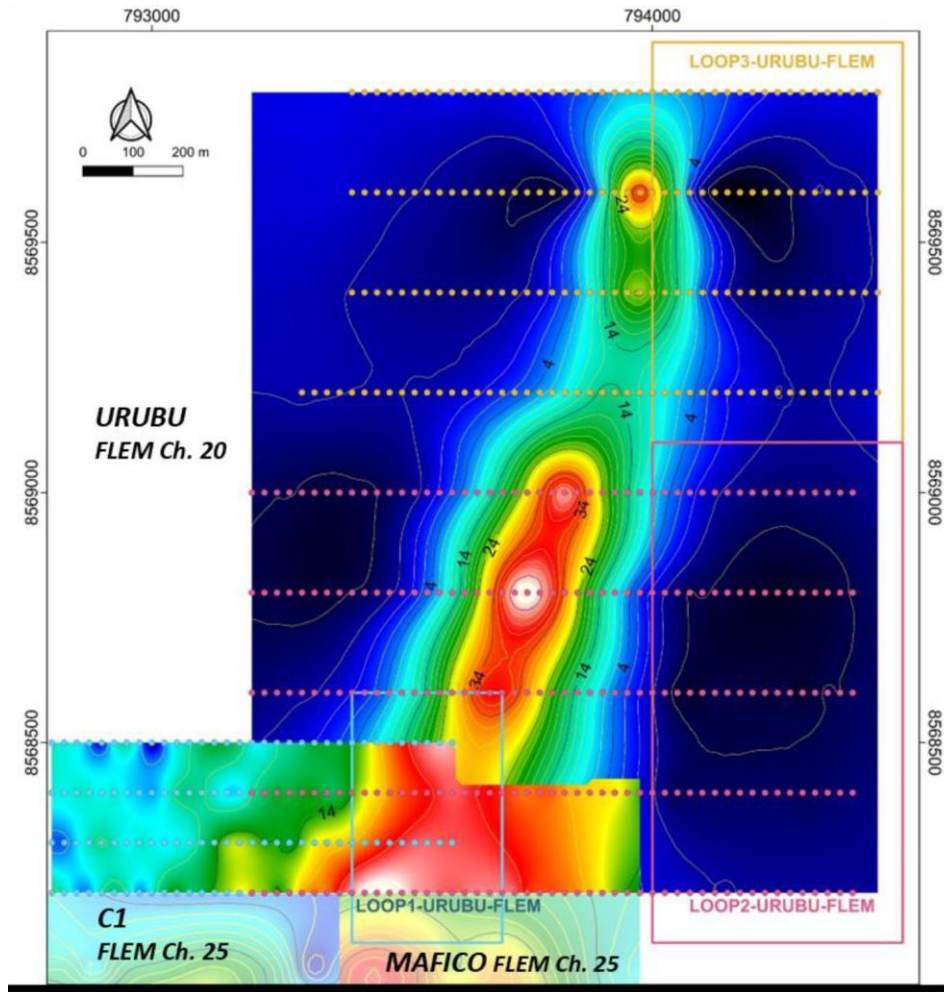
The IP survey illustrates a consistent chargeability anomaly extending from C3 to the north. In Figure 4, FLEM survey results show an extensive and coherent conductor which closely coincides with the soil geochemistry and IP results. The conductive anomaly at Urubu has similar conductive and thickness values to C3. Once the inversion of the FLEM survey has been completed the conductive plates will be incorporated into the exploration plan.

Auger Geochemistry is planned at Urubu and depending on the combined results, diamond drilling will be used to test the prospect.



**Figure 3:** Geochemistry results and selected IP lines across C3 and the advancing Urubu prospect





**Figure 4:** Urubu prospect FLEM survey results. Inversion underway to define the conductive plate locations

## C5 Prospect – Advancing Towards Drill Ready Targets

The C5 prospect presents an advanced prospect, first noted from CPRM historical reports. The CPRM reference a single mineralised drillhole at C5, however the location of this hole has yet to be discovered on the ground.

Alvo is advancing exploration at C5 based on broad spaced soil geochemical and geophysical surveys, to be further detailed subject to success up until the point of drill readiness. To date, Alvo has conducted soil geochemical sampling (800 x 50m) and followed up on areas which returned positive results (400 x 50m). Two main coincident geochemical anomalies (Zn, Cu and Pb), separated by a mapped fault zone, extend for a combined 2.5km aligned in a north-south orientation (see Figure 5).

Dipole-dipole lines of IP across the geochemical anomalies has confirmed a close association of the geochemical anomalies and IP chargeability and resistivity. This is seen as an encouraging sign for mineralisation and additional work is underway with a series of FLEM surveys planned to be executed in coming weeks.

Auger drilling and trenching will be considered if FLEM surveys are successful in delineating a conductive anomaly.



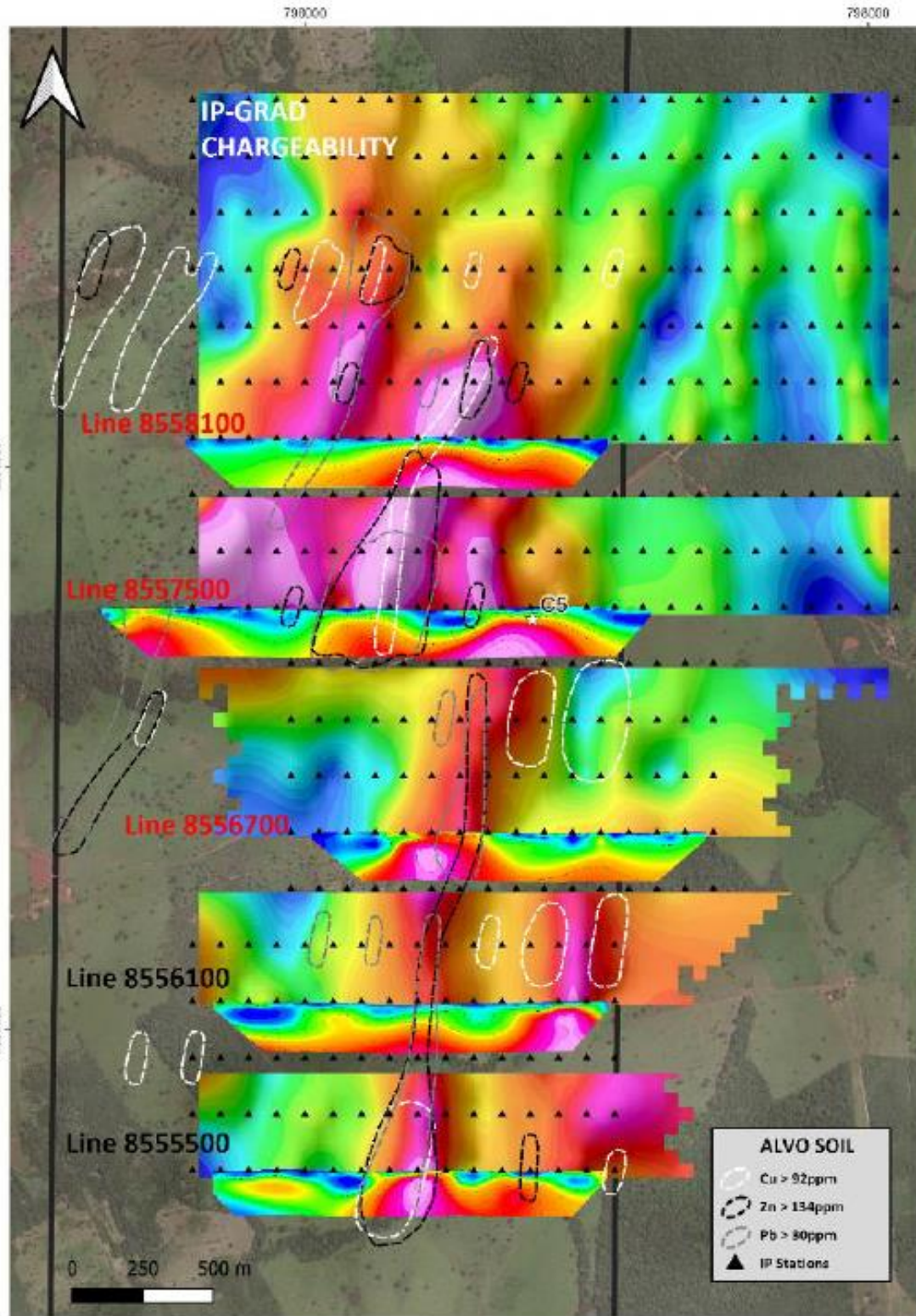


Figure 5: C5 prospect with geochemical anomalies and IP lines illustrating chargeability.

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## Afla Project – Exploration Program

Exploration at the Afla Project will follow the same methodical approach that Alvo is applying across the Palma Project. Alvo signed an earn-in agreement over 5 exploration permits 98km<sup>2</sup>.<sup>2</sup>

In Figure 6, first pass auger geochemistry has been planned across the tenements. Auger drilling will take advantage of existing roads and sample on 200m spacing, with priority 1 and priority 2 sampling defined.

For soil geochemistry, priority 1 and 2 sampling programs have also been defined, based on historical soil sampling and VTEM anomalies.

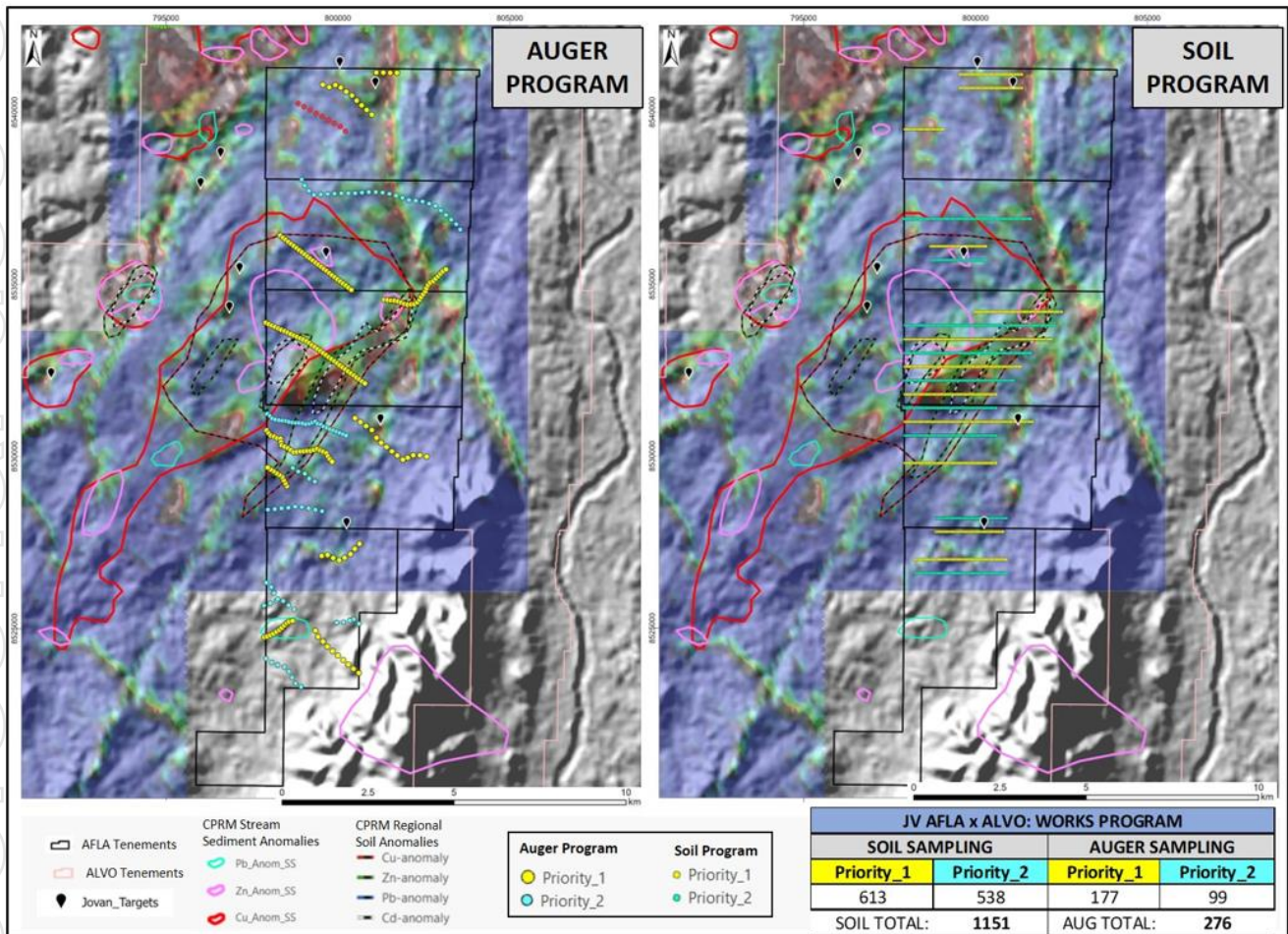


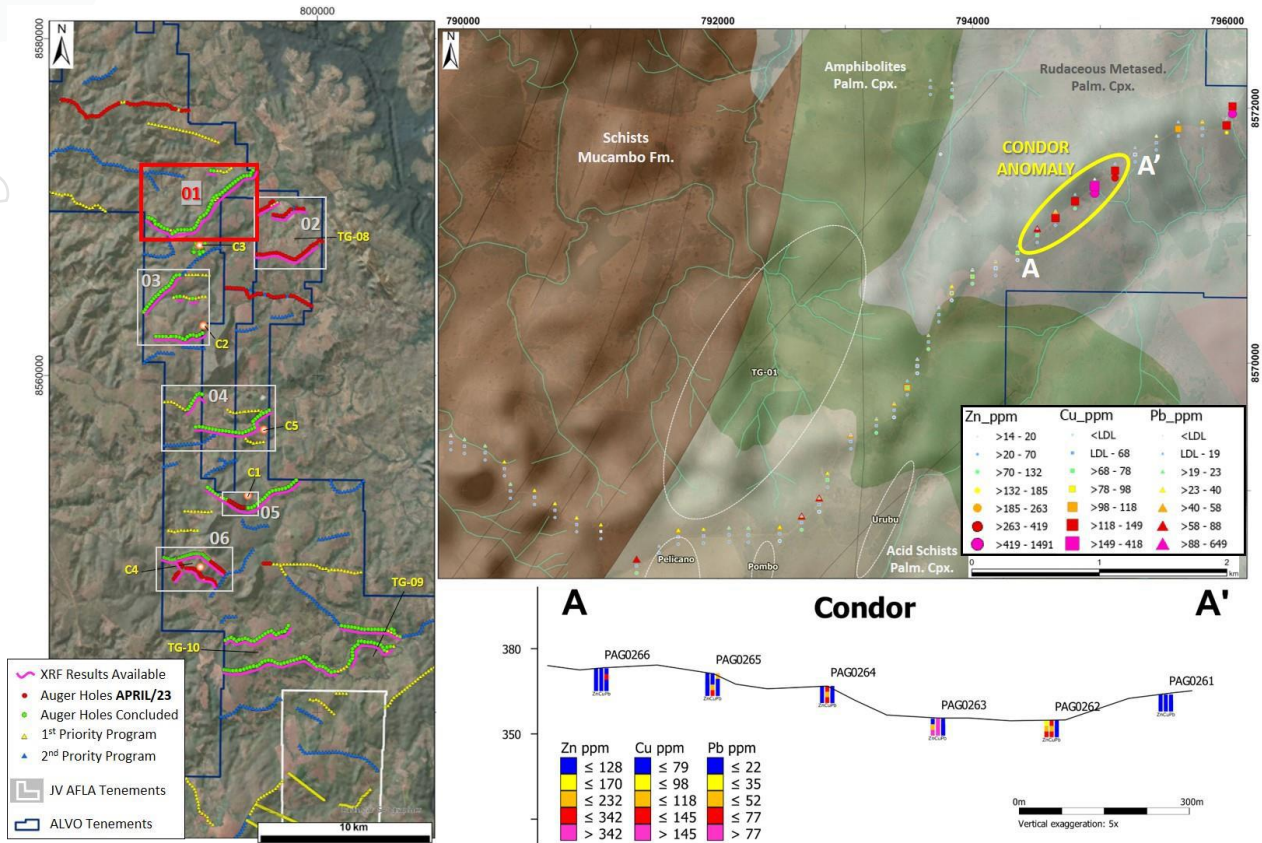
Figure 6: Afla earn-in area, preliminary Planned Auger and soil geochemistry work programs

## Condor Prospect – Auger Geochemical Anomaly

Auger drilling to the north of C3 has highlighted a series of geochemical anomalies based on the regional broad spaced auger drilling program. At the Condor prospect, auger geochemistry on 5 consecutive holes on 200m spacing has intercepted anomalous samples (Cu, Zn and Pb) and additional work around closer spaced drilling, mapping and IP testing is planned based on ongoing positive results. To the best of Alvo’s knowledge, the Condor prospect has never been sampled.

Auger geochemical drilling will utilise the existing roads and fence lines to quickly sample the Palma District and the initial sampling has highlighted several targets similar to Condor.

<sup>2</sup> See ASX Release “Earn-In on Afla Cu/Zn Project Consolidates Palma VMS Belt” dated 28 March 2023.



**Figure 7:** Condor Prospect (top right) and location of auger drilling over geology with the anomalous Cu, Zn and Pb samples highlighted. Cross section through the Condor anomaly (bottom right)

### Next Steps and Upcoming Newsflow

- Phase 2 Diamond Drilling at C1 Deposit – **Ongoing**
- Auger geochemical Drilling using Alvo’s new truck mounted mechanical Auger – **Ongoing**
- DHEM surveys at C3 and C1 – **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 – **Ongoing**
- IP surveys at C3, C1 and regional targets – **Ongoing**
- Updated Mineral Resource Estimate at C3 – **Q3 CY2023**
- Updated Mineral Resource Estimate at C1 – **Q4 CY2023**



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 THE 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 "PRELIMINARY METALLURGICAL TESTWORK INDICATES EXCELLENT RECOVERIES" dated 9 November 2022 issued by Alvo Minerals Limited

As reported in the announcement "Large Extension of High-Grade Copper and Zinc Mineralisation – 19 January 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 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

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**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.



**Table 1: Collar details**

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0001	793,020	8,567,727	393	12
PAG0002	793,074	8,567,709	393	8
PAG0003	792,974	8,567,741	393	16
PAG0004	793,043	8,567,788	391	12
PAG0005	792,939	8,567,645	396	10
PAG0006	792,999	8,567,886	389	10
PAG0007	793,077	8,567,864	387	5
PAG0008	793,149	8,567,835	387	4
PAG0009	793,129	8,567,932	393	3
PAG0010	793,032	8,567,966	394	9
PAG0011	792,985	8,567,985	394	9
PAG0012	792,868	8,567,884	393	5
PAG0013	792,824	8,567,901	395	4
PAG0014	792,772	8,567,906	396	4
PAG0015	792,961	8,567,852	391	10
PAG0016	792,914	8,567,867	392	3
PAG0017	793,008	8,567,832	390	11
PAG0018	793,054	8,567,815	389	14
PAG0019	793,102	8,567,796	389	4
PAG0020	793,190	8,567,885	392	4
PAG0021	793,224	8,567,853	394	8
PAG0022	793,324	8,567,823	399	8
PAG0023	793,089	8,567,905	389	9
PAG0024	793,041	8,567,926	391	6
PAG0025	792,993	8,567,942	392	8
PAG0026	792,945	8,567,960	393	7
PAG0027	792,926	8,567,754	393	8
PAG0028	792,884	8,567,772	394	3
PAG0029	793,116	8,567,687	393	6
PAG0030	792,986	8,567,628	395	12
PAG0031	793,033	8,567,611	394	8
PAG0032	793,080	8,567,594	394	10
PAG0033	793,128	8,567,576	394	10
PAG0034	793,163	8,567,550	395	10
PAG0035	793,188	8,567,450	395	7
PAG0036	793,143	8,567,464	395	7
PAG0037	793,094	8,567,483	395	11
PAG0038	793,046	8,567,500	396	10
PAG0039	793,000	8,567,515	396	12
PAG0040	792,955	8,567,533	397	14
PAG0041	792,921	8,567,558	398	8
PAG0042	792,785	8,567,811	396	10

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0043	792,962	8,567,424	398	10
PAG0044	793,011	8,567,406	397	7
PAG0045	793,058	8,567,389	397	10
PAG0046	793,106	8,567,372	396	10
PAG0047	793,153	8,567,355	396	8
PAG0048	793,208	8,567,346	396	10
PAG0049	792,983	8,567,313	398	16
PAG0050	793,006	8,567,205	399	8
PAG0051	792,605	8,567,446	405	18
PAG0052	792,569	8,567,354	408	14
PAG0053	792,615	8,567,338	409	10
PAG0054	792,661	8,567,318	400	12
PAG0055	794,471	8,542,526	448	6
PAG0056	794,575	8,542,511	448	8
PAG0057	794,674	8,542,501	446	7
PAG0058	794,773	8,542,488	445	7
PAG0059	794,876	8,542,475	442	6
PAG0060	794,979	8,542,478	439	13
PAG0061	795,181	8,542,484	430	11
PAG0062	795,418	8,542,493	423	8
PAG0063	795,630	8,542,559	423	8
PAG0064	795,822	8,542,622	416	10
PAG0065	796,008	8,542,692	408	8
PAG0066	796,204	8,542,752	401	10
PAG0067	796,404	8,542,742	392	12
PAG0068	796,575	8,542,856	387	16
PAG0069	796,718	8,542,981	386	8
PAG0070	796,908	8,543,053	381	10
PAG0071	797,097	8,543,100	381	12
PAG0072	797,291	8,543,068	383	12
PAG0073	797,474	8,542,986	385	10
PAG0074	797,656	8,542,898	382	16
PAG0075	797,845	8,542,867	383	16
PAG0076	798,034	8,542,926	381	16
PAG0077	798,226	8,542,982	380	16
PAG0078	798,425	8,543,055	377	14
PAG0079	798,608	8,543,099	379	16
PAG0080	798,802	8,543,158	374	14
PAG0081	798,988	8,543,221	376	10
PAG0082	799,185	8,543,295	375	14
PAG0083	799,357	8,543,247	371	16
PAG0084	799,511	8,543,122	363	16
PAG0085	799,678	8,542,993	355	20





HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0086	799,815	8,542,857	350	7
PAG0087	799,949	8,542,705	341	10
PAG0088	800,139	8,542,742	332	6
PAG0089	800,334	8,542,700	332	10
PAG0090	800,512	8,542,613	334	6
PAG0091	800,663	8,542,482	336	10
PAG0092	800,832	8,542,378	328	8
PAG0093	801,030	8,542,417	329	6
PAG0094	801,887	8,542,878	333	6
PAG0095	801,943	8,543,070	340	10
PAG0096	802,091	8,543,200	351	12
PAG0097	802,104	8,543,392	358	17
PAG0098	802,072	8,543,588	349	12
PAG0099	802,092	8,543,785	350	10
PAG0100	802,242	8,543,916	361	20
PAG0101	802,409	8,544,031	361	8
PAG0102	802,457	8,544,209	359	10
PAG0103	802,614	8,544,223	362	16
PAG0104	802,803	8,544,184	357	12
PAG0105	803,006	8,544,168	352	14
PAG0106	803,200	8,544,167	345	12
PAG0107	803,388	8,544,108	339	8
PAG0108	803,600	8,544,048	332	8
PAG0109	803,778	8,543,994	329	8
PAG0110	803,890	8,543,846	327	8
PAG0111	803,979	8,543,688	321	4
PAG0112	804,143	8,543,868	324	10
PAG0113	804,340	8,543,909	319	6
PAG0114	804,906	8,544,482	310	4
PAG0115	804,584	8,544,684	322	8
PAG0116	804,532	8,544,878	338	6
PAG0117	804,407	8,544,940	335	8
PAG0118	804,015	8,544,909	332	8
PAG0119	803,822	8,544,913	341	10
PAG0120	803,615	8,544,926	354	16
PAG0121	803,422	8,544,923	353	14
PAG0122	803,220	8,544,927	354	12
PAG0123	803,026	8,544,932	359	12
PAG0124	802,798	8,544,931	373	20
PAG0125	802,620	8,544,953	374	14
PAG0126	802,426	8,544,996	380	12
PAG0127	802,224	8,545,035	378	2
PAG0128	802,032	8,545,064	379	8
PAG0129	801,834	8,545,084	381	6

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0130	801,630	8,545,105	381	12
PAG0131	801,437	8,545,138	388	5
PAG0132	794,538	8,544,276	400	10
PAG0133	794,697	8,544,350	403	10
PAG0134	794,878	8,544,440	405	12
PAG0135	795,052	8,544,346	396	10
PAG0136	795,212	8,544,232	384	4
PAG0137	795,528	8,544,347	387	4
PAG0138	795,338	8,544,312	382	8
PAG0139	795,708	8,544,398	392	6
PAG0140	795,891	8,544,327	400	8
PAG0141	796,058	8,544,235	408	10
PAG0142	796,256	8,544,238	404	10
PAG0143	796,410	8,544,341	398	4
PAG0144	796,577	8,544,452	395	12
PAG0145	796,746	8,544,562	387	10
PAG0146	796,906	8,544,674	385	10
PAG0147	797,084	8,544,771	381	10
PAG0148	797,273	8,544,832	375	10
PAG0149	797,406	8,544,680	374	8
PAG0150	797,549	8,544,591	365	6
PAG0151	797,699	8,544,703	360	8
PAG0152	797,910	8,544,784	355	2
PAG0153	798,063	8,544,812	352	6
PAG0154	798,190	8,544,986	361	5
PAG0155	798,273	8,545,148	372	6
PAG0156	798,739	8,553,782	369	6
PAG0157	798,578	8,553,644	372	8
PAG0158	798,436	8,553,515	373	10
PAG0159	798,273	8,553,390	378	10
PAG0160	798,095	8,553,311	379	7
PAG0161	797,890	8,553,266	379	12
PAG0162	797,707	8,553,226	380	10
PAG0163	797,526	8,553,187	378	6
PAG0164	797,317	8,553,142	389	6
PAG0165	797,144	8,553,040	388	8
PAG0166	796,997	8,552,902	388	6
PAG0167	796,874	8,552,748	391	8
PAG0168	796,729	8,552,622	391	8
PAG0169	796,566	8,552,498	395	8
PAG0170	796,405	8,552,377	394	10
PAG0171	796,243	8,552,238	397	8
PAG0172	796,083	8,552,147	397	12
PAG0173	795,884	8,552,138	403	12



HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0174	795,678	8,552,158	406	12
PAG0175	795,478	8,552,176	415	14
PAG0176	795,297	8,552,245	421	10
PAG0177	795,116	8,552,344	424	14
PAG0178	794,953	8,552,438	426	14
PAG0179	794,779	8,552,540	424	8
PAG0180	794,605	8,552,632	423	6
PAG0181	794,409	8,552,683	429	6
PAG0182	794,065	8,552,897	424	2
PAG0183	793,903	8,552,982	419	2
PAG0184	793,762	8,553,123	419	10
PAG0185	793,604	8,553,242	419	6
PAG0186	793,466	8,553,355	413	6
PAG0187	792,309	8,558,002	413	6
PAG0188	792,416	8,558,174	413	10
PAG0189	792,526	8,558,344	412	8
PAG0190	792,631	8,558,512	405	6
PAG0191	792,737	8,558,683	403	8
PAG0192	792,843	8,558,851	393	6
PAG0193	792,996	8,558,915	386	6
PAG0194	793,145	8,558,885	379	4
PAG0195	797,129	8,557,925	351	10
PAG0196	796,965	8,557,823	355	10
PAG0197	796,771	8,557,756	354	16
PAG0198	796,605	8,557,648	350	8
PAG0199	796,450	8,557,541	343	4
PAG0200	796,308	8,557,392	342	6
PAG0201	796,174	8,557,269	335	5
PAG0202	796,242	8,557,084	340	6
PAG0203	796,269	8,556,904	342	6
PAG0204	796,091	8,556,816	349	8
PAG0205	795,907	8,556,740	347	8
PAG0206	795,725	8,556,659	357	8
PAG0207	795,540	8,556,579	362	8
PAG0208	795,341	8,556,600	361	10
PAG0209	795,147	8,556,622	359	8
PAG0210	794,943	8,556,645	354	6
PAG0211	794,745	8,556,669	358	8
PAG0212	794,549	8,556,694	362	10
PAG0213	794,349	8,556,718	364	6
PAG0214	794,153	8,556,736	370	12
PAG0215	793,952	8,556,773	373	10
PAG0216	793,758	8,556,813	377	6
PAG0217	793,561	8,556,855	382	6

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0218	793,366	8,556,894	380	4
PAG0219	793,178	8,556,936	389	4
PAG0220	792,972	8,556,959	390	6
PAG0221	792,764	8,556,945	385	6
PAG0222	793,171	8,562,509	407	6
PAG0223	792,988	8,562,410	411	6
PAG0224	792,814	8,562,343	410	8
PAG0225	792,617	8,562,398	419	6
PAG0226	792,434	8,562,390	429	6
PAG0227	792,269	8,562,281	437	10
PAG0228	792,127	8,562,136	439	4
PAG0229	791,970	8,562,187	456	6
PAG0230	791,790	8,562,274	454	8
PAG0231	791,593	8,562,314	451	10
PAG0232	791,392	8,562,314	450	8
PAG0233	791,292	8,562,313	448	6
PAG0234	790,993	8,562,310	447	6
PAG0235	790,797	8,562,314	450	12
PAG0236	790,588	8,562,313	454	8
PAG0237	790,399	8,562,312	459	5
PAG0238	789,675	8,563,766	441	14
PAG0239	789,777	8,563,928	439	6
PAG0240	789,881	8,564,073	433	6
PAG0241	790,026	8,564,252	433	10
PAG0242	790,143	8,564,403	432	8
PAG0243	790,268	8,564,566	429	8
PAG0244	790,401	8,564,700	428	10
PAG0245	790,559	8,564,813	421	6
PAG0246	790,677	8,564,974	419	4
PAG0247	790,837	8,565,087	418	6
PAG0248	791,000	8,565,204	417	8
PAG0249	791,165	8,565,318	421	8
PAG0250	791,285	8,565,481	429	8
PAG0251	791,378	8,565,659	422	8
PAG0252	791,475	8,565,827	425	8
PAG0253	791,608	8,565,943	425	8
PAG0254	791,809	8,565,973	419	8
PAG0255	796,167	8,572,179	351	4
PAG0256	796,040	8,572,014	345	8
PAG0257	795,994	8,571,865	348	6
PAG0258	795,803	8,571,843	358	16
PAG0259	795,614	8,571,838	356	8
PAG0260	795,442	8,571,729	357	6
PAG0261	795,275	8,571,636	356	6



HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0262	795,118	8,571,510	348	6
PAG0263	794,958	8,571,389	350	6
PAG0264	794,804	8,571,269	364	6
PAG0265	794,650	8,571,138	368	8
PAG0266	794,507	8,571,003	370	8
PAG0267	794,352	8,570,865	369	18
PAG0268	794,181	8,570,745	362	12
PAG0269	793,998	8,570,679	363	16
PAG0270	793,836	8,570,549	362	8
PAG0271	793,735	8,570,381	356	6
PAG0272	793,652	8,570,166	358	4
PAG0273	793,565	8,569,977	361	8
PAG0274	793,486	8,569,807	373	10
PAG0275	793,383	8,569,631	373	8
PAG0276	793,244	8,569,509	379	14
PAG0277	793,042	8,569,385	381	6
PAG0278	792,860	8,569,083	384	4
PAG0279	792,795	8,568,890	385	6
PAG0280	792,657	8,568,748	392	6
PAG0281	792,485	8,568,661	393	4
PAG0282	792,239	8,568,651	397	4
PAG0283	792,086	8,568,653	398	4
PAG0284	791,887	8,568,644	406	5
PAG0285	791,689	8,568,636	414	8
PAG0286	791,538	8,568,509	416	4
PAG0287	791,361	8,568,410	423	6
PAG0288	792,580	8,564,576	396	8
PAG0289	791,644	8,564,674	396	6
PAG0290	791,836	8,564,688	392	6
PAG0291	789,903	8,569,377	341	6
PAG0292	790,010	8,569,348	351	6
PAG0293	790,172	8,569,296	362	6
PAG0294	790,323	8,569,172	381	4
PAG0295	790,371	8,568,996	387	4
PAG0296	790,560	8,568,948	405	3
PAG0297	790,720	8,568,845	412	4
PAG0298	790,891	8,568,733	422	6
PAG0299	791,081	8,568,679	427	5
PAG0300	793,668	8,572,165	315	6
PAG0301	793,838	8,572,144	309	6
PAG0302	790,899	8,549,179	466	4
PAG0303	790,994	8,549,141	457	4
PAG0304	791,089	8,549,129	447	6
PAG0305	791,181	8,549,100	445	4

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0306	791,265	8,549,046	436	6
PAG0307	791,361	8,549,042	432	10
PAG0308	791,464	8,549,063	429	8
PAG0309	791,564	8,549,073	427	8
PAG0310	791,682	8,549,030	427	10
PAG0311	791,729	8,549,103	429	6
PAG0312	791,786	8,549,142	431	8
PAG0313	791,882	8,549,166	430	14
PAG0314	791,965	8,549,217	433	8
PAG0315	792,066	8,549,247	440	6
PAG0316	792,160	8,549,277	443	6
PAG0317	792,251	8,549,304	452	6
PAG0318	792,355	8,549,334	459	6
PAG0319	792,446	8,549,368	459	8
PAG0320	792,559	8,549,390	464	4
PAG0321	792,667	8,549,402	468	6
PAG0322	792,741	8,549,409	469	4
PAG0323	792,840	8,549,403	466	6
PAG0324	792,943	8,549,396	463	6
PAG0325	793,042	8,549,388	461	2
PAG0326	793,149	8,549,380	460	3
PAG0327	793,213	8,549,342	462	3
PAG0328	793,287	8,549,276	465	10
PAG0329	793,365	8,549,207	466	12
PAG0330	793,430	8,549,148	466	10
PAG0331	793,514	8,549,078	463	10
PAG0332	793,589	8,549,012	459	10
PAG0333	793,660	8,548,943	453	8
PAG0334	793,737	8,548,877	452	10
PAG0335	793,818	8,548,818	449	10
PAG0336	793,897	8,548,758	447	10
PAG0337	793,978	8,548,700	446	9
PAG0338	794,061	8,548,634	448	2
PAG0339	794,146	8,548,576	446	3
PAG0340	794,225	8,548,522	445	6
PAG0341	794,293	8,548,454	446	4
PAG0342	794,367	8,548,388	447	7
PAG0343	794,445	8,548,315	443	10
PAG0344	791,455	8,547,928	435	10
PAG0345	791,527	8,547,991	434	10
PAG0346	791,553	8,548,093	429	10
PAG0347	791,611	8,548,174	424	10
PAG0348	791,685	8,548,231	419	6
PAG0349	791,762	8,548,302	414	4





HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0350	791,976	8,548,630	408	6
PAG0351	791,932	8,548,715	418	14
PAG0352	791,887	8,548,795	424	8
PAG0353	791,819	8,548,888	427	10
PAG0354	791,755	8,548,954	427	10
PAG0355	793,967	8,547,559	412	4
PAG0356	793,895	8,547,733	406	6
PAG0357	793,730	8,547,874	407	10
PAG0358	793,551	8,547,898	419	12
PAG0359	793,412	8,547,942	427	8
PAG0360	793,180	8,548,018	429	10
PAG0361	793,090	8,548,066	432	10
PAG0362	793,044	8,548,147	428	6
PAG0363	793,006	8,548,234	434	12
PAG0364	792,957	8,548,321	438	12
PAG0365	792,886	8,548,392	440	8
PAG0366	792,783	8,548,433	439	12
PAG0367	792,704	8,548,482	441	12
PAG0368	792,623	8,548,533	442	11
PAG0369	795,634	8,552,158	408	20
PAG0370	795,575	8,552,166	411	14
PAG0371	795,533	8,552,169	413	16
PAG0372	795,431	8,552,177	417	14
PAG0373	795,371	8,552,201	419	18
PAG0374	795,342	8,552,217	420	11
PAG0375	795,250	8,552,270	422	14
PAG0376	795,203	8,552,297	423	9
PAG0377	795,162	8,552,314	424	18
PAG0378	795,048	8,552,380	425	16
PAG0379	794,993	8,552,416	426	14
PAG0380	794,908	8,552,458	427	22
PAG0381	794,864	8,552,486	423	16
PAG0382	794,818	8,552,509	423	16
PAG0383	794,730	8,552,563	423	12
PAG0384	792,521	8,548,540	435	6
PAG0385	792,422	8,548,539	425	6
PAG0386	792,321	8,548,534	420	6
PAG0387	792,232	8,548,541	411	6
PAG0388	797,400	8,569,540	334	8
PAG0389	797,602	8,569,511	341	8
PAG0390	797,810	8,569,473	351	10
PAG0391	797,989	8,569,468	350	8
PAG0392	798,137	8,569,591	344	6
PAG0393	798,286	8,569,728	335	6

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0394	798,427	8,569,869	327	8
PAG0395	798,772	8,569,925	326	6
PAG0396	798,966	8,569,873	335	6
PAG0397	799,160	8,569,892	348	6
PAG0398	796,532	8,569,782	347	6
PAG0399	796,732	8,569,857	340	6
PAG0400	796,908	8,569,945	333	6
PAG0401	797,093	8,570,032	333	6
PAG0402	797,204	8,570,243	336	10
PAG0403	797,356	8,570,320	337	8
PAG0404	796,382	8,567,216	373	6
PAG0405	796,587	8,567,185	375	8
PAG0406	796,778	8,567,166	376	6
PAG0407	796,975	8,567,198	375	8
PAG0408	797,174	8,567,234	376	8
PAG0409	797,371	8,567,266	377	8
PAG0410	797,570	8,567,296	374	8
PAG0411	797,761	8,567,221	374	8
PAG0412	797,943	8,567,148	373	8
PAG0413	798,128	8,567,077	373	6
PAG0414	798,330	8,566,996	372	6
PAG0415	798,499	8,566,927	372	6
PAG0416	798,681	8,566,901	370	6
PAG0417	798,856	8,567,020	369	6
PAG0418	799,010	8,567,124	369	8
PAG0419	799,172	8,567,251	367	8
PAG0420	799,324	8,567,378	366	8
PAG0421	799,472	8,567,509	368	8
PAG0422	799,615	8,567,652	361	6
PAG0423	799,770	8,567,769	358	6
PAG0424	799,952	8,567,851	367	8
PAG0425	800,092	8,567,997	374	6
PAG0426	800,283	8,567,955	374	8
PAG0427	784,802	8,576,352	443	8
PAG0428	784,959	8,576,356	444	8
PAG0429	785,159	8,576,323	443	6
PAG0430	785,341	8,576,265	442	6
PAG0431	785,529	8,576,180	424	10
PAG0432	785,694	8,576,055	417	8
PAG0433	785,797	8,575,906	428	6
PAG0434	785,872	8,575,724	426	6
PAG0435	786,029	8,575,616	424	6
PAG0436	786,170	8,575,480	437	6
PAG0437	786,252	8,575,298	444	6



HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0438	786,429	8,575,362	436	6
PAG0439	786,624	8,575,406	437	6
PAG0440	786,819	8,575,383	439	6
PAG0441	786,997	8,575,398	444	6
PAG0442	787,159	8,575,519	437	6
PAG0443	787,314	8,575,643	439	6
PAG0444	787,484	8,575,770	442	10
PAG0445	787,638	8,575,870	439	10
PAG0446	787,818	8,575,965	431	10
PAG0447	787,995	8,576,055	423	8
PAG0448	788,173	8,576,150	420	4
PAG0449	788,704	8,576,184	417	8
PAG0450	788,883	8,576,101	420	8
PAG0451	789,084	8,576,097	414	8
PAG0452	789,281	8,576,080	408	6
PAG0453	789,471	8,576,120	395	6
PAG0454	789,661	8,576,178	383	10
PAG0455	789,864	8,576,155	376	8
PAG0456	790,052	8,576,127	380	8
PAG0457	790,246	8,576,094	370	6
PAG0458	790,448	8,576,093	359	8
PAG0459	790,643	8,576,090	353	6
PAG0460	790,844	8,576,086	346	12
PAG0461	791,043	8,576,071	339	10
PAG0462	791,235	8,576,006	335	6
PAG0463	791,366	8,575,857	335	8
PAG0464	791,562	8,575,821	332	8
PAG0465	791,941	8,575,724	335	8
PAG0466	792,149	8,575,732	336	8
PAG0467	792,329	8,575,717	334	8
PAG0468	794,614	8,565,191	388	10

HOLE_ID	EASTING	NORTHING	RL	Depth
PAG0469	794,808	8,565,190	384	8
PAG0470	795,011	8,565,173	386	10
PAG0471	795,209	8,565,166	383	10
PAG0472	795,411	8,565,150	381	12
PAG0473	795,613	8,565,135	370	10
PAG0474	796,477	8,564,858	354	8
PAG0475	796,659	8,564,847	344	6
PAG0476	795,768	8,565,009	367	10
PAG0477	795,843	8,564,826	367	8
PAG0478	795,945	8,564,624	369	6
PAG0479	796,129	8,564,693	363	6
PAG0480	796,301	8,564,782	363	8
PAG0481	797,068	8,564,785	343	4
PAG0482	797,241	8,564,684	345	6
PAG0483	797,429	8,564,630	346	4
PAG0484	797,616	8,564,648	346	6
PAG0485	797,824	8,564,669	344	4
PAG0486	798,025	8,564,712	342	4
PAG0487	798,410	8,564,732	337	4
PAG0488	798,607	8,564,717	335	4
PAG0489	798,786	8,564,621	342	6
PAG0490	798,954	8,564,509	341	8
PAG0491	799,131	8,564,414	339	6
PAG0492	799,303	8,564,315	339	8
PAG0493	799,477	8,564,217	335	10
PAG0494	799,647	8,564,117	332	10
PAG0495	796,796	8,548,841	429	12
PAG0496	796,996	8,548,843	425	10
PAG0497	797,184	8,548,836	424	10

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## 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	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Sampling was supervised by Alvo geologists who selected the sampling zones.</li> <li>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.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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 &gt;95% for all drilling to date.</li> <li>Drillers are penalised for poor recovery and are constantly supervised at the rig to ensure care is taken to ensure high recoveries.</li> <li>No relationship is believed to exist between recovery and grade.</li> </ul>





Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• The Phase 2 drill program targeting the C3 deposit, 4,895m in 15 holes have been drilled to date. Drilling at Mafico ( 5 holes for 1,165m), Ema (4 holes for 1,150m), Pelicano (1 hole for 403m) and Pombo (1 hole for 202m). All metreage reported has been logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Sample size, being generally 1m sample intervals, is appropriate to the material being sampled and considered to be representative.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• SGS Geosol Laboratorios Ltda (<b>SGS</b>) 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 <ul style="list-style-type: none"> <li>○ Half drill core samples are dried, crushed until 75% pass 3mm, homogenised and split with 250-300g pulverised until 95% passing 150#</li> <li>○ Gold is determined by 30g fire assay</li> <li>○ Multi element (including Cu, Zn, Pb and Ag) are determined by multi-acid digestion and ICP-OES. Samples above 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.</li> </ul> </li> <li>• 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.</li> <li>• Alvo has reviewed the QA/QC data for all lab samples and are satisfied the results are within acceptable limits</li> </ul>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intercept tables are prepared by Alvo personal and checked by at least one other geologist.</li> <li>No twinned holes are being reported.</li> <li>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.</li> <li>No adjustments to the data were made. Weighted averages were used to calculate significant intercepts. For duplicates, the first sample is recorded for intercepts.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Alvo is using GPS to locate and record the drillhole collar locations. All drillholes are downhole surveyed using the Gyro tool from Reflex.</li> <li>All location data has been recorded SIRGAS 2000 UTM zone 22S.</li> <li>Topographic control is adequate for the exploration at Palma.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drillholes were variably spaced- Phase 2 drilling at C3 has targeted step-outs from the 2021 JORC (2012) MRE and other holes considered important for any future MRE update. Drilling at Mafico, Ema and Pelicano are new targets and there is no grid for drilling at these prospects as yet.</li> <li>Drill spacing is considered sufficient to complement the previously reported Inferred JORC 2012 MRE. Results will improve the geological and grade continuity.</li> <li>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.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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. C3 is generally planar in overall geometry, however ongoing interpretation has noted faults, folds and shear zones in the drilling which may have altered the geometry.</li> <li>All intercepts recorded are downhole intervals and may not equal true width. Scissor holes are reported the same and normally oriented holes.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits of the techniques or data has been undertaken at this stage.</li> </ul>



## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration was mainly completed by the CPRM . 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. 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.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See Table 2- Collar table. All drilling from C3 is included in Table 2.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>The significant intercepts were calculated using minimum sample length of 1m, with up to 2m of consecutive dilution, samples included with values &gt; 0.2%Cu or &gt;0.5% Zn or &gt;0.1g/t Au. No upper cuts were considered.</li> <li>Weighted averages were calculated for all intercepts.</li> <li>Copper equivalent grades are reported. Parameters for this calculation are; <b>CuEq and ZnEq: Copper and Zinc Equivalent Calculation</b> The metal equivalent grades 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 Gold ((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 =</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	$Cu\ grade\% * Cu\ recovery + ((Pb\ grade\ \% * Pb\ recovery\ \% * (Pb\ price\ \$/t / Cu\ price\ \$/t)) + (Zn\ grade\ \% * Zn\ recovery\ \% * (Zn\ price\ \$/t / Cu\ price\ \$/t)) + (Ag\ grade\ g/t / 31.103 * Ag\ recovery\ \% * (Ag\ price\ \$/oz / Cu\ price\ \$/t)) + (Au\ grade\ g/t / 31.103 * Au\ recovery\ \% * (Au\ price\ \$/oz / Cu\ price\ \$/t)).\ Reported\ on\ 100\%\ Basis.$
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The downhole depths are reported, true widths* is not accurately known at this stage.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See diagrams reported in the announcement</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All results are reported above the cut-offs described above. Not all of the holes are sampled.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Extensive exploration data and information has been completed at the Palma Project and previously reported. A summary is provided below;</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Alvo estimated a JORC compliant MRE for the C1 and C3 prospects.</li> <li>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).</li> </ul>





Criteria	JORC Code explanation	Commentary
Further work	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Alvo will continue the diamond drilling program targeting the C1 deposit. 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.</li> <li>• 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.</li> <li>• Alvo has purchased a truck mounted mechanical Auger drill rig allowing fast and effective Geochem sampling across the companies tenure.</li> <li>• Alvo routinely soil sampling across the tenure, geologically maps and occasionally trenches prospects to better understand the under-surface geology and geochemistry.</li> </ul>

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