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ASX: ALV

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ALVO DELIVERS DRILLING INTERCEPTS UP TO 4.3% Cu, 17.5% Zn & 184g/t Ag

Diamond drilling delivers thick, shallow and high-grade intercepts at the C1 Prospect

HIGHLIGHTS

- The Palma VMS Project continues to deliver significant base and precious metals results from the C1 prospect.
- **Grades from the phase 1 drill program at C1 and C3 compare favourably with intercepts in historical drilling -used in the reported JORC Mineral Resource Estimate (MRE) of 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag**
- Final assay results received from the phase 1 drill program at C1 continue to define **multiple shallow, thick and high-grade polymetallic intercepts**. Highlights include:
  - PD1-039: **22.0m @ 0.87% Cu, 5.62% Zn, 1.26% Pb, 30.8g/t Ag & 0.04g/t Au** from 50m
    - Inc. **5.7m @ 1.45% Cu, 16.90% Zn, 3.63% Pb, 80.9g/t Ag & 0.08g/t Au** from 59m
  - PD1-037: **2.0m @ 4.32% Cu, 17.45% Zn, 4.78% Pb, 184.2g/t Ag & 0.31g/t Au** from 111m
  - PD1-043: **4.6m @ 0.67% Cu, 7.10% Zn, 1.72% Pb, 29.0g/t Ag & 0.04g/t Au** from 41m
    - Inc. **1.4m @ 1.76% Cu, 20.92% Zn, 5.42% Pb, 91.2g/t Ag & 0.11g/t Au** from 43m
  - PD1-044: **10.9m @ 0.60% Cu, 3.00% Zn, 0.81% Pb, 16.5g/t Ag & 0.01g/t Au** from 60m
    - Inc. **2.5m @ 1.13% Cu, 9.93% Zn, 2.14% Pb, 56.5g/t Ag & 0.04g/t Au** from 68m
  - PD1-045: **2.0m @ 1.98% Cu, 14.37% Zn, 3.35% Pb, 81.9g/t Ag & 0.14g/t Au** from 65m
- Phase 1 drill programs are complete and have significantly increased the Company's confidence for the **phase 2 that will take aggressive step-outs to test extensions to existing high-grade VMS mineralisation**
  - Both drill rigs have relocated and are operating at the C3 prospect, **testing both extensions and discovery targets at Mafico and Ema (previously C3 West)** located within 800m of the C3 prospect
  - Based on the strong results at Palma **the maiden 10,000m program has been extended**

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PROJECT
Palma Project

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

Alvo Minerals Limited (ASX: ALV) (Alvo or **the Company)** is pleased to announce the final assay results from the phase 1 diamond drill program at the C1 prospect. Diamond drilling returned multiple shallow, thick and high-grade polymetallic intercepts (see Figures 1-3 and Table 1).

The Company has completed the maiden 10,000m diamond drill program and given the strong results delivered to date has elected to extend the drill program, with total diamond drilling at Palma Project now passing 12,000m. Both diamond drill rigs are currently operating at C3 testing extensions to high-grade VMS mineralisation and several new discovery targets including Mafico and Ema (previously C3 West).

Rob Smakman, Alvo's Managing Director commented from site:

"Results from drilling at C1 continue to impress, with the best intercepts associated with thickening on the fold which plunges shallowly towards the south. We are starting to build our geological understanding of C1 and look forward to expanding our drilling along strike and down dip once additional geophysical surveys are completed.

Both diamond drill rigs are now back at C3 and testing high-grade extensions to the north, south and at depth, where mineralisation remains open.

It's great to complete the maiden 10,000m program, a goal that we set ourselves for our first year. We are now extending the program as drilling continues at C3 where we are chasing extensions. We are also starting the exciting process of drilling several discovery targets."

Diamond Drilling at C1

Final diamond drilling results for Phase 1 at C1 are reported below and include the results from 18 holes, for a total of 30 holes for 5,551 metres in phase 1 drilling at C1.[1]

The mineralised intercepts (including an intercept of supergene mineralisation) from the 18 holes are reported below in Table 1 and include significant polymetallic intercepts (VMS unless stated):

- PD1-032: **16.0m @ 1.07% Cu, 0.85% Zn, 0.29% Pb, 5.6g/t Ag & 0.06g/t Au** from 16m (supergene)
- PD1-032: **10.6m @ 0.71% Cu, 5.12% Zn, 1.17% Pb, 37.9g/t Ag & 0.04g/t Au** from 71m
- PD1-037: **2.0m @ 4.32% Cu, 17.45% Zn, 4.78% Pb, 184.2g/t Ag & 0.31g/t Au** from 111m
- PD1-039: **22.0m @ 0.87% Cu, 5.62% Zn, 1.26% Pb, 30.8g/t Ag & 0.04g/t Au** from 50m
  - Inc. **5.7m @ 1.45% Cu, 16.90% Zn, 3.63% Pb, 80.9g/t Ag & 0.08g/t Au** from 59m
- PD1-043: **4.6m @ 0.67% Cu, 7.10% Zn, 1.72% Pb, 29.0g/t Ag & 0.04g/t Au** from 41m
  - Inc. **1.4m @ 1.76% Cu, 20.92% Zn, 5.42% Pb, 91.2g/t Ag & 0.11g/t Au** from 43m
- PD1-044: **10.9m @ 0.60% Cu, 3.00% Zn, 0.81% Pb, 16.5g/t Ag & 0.01g/t Au** from 60m
  - Inc. **2.5m @ 1.13% Cu, 9.93% Zn, 2.14% Pb, 56.5g/t Ag & 0.04g/t Au** from 68m
- PD1-045: **2.0m @ 1.98% Cu, 14.37% Zn, 3.35% Pb, 81.9g/t Ag & 0.14g/t Au** from 65m
- PD1-046: **18.1m @ 0.53% Cu, 2.27% Zn, 0.47% Pb, 21.3g/t Ag & 0.02g/t Au** from 62m
  - Inc. **5.5m @ 0.90% Cu, 6.19% Zn, 1.25% Pb, 54.4g/t Ag & 0.05g/t Au** from 72m
- PD1-047: **14.0m @ 0.93% Cu, 2.45% Zn, 0.67% Pb, 21.6g/t Ag & 0.05g/t Au** from 47m
  - Inc. **1.7m @ 1.01% Cu, 8.31% Zn, 2.04% Pb, 55.5g/t Ag & 0.07g/t Au** from 59m

[1] The first 12 holes were reported in ASX release titled "C1 Delivers Outstanding High-grade Polymetallic Drill Results" dated 14 June 2022.

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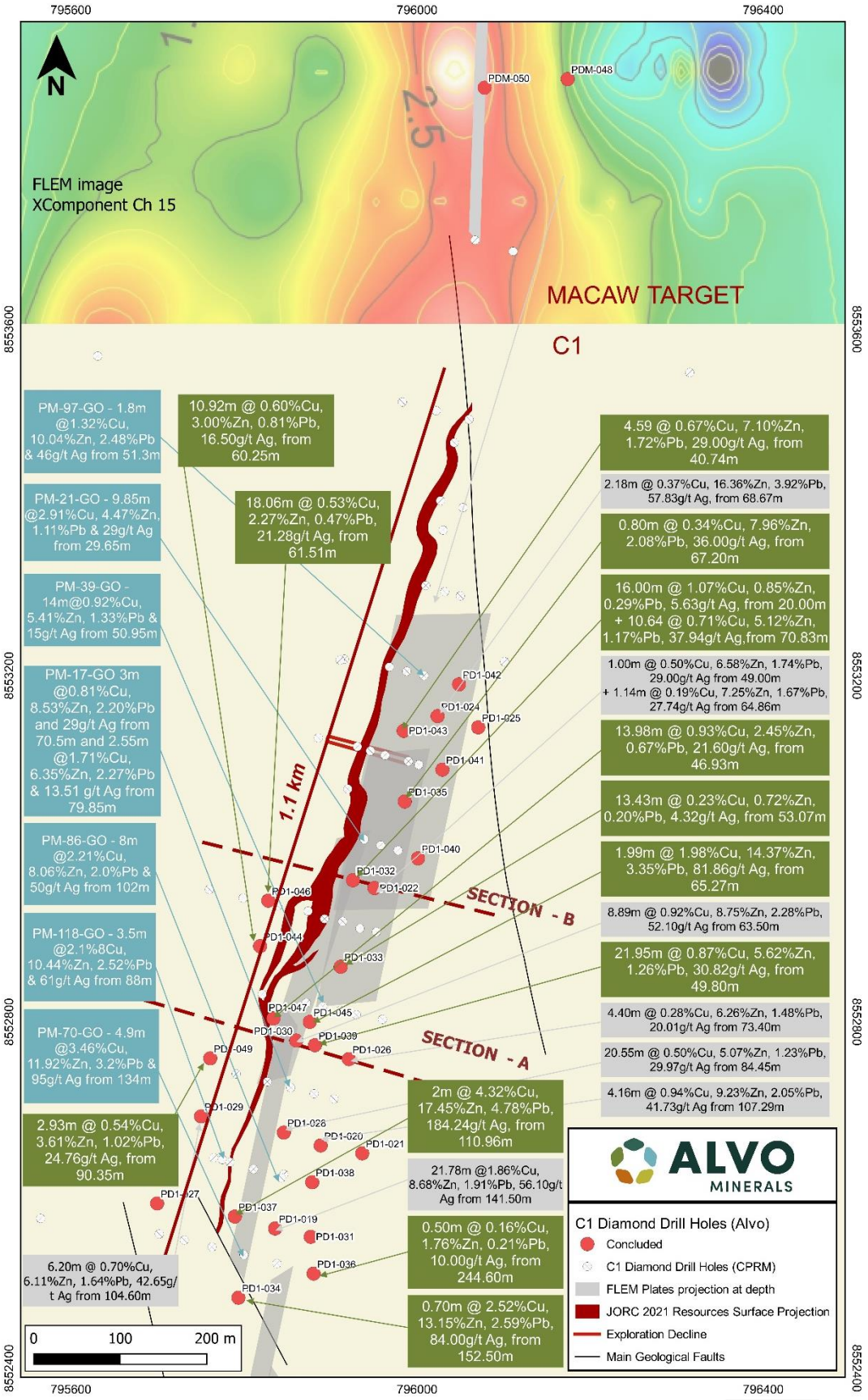

Figure 1: *C1 prospect plan including significant intercepts*

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The VMS mineralisation intercepted to date at C1 varies between massive, semi-massive and disseminated with the overall geometry demonstrating a thickened massive/semi-massive zone along an interpreted fold hinge which plunges shallowly to the south. This high-grade polymetallic zone extends for about 600m along strike and is shallow, starting from approximately 25m below surface.

The supergene mineralisation intercepted in hole PD1-032 was the first occurrence at C1 and is similar to the supergene zone at C3. However, due to the shallow weathering profile at C1, it is expected the overall supergene zone will be less significant than the zones drilled at C3 to date.

Overall, the grade intercepted from phase 1 drilling at C1 has consistently been wider intercepts with higher grade than historical holes used in the JORC 2012 compliant Mineral Resource Estimate (**MRE**) published by Alvo in 2021 which is based on the historical drilling of the Brazilian Geological Survey (**CPRM**). Alvo drill results also systematically include gold results which historically were not assayed.

The geometry of the current resource and the Alvo drilling matched well, despite the complex geometry. The 'limbs' of this fold are narrow, high-grade, open at depth and along strike to the NNE. Exploration is ongoing at C1 where additional thickened folds are being targeted.

Overall, the mineralisation extends for over 1km in strike length, with the southern extent of the mineralisation appearing to be truncated by a fault. The southern holes intercepted a fault zone adjacent to narrow massive sulphides and DHEM surveys are planned to better understand any possible dislocation of the fold zone. Fixed Loop Electromagnetic (**FLEM**) surveys indicate conductive plates at depth and further east south of the fault, however more information from the Downhole Electromagnetic (**DHEM**) surveys will assist in the interpretation.

The Company will utilise DHEM on the phase 1 holes to ensure any conductive plate locations are considered for testing in upcoming campaigns. The DHEM, which is due to start shortly, will also be a key tool at C1 to explore for additional folded zones at depth.

Additional FLEM surveys are underway at C1 to test the gap between the 2021 contractor survey and the northern FLEM survey completed by the company in 2022. These FLEM surveys will also target the fold zones at depth.

Metallurgical samples for C1 are now being prepared for transport and testing alongside the ongoing testwork of samples from C3.

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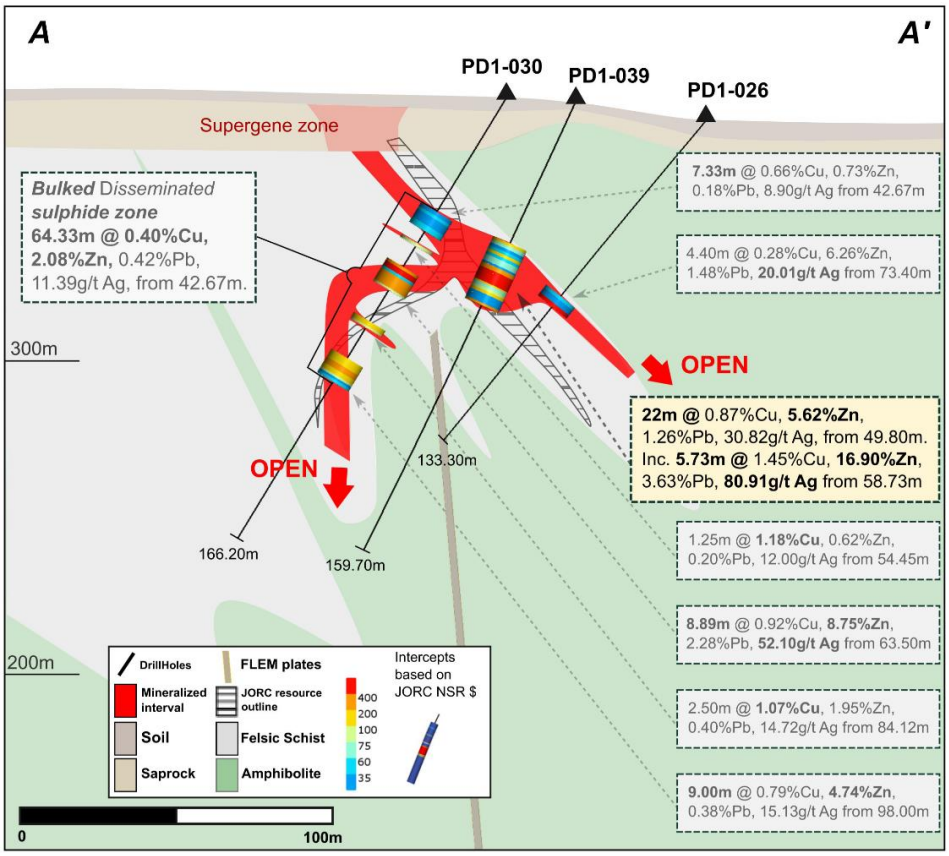

Figure 2: *Cross section A, C1 prospect.*

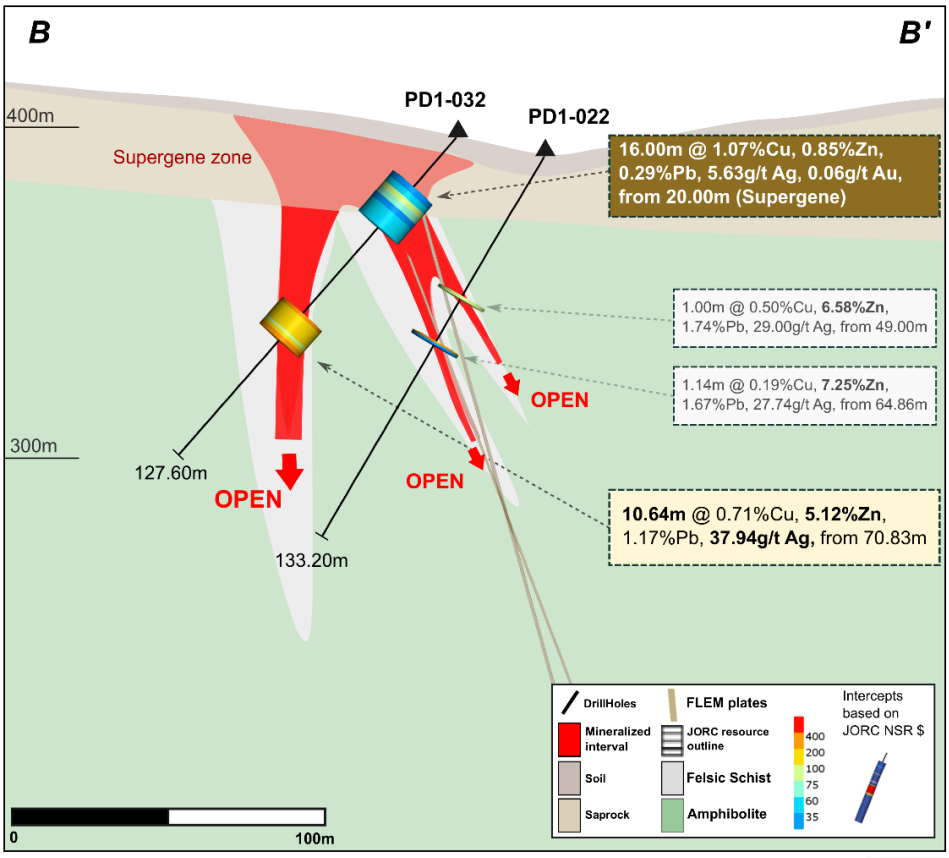

Figure 3: *Cross section B C1 prospect.*

Exploration at Macaw

Alvo drill tested Macaw prospect located along strike from C1 (see Figure 1) that has a moderate geochemical anomaly and strong, coincident FLEM and Induced Polarisation (**IP**) anomalies.

Alvo drill tested the anomalies with two holes which intercepted both massive and disseminated sulphides, however the sulphides were principally pyrite and pyrrhotite. Broad alteration zones similar to what was seen in the drilling at C1 has been interpreted by Alvo's geological team as confirmation that the sulphides at Macaw are a part of the VMS system, however their location is interpreted as being in a more distal part of the mineralised system. VMS mineralisation can often be 'zoned' where different sulphide species are concentrated in different areas.

DHEM on the holes at Macaw are planned to look for additional off-hole conductors which could host additional mineralised zones.

Next Steps:

- Phase 2 diamond drilling is ongoing at C3, targeting extensional targets defined by earlier drilling and refined by FLEM and DHEM surveys.
- FLEM and DHEM surveys underway to evaluate extensional targets at C3 and C1, while also evaluating potential new discovery prospects, Ema, Mafico, Pelicano and Pombo. Follow-up mapping, sampling and trenching of the multiple regional targets is underway
- Metallurgical test work is underway for C3, sample preparation is underway for C1.

Table 1: *Significant intercepts C1 Diamond drilling program.*

Hole ID	Length (m)	From (m)	Cu %	Zn %	Pb %	Ag g/t	Au g/t	Comment
PD1-031	-	-	-	-	-	-	-	NSA
PD1-032	16.00	20.00	1.07	0.85	0.29	5.63	0.06	*Supergene*
	10.64	70.83	0.71	5.12	1.17	37.94	0.04	VMS
PD1-033	13.43	53.07	0.23	0.72	0.20	4.32	0.02	VMS
including	3.93	53.07	0.69	0.53	0.28	9.41	0.05	VMS
including	0.50	66.00	0.08	11.36	2.36	42.00	0.06	VMS
PD1-034	0.70	152.50	2.52	13.15	2.59	84.00	0.21	VMS
PD1-035	0.80	67.20	0.34	7.96	2.08	36.00	0.02	VMS
PD1-035	2.82	82.18	0.22	0.69	0.11	12.77	0.04	VMS
PD1-037	1.99	110.96	4.32	17.45	4.78	184.24	0.31	VMS
PD1-036	2.00	116.00	0.20	0.63	0.17	4.50	0.01	VMS
PD1-036	0.50	244.60	0.16	1.76	0.21	10.00	0.01	VMS
PD1-036	0.55	246.85	0.18	1.05	0.10	4.00	0.03	VMS
PD1-036	0.50	249.60	0.29	1.14	0.07	4.00	0.02	VMS
PD1-036	0.55	251.70	0.10	1.62	0.30	13.00	0.01	VMS
PD1-038	-	-	-	-	-	-	-	NSA
PD1-039	21.95	49.80	0.87	5.62	1.26	30.82	0.04	VMS
including	5.73	58.73	1.45	16.90	3.63	80.91	0.08	VMS

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Hole ID	Length (m)	From (m)	Cu %	Zn %	Pb %	Ag g/t	Au g/t	Comment
PD1-040	-	-	-	-	-	-	-	NSA
PD1-041	-	-	-	-	-	-	-	NSA
PD1-042	-	-	-	-	-	-	-	NSA
PD1-043	4.59	40.74	0.67	7.10	1.72	29.00	0.04	VMS
including	1.35	42.80	1.76	20.92	5.42	91.22	0.11	VMS
PD1-044	7.39	46.47	0.45	0.43	0.17	2.57	0.00	VMS
PD1-044	10.92	60.25	0.60	3.00	0.81	16.50	0.01	VMS
including	2.48	67.92	1.13	9.93	2.14	56.50	0.04	VMS
PD1-045	13.38	44.11	0.43	1.38	0.35	9.99	0.02	VMS
including	1.68	50.00	1.07	4.65	1.01	36.30	0.10	VMS
including	1.47	54.53	0.91	3.05	0.88	26.84	0.05	VMS
PD1-045	1.99	65.27	1.98	14.37	3.35	81.86	0.14	VMS
PD1-045	4.50	96.10	0.34	1.86	0.37	13.13	0.02	VMS
PD1-046	2.40	40.97	0.48	1.11	0.33	7.00	0.00	VMS
PD1-046	2.90	50.30	0.35	0.99	0.27	6.38	0.00	VMS
PD1-046	18.06	61.51	0.53	2.27	0.47	21.28	0.02	VMS
including	5.54	72.00	0.90	6.19	1.25	54.39	0.05	VMS
PD1-047	13.98	46.93	0.93	2.45	0.67	21.60	0.05	VMS
including	1.70	58.60	1.01	8.31	2.04	55.53	0.07	VMS
PD1-047	2.68	81.10	0.31	5.80	1.45	29.60	0.04	VMS
PDM-048	-	-	-	-	-	-	-	NSA
PD1-049	2.93	90.35	0.54	3.61	1.02	24.76	0.03	VMS
PDM-050	-	-	-	-	-	-	-	NSI

Table of significant intercepts calculated using a 0.2% 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. NSA= No Significant Assays

Table 2: *Diamond drill Collar details. Coordinates are in SIRGAS_2000 Zone22S*

Hole ID	Prospect	Easting	Northing	RL	Depth	Azimuth	Dip	Comment
PD1-019	C1	795840	8552559	400	181.45	285	-60	Upgrade
PD1-020	C1	795893	8552661	387	250.80	285	-60	Upgrade
PD1-021	C1	795942	8552649	385	268.60	285	-60	Extend
PD1-022	C1	795953	8552958	410	133.20	285	-60	Upgrade
PD1-023	C1	796002	8552166	412	466.75	285	-60	Discover
PD1-024	C1	796024	8553153	399	110.00	285	-60	Upgrade
PD1-025	C1	796070	8553140	414	177.40	285	-60	Extend
PD1-026	C1	795925	8552760	393	133.30	285	-50	Upgrade
PD1-027	C1	795706	8552586	424	210.85	105	-60	Upgrade
PD1-028	C1	795845	8552669	381	205.05	285	-60	Upgrade
PD1-029	C1	795756	8552691	392	137.30	105	-60	Upgrade
PD1-030	C1	795859	8552771	385	166.20	285	-60	Upgrade
PD1-031	C1	795880	8552555	394	271.40	285	-60	Extend

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Hole ID	Prospect	Easting	Northing	RL	Depth	Azimuth	Dip	Comment
PD1-032	C1	795927	8552961	397	127.60	285	-50	Upgrade
PD1-033	C1	795911	8552864	389	158.90	285	-50	Upgrade
PD1-034	C1	795795	8552479	393	199.45	285	-60	Extend
PD1-035	C1	795991	8553055	386	100.65	285	-60	Upgrade
PD1-036	C1	795882	8552510	396	278.70	285	-60	Extend
PD1-037	C1	795789	8552573	396	160.85	285	-60	Upgrade
PD1-038	C1	795878	8552615	364	211.70	285	-70	Extend
PD1-039	C1	795882	8552773	381	159.70	285	-65	Upgrade
PD1-040	C1	796001	8552988	388	166.50	285	-60	Extend
PD1-041	C1	796029	8553091	387	172.90	285	-70	Extend
PD1-042	C1	796048	8553189	379	160.55	285	-60	Extend
PD1-043	C1	795984	8553136	385	97.55	285	-60	Upgrade
PD1-044	C1	795818	8552887	393	151.20	105	-60	Upgrade
PD1-045	C1	795876	8552800	335	199.05	285	-60	Upgrade
PD1-046	C1	795828	8552940	358	171.95	105	-60	Upgrade
PD1-047	C1	795834	8552804	353	154.70	105	-70	Upgrade
PDM-048	Macaw	796174	8553889	342	217.20	270	-50	Discover
PD1-049	C1	795761	8552758	369	166.35	105	-60	Upgrade
PDM-050	Macaw	796078	8553879	345	124.55	285	-60	Discover

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

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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.

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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 would 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.

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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 C1 (as at 29/08/2022), a total meterage of 5,5550m in 30 holes have been drilled to date and 18 holes are reported in this release. 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 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 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. • 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

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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 pGPS 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

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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 C1 prospect is located on tenements 811.702/1975, 811.686/1975 and 860.310/1984, which are all 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, minimum drilling commitments and payment of 1.71% royalty from production (above statutory government royalties). • Alvo is confident the tenements are all in good standing and no known impediments exist for further exploration or eventual mining, apart from normal statutory reporting, local access agreements and state and federal approvals.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration 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 C1 and Macaw 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*	• 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

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	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.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• At C1, the overall mineralised domain dips steeply to the SE with localised folding observed in drillcore. The folding has resulted in complex shapes near and drilling cannot always intercept perpendicular to mineralisation. • The fold hinge has been measured as plunging shallowly to the South with 3D models of grade and thickness observable with a similar orientation. • The downhole depths are reported, true width is not accurately known at this stage.
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.

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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.

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