

**News Release** 

# Follow-Up Work on Sulphide Discovery Hole MAD-22 Identifies Project's First Anomalous Gold and Silver, Rigs Mobilized to Commence Drilling Sulphide Target

Vancouver, British Columbia, February 15, 2023 – Marimaca Copper Corp. ("Marimaca Copper" or the "Company") (TSX: MARI) is pleased to announce the results of assays for gold and silver from hole MAD-22 and to outline the first phase of follow-up drilling of the exciting new sulphide target identified in diamond drill hole MAD-22, which intersected 120m at 1.7% CuT including 92m at 2.11% CuT (refer to announcement dated 15 December 2022). The anomalous gold and silver encountered towards the end of MAD-22 is the first anomalous precious metal content encountered at the Marimaca Project ("Marimaca" or "the Project").

#### **Highlights**

- First anomalous gold and silver identified at Marimaca coincident with higher grades of primary copper mineralization in MAD-22
  - o 100m of anomalous gold (majority >0.02g/t) and silver (majority >1g/t) from 140m
  - o 40m with an average grade of 3.74% CuT and 0.07g/t Au and 7g/t Ag from 186m
    - Represents 40m with an average grade of 3.84% CuEq<sup>1</sup> from 186m
- MAD-22 intersected over 240m of continuous mineralization from surface with a high grade primary mineral zone at depth including:
  - Reconfirms strong association of high-grade chalcopyrite with high magnetic susceptibility
  - o Encountered massive chalcopyrite over an interval of 92m with an average copper grade of 2.11% CuT from 140m
  - Located immediately adjacent to the eastern wall of the whittle pit limits for the October 2022 MRE, indicating potential for high grade, open pit-able mineralization
  - o Indications are that mineralization relates to a second, later stage, mineralizing event when compared to the broader Marimaca Oxide Project
- Large scale magnetic anomaly previously identified believed to be prospective for mineralization similar to the primary zone in MAD-22
- Five-hole diamond drilling program planned, and rig mobilised, to follow up results of MAD-22:
  - o 50m to 100m step outs from MAD-22
  - o First phase tests approximately 300m of strike potential around MAD-22 with a target width of up to 300m
  - o Drilling will test deeper extensions below the limit of drill hole MAD-22, which terminated in mineralization
  - o Second phase of up to five holes based on results of first phase increase tested strike length to 500m+
- Fully funded to test the exciting sulphide target

### Sergio Rivera, VP Exploration of Marimaca Copper, commented:

"MAD-22 was a spectacular drill hole in terms of grade, continuity and the shallow nature of mineralization, and provided us with valuable information with respect to potential sulphide feeder zones for the Project. As we have noted in previous releases, there is a strong correlation between magnetic anomalism and the presence of primary copper mineralization. MAD-22 once again strongly confirmed the relationship. It has also been noted that outcropping zones with higher prevalence of magnetite, in veins and stringers, could be a good surface vector for future exploration targeting Marimaca-style IOCG (Iron Oxide Copper Gold) deposits.

<sup>&</sup>lt;sup>1</sup> CuEq is calculated using gold price of US\$1,850/oz, silver price of US\$22.50/oz and copper price of US\$4.0/lb



"In 2020, we completed high resolution magnetic work and developed a 3D model which highlights a large-scale magnetic anomaly, which we estimate to be over 175 million<sup>3</sup> meters in volume, or approximately 475 million<sup>2</sup> tonnes of high magnetic susceptibility rock mass. MAD-22 was drilled into the southern extent of this anomaly, which extends over strike of approximately 1.0km and to a depth of around 800m below surface.

"The result of MAD-22 is an exciting confirmation of our view that there is significant sulphide potential below the MOD. We have mobilized a rig to complete an initial follow up program to test the immediate 300m to 500m of strike around MAD-22. Based on the results we achieve we will then plan an expanded programme."

#### Overview

Following extensive drilling and geophysical work, the Company developed an exploration model which was based on a strong correlation between higher grade chalcopyrite mineralization and high magnetic susceptibility, which was used to vector for future deeper drilling campaigns. During the 2021 campaign, the deeper drilling, which was targeting deeper sulphide potential, encountered additional oxide and secondary sulphides in a zone now known as MAMIX (refer to announcement dated 5 May 2021). This extended the envelope of leachable copper minerals by, in some cases, several hundred meters. This discovery was a core component of the upgraded Mineral Resource Estimate ("MRE) released in October 2022 (refer to announcement dated 13 October 2022), but left the sulphide potential unaddressed.

A review of historical drilling data highlighted numerous broad zones of, typically remnant, primary mineralization, especially around the centre of the project, which were identified but never properly followed up on due the focus on the MAMIX Zone. Notable intersections were identified along section N7.435.800, with at least six drill holes encountering remnant primary copper mineralization over a width of approximately 300m, east-west, across strike. There was a notable increase in magnetic susceptibility as the sulphide zones were entered, although it should be noted that most of the drilling on N7.435.800 was not directly coincident with the magnetic anomaly, but rather was on the periphery of it.

<sup>&</sup>lt;sup>2</sup> Based on average specific gravity of 2.75g/cm<sup>3</sup>



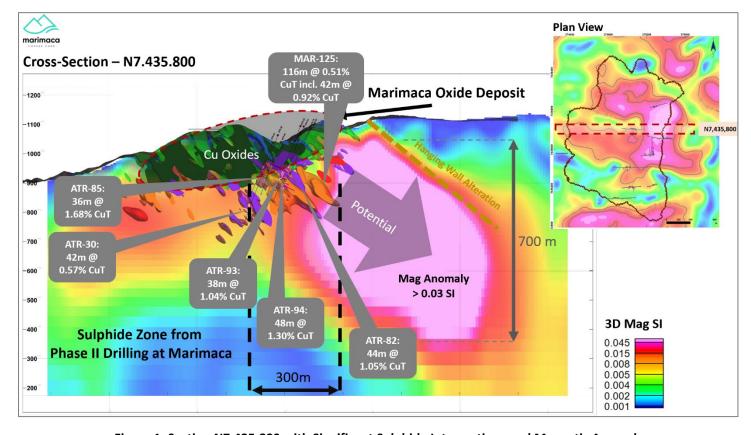


Figure 1: Section N7.435.800 with Significant Sulphide Intersections and Magnetic Anomaly

MAD-22 was drilled on section N7,435,550, which is located 250m to the south of N7,435,800 (**figure 1**) and intersected very high-grade primary copper mineralization, which is not interpreted to be remnant in nature. In contrast to the drill holes on N7.435.800, MAD-22 was drilled directly into an area with some of the highest magnetic susceptibilities encountered at the project. As noted in the release in December 2022, MAD-22 encountered very high grades of primary copper mineralization over broad downhole widths. MAD-22 noted similar mineral textures of magnetite veins and stringers and massive chalcopyrite. Notably, MAD-22 was collared further to the east than all of the drilling on the northern section, and was drilled in the opposite orientation. It is thought that the higher grade, primary (non remnant) mineralization on section N 7,435,800 should be further to the east of drill holes MAR-125 and ATR-82 as noted in **Figure 1**.



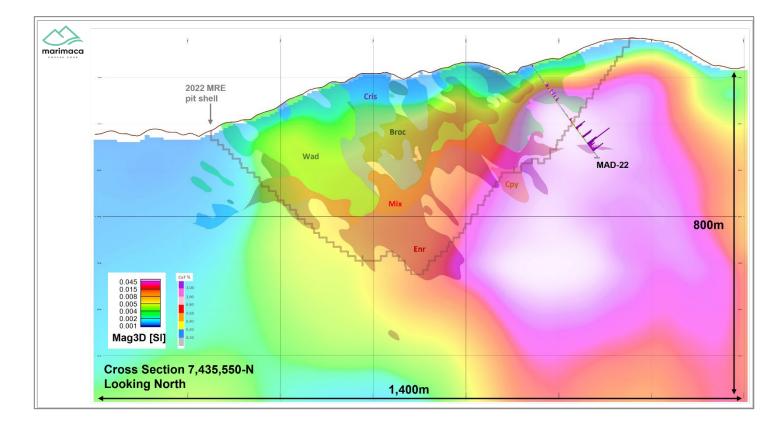


Figure 2: Cross Section N 7,435,550 with MAD-22 Drill Hole

Borehole Teleview analysis of MAD-22 indicates that the structures controlling high-grade primary mineralization are oriented north-north-east dipping at 75 to 80 degrees to the east. This is in contrast to the general structural sense of the Marimaca Oxide Deposit, where dominant structures are oriented more north south and are more shallow dipping to the east. The importance of dacitic dykes and the north-west trending regional faults and structures is also noted for the confluence of these important geological features and their proximity to higher grade mineralization, both in the oxide and primary mineral zones.

Furthermore, it appears that the mineralization in MAD-22 is related to a second, later stage, mineralizing event. This could explain the anomalous levels of precious metals, which have as yet been unobserved in drilling and exploration work for the Marimaca Oxide Project to date.

### **Follow Up Drilling Plan**

The Company plans to step out drill an area covering approximately 500m of strike potential immediately around MAD-22 including Section N7.435.800 in the north, where the previous high grade remnant chalcopyrite intersections were noted. The target zone is approximately 300m in width, east to west, across this area. Given the scale of the magnetic anomaly, the Company believes there is potential for significant depth extensions, but for the initial program, 300m drill holes are planned, which will extend the depth of MAD-22 by approximately 60m.



Drilling will be completed in two phases, with the second phase final design being based on the results from phase 1 and the Company is fully funded to deliver both phases based on current work programmes.

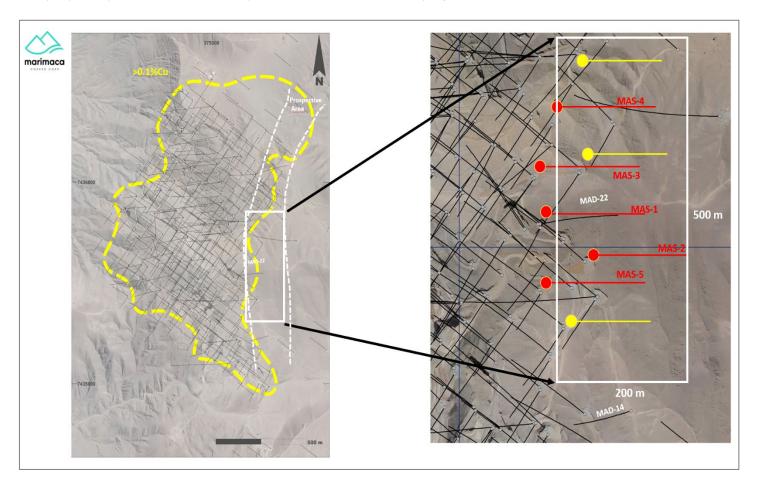


Figure 3: Planned Drill Hole Locations of Phase 1 and 2 Sulphide Follow-up

#### Geophysics

In July 2020, Marimaca released the results from an initial drone mounted high resolution magnetic survey covering the Marimaca Project (refer to announcement on 14<sup>th</sup> July 2020). The results showed a large scale magnetic anomaly immediately adjacent and downdip of the Marimaca Oxide Deposit ("MOD"), within the same geometry as the interpreted downdip extensions of the key controlling structures for the MOD. Based on the 3-D magnetic model created, it was estimated that the magnetic anomaly had a volume of approximately 175 million cubic meters, which is equivalent to approximately 475 million tonnes assuming a specific gravity of 2.75g/cm³.



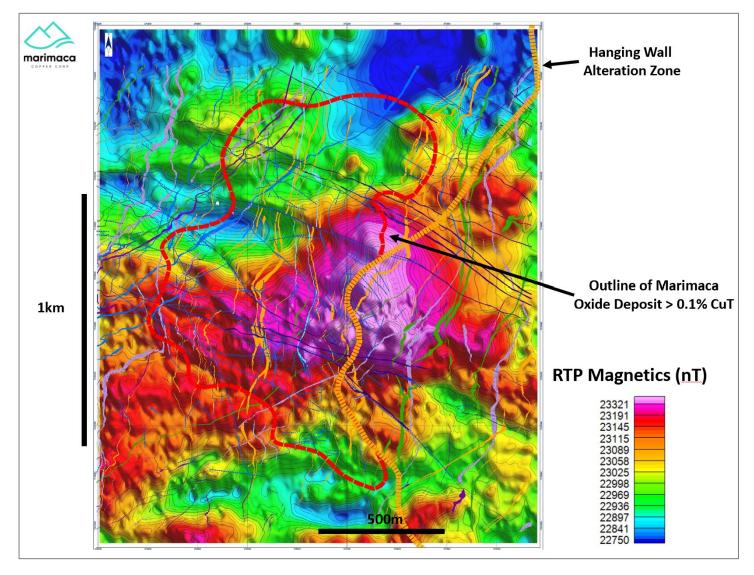


Figure 4: Marimaca Large Scale Magnetic Anomaly with >0.1% CuT Outline

In parallel with this work, the Company completed a full review of all drill samples across the project to identify any relationships with magnetic susceptibility and mineralization potential. A clear relationship exists between magnetism and the presence of chalcopyrite was noted across the full drilling database of nearly 100,000m.



A review of MAD-22 showed this relationship clearly, with an increasing trend of magnetic susceptibility more generally when moving into the primary mineralization zone, and strong spikes of magnetic susceptibility with the highest grades of copper encountered in the drill hole.

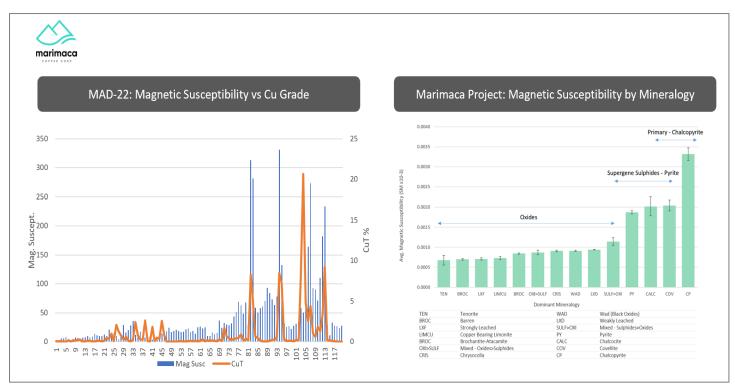


Figure 5: Relationship of Magnetic Susceptibility and Drilling Across the Project

**Table 1. Summary of Anomalous Precious Metal Intervals** 

Hole	Depth (m)		From (m)	To (m)	Intersection (m)	% CuT	Au (g/t)	Ag (g/t)
	300		0	240	240	1.01%	n/a	n/a
MAD 22		Including	140	240	100	1.95%	0.05	6
MAD-22		Including	182	226	44	3.44%	0.07	7
		Including	186	224	40	3.74%	0.07	7

Table 2. Drill Collars and Survey

Hole	Easting	Northing	Elevation (m)	Azimuth	Inclination	Depth (m)
MAD-22	375143.8	7435536.2	1,124.9	85	-55	240

## **Sampling and Assay Protocol**

True widths cannot be determined with the information available at this time. DDH holes were sampled on a 2m continuous basis, halved by a conventional core splitter on site with one half sent to the Andes Analytical Assay preparation laboratory in Calama and the pulps then sent to the same company laboratory in Santiago for assaying. Samples were prepared using the following standard protocol: drying; crushing all sample to -1/4" and passing through a secondary crusher to better than 80%



passing -10#; homogenizing; splitting; pulverizing a 400-600g subsample to 95% passing -150#; and a 125g split of this sent for assaying. All samples were assayed for %CuT (total copper); %CuS (acid soluble copper) and Ag AAS. Au was Fire Assayed. A full QA/QC program, involving insertion of appropriate blanks, standards and duplicates was employed with acceptable results. Pulps and sample rejects are stored by Marimaca Copper for future

# **Qualified Person**

The technical information in this news release, including the information that relates to geology, drilling and mineralization was prepared under the supervision of, or has been reviewed by Sergio Rivera, VP of Exploration, Marimaca Copper Corp, a geologist with more than 35 years of experience and a member of the Colegio de Geólogos de Chile, Instituto de Ingenieros de Minas de Chile and of the Society of Economic Geologist USA, and who is the Qualified Person for the purposes of NI 43-101 responsible for the design and execution of the drilling program.

The QP confirms he has visited the project area, has reviewed relevant project information, is responsible for the information contained in this news release, and consents to its publication.

#### **Contact Information**

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#### **Forward Looking Statements**

This news release includes certain "forward-looking statements" under applicable Canadian securities legislation. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Forward-looking statements reflect the beliefs, opinions and projections on the date the statements are made and are based upon a number of assumptions and estimates that, while considered reasonable by Marimaca Copper, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors, both known and unknown, could cause actual results, performance or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by such forwardlooking statements and the parties have made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: risks related to share price and market conditions, the inherent risks involved in the mining, exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other geological data, fluctuating metal prices, the possibility of project delays or cost overruns or unanticipated excessive operating costs and expenses, uncertainties related to the necessity of financing, the availability of and costs of financing needed in the future as well as those factors disclosed in the annual information form of the Company dated March 28, 2022, the final short form base prospectus and other filings made by the Company with the Canadian securities regulatory authorities (which may be viewed at www.sedar.com). Accordingly, readers should not place undue reliance on forward-looking statements. Marimaca Copper undertakes no obligation to update publicly or otherwise revise any forward-looking statements contained herein whether as a result of new information or future events or otherwise, except as may be required by law.

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