THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION AS STIPULATED UNDER THE UK VERSION OF THE MARKET ABUSE REGULATION NO 596/2014 WHICH IS PART OF ENGLISH LAW BY VIRTUE OF THE EUROPEAN (WITHDRAWAL) ACT 2018, AS AMENDED. ON PUBLICATION OF THIS ANNOUNCEMENT VIA A REGULATORY INFORMATION SERVICE, THIS INFORMATION IS CONSIDERED TO BE IN THE PUBLIC DOMAIN.

15 October 2024

# Great Southern Copper plc ("GSC" or the "Company")

# New Porphyry Cu-Au Exploration Target Identified at Viuda, Especularita Project

Rock chip sample results up to 3.5% Cu, 13.85g/t Au and 56.6g/t Ag

Great Southern Copper plc (LSE: GSCU), the company focused on copper-gold-lithium exploration in Chile, is pleased to announce that results from exploration mapping and sampling at its Viuda prospect confirm the potential for a new untested porphyry Cu-Au system.

#### Highlights:

- High-grade copper-gold-silver mineralisation associated with stockwork and vein breccia
- Rock chip samples from artisanal workings range up to 3.5% Cu, 13.85g/t Au and 56.6g/t Ag
- 10 samples (18%) return assay grades >1.0% Cu
- Mapping demonstrates typical large-scale porphyry copper-type geology and alteration,
- Scale of system similar to known porphyry Cu-Au deposits, such as Bajo de Alumbrera
- No evidence of historical exploration drilling
- Excellent prospect access with potential to fast-track drill testing,
- Coastal metallogenic belt location with excellent access to infrastructure

# Viuda prospect:

The Viuda prospect was acquired by the Company earlier this year<sup>1,2</sup> as part of the Artemisa Option Agreement which now forms the broader Especularita Project located in the coastal metallogenic belt of Chile.

The prospect comprises 16km<sup>2</sup> of concessions centred upon a prominent hill of resistive siliceous rock surrounded by a large bowl-shaped depression, or "bajo", of clay-altered granodiorite – a geological setting typical of many porphyry copper and copper-gold systems. (Figure 1). Recent exploration work by GSC includes prospect-scale mapping and sampling with 55 rock chip grab samples collected and assayed.

**Sam Garrett, Chief Executive Officer of Great Southern Copper, said:** "The discovery of additional porphyry style Cu-Au-Ag alteration and mineralisation at Viuda is very exciting and further emphasises the potential of the Especularita Project to host multiple porphyry copper centres.

"While we prepare for drilling at Mostaza, it is encouraging to know that our targeted exploration programme is resulting in more grass-roots prospects being elevated to drill-ready status, thus providing the Company with an enviable pipeline of drill-target opportunities."

Viuda prospect geology and mineralisation:

The Viuda prospect is dominated by a prominent ridge of leached, silica altered (advanced argillic) dacitic volcanics, or dacite dome rocks which occupies the central core of the alteration system (Figure 2).

The central siliceous alteration is surrounded by a 2km-wide zone of silica-sericite-clay altered granodiorite with overprinting quartz-pyrite stockwork vein mineralisation of varying intensity (phyllic alteration). The phyllic altered granodiorite forms a characteristic depression, or bowl-like morphology, recognised by its characteristic yellowish colour anomaly against the darker more resistive andesitic volcanic rocks into which the granodiorite intruded (Figure 3). Although oxidised and leached, the weathered, phyllic-altered rocks typically host low-grade copper-gold (>0.1% Cu) with higher grade mineralisation occurring in late structurally-controlled vein-breccias and stockworks where assay grades range up to 3.5% Cu, 13.8g/t Au and 56.6g/t Ag.

The size, intensity and distribution of the alteration zones, together with widespread evidence of disseminated and veinlet sulphides and highly anomalous Cu, Au and Mo in rock-chip samples, indicates that the Viuda prospect represents the upper parts of a partially exposed and leached porphyry Cu-Au system with good potential for downward zonation into underlying secondary and primary copper-gold mineralisation in the core of the deposit.

The surface geology, scale and setting of Viuda is analogous to known porphyry copper deposits such as Bajo de Alumbrera in Argentina (605Mt @ 0.54% Cu, 0.64g/t Au<sup>3</sup>).

# Rock chip sampling and results:

All rock chip samples collected are located using hand-held GPS units (WGS84 zone 19S datum, UTM coordinate system) and allocated a unique sample number using a ticket-book system.

Samples are transported from the field and delivered by Company employees to ALS Laboratories in Santiago where they are prepared for analysis (weighed, dried, crushed and pulverised). A subsequent 200g split of each sample pulp is then forwarded to the ALS geochemical laboratory in Lima, Peru, where samples are assayed for gold (30g fire assay with ICP-AES finish, ALS code AU-ICP21) and analysed for 48 major, base and trace elements by ICP-MS following a four-acid digest (ALS code ME-MS61).

Assay results for the 55 rock and float grab samples collected in this programme range up to 3.5% Cu, 13.85g/t Au and 56.6g/t Ag. Significantly, 34 samples (62%) returned anomalous copper grades of >0.1% Cu with 10 samples (18%) assaying over 1.0% Cu. In addition to Cu-Au-Ag, the samples were also variably anomalous in Ba, Mo, Sb, Sr, Zn which is consistent with the interpreted upper levels of the porphyry-epithermal system.

#### Next steps:

Results to date indicate potential for porphyry style Cu-Au mineralisation at Viuda. A programme of further detailed mapping and sampling will commence with the aim to elevate the prospect to drill-ready status. Subject to the results of the detailed work, drill targeting may be enhanced by ground magnetics and IP geophysical surveys.



**Figure 1:** Location of Viuda porphyry Cu-Au prospect, Especularita Project, Chile. The centre of the prospect is recognised as a prominent hill of silicified dacite surrounded by phyllic-altered granodiorite.



**Figure 2:** Central Viuda prospect surrounded by artisanal copper-gold workings. Note sealed access road. Advanced argillic altered dacite (Upper right) forms central core to the alteration system, surrounded by qtz-py crackle-veined sericite-clay-silica altered granodiorite (Lower right).



**Figure 3:** Same-scale view of geological setting of Viuda exhibiting characteristic zoned alteration patterns defined by a broad yellow leached phyllic zone (bottom) compared with the Bajo de Alumbrera deposit in Argentina (top). The deposit contains historical and actual reserves of 605 Mt of ore, with an average grade of 0.54 percent Cu and 0.64 g/t Au<sup>3</sup>.

# **References:**

- 1. RNS 0741E (22 Feb 2024); GSC expands Especularita project with two agreements.
- 2. RNS 1134S (12 Jun 2024); GSC signs purchase option agreement for Artemisa.
- **3.** J., 2003: Geology of the Bajo La Alumbrera Porphyry Copper-Gold Deposit, Argentina, in Economic Geology, Vol 98, pp. 1535-1574

# **Enquiries:**

Great Southern Copper plc	
Sam Garrett, Chief Executive Officer	+44 (0) 20 4582 3500

SI Capital Limited	
Nick Emerson	+44 (0) 1483 413500
Gracechurch Group	
Harry Chathli, Alexis Gore, Henry Gamble	+44 (0) 20 4582 3500

#### **Notes for Editors:**

#### **About Great Southern Copper**

Great Southern Copper PLC is a UK-listed mineral exploration company focused on the discovery of copper-gold and lithium deposits in Chile. The Company has the option to acquire rights to 100% of two projects in the under-explored coastal belt of Chile that are prospective for large scale copper-gold deposits. In addition, the Company has the option to acquire rights to 100% of a lithium project located in the Salar de Atacama district of Chile. Chile is a globally significant mining jurisdiction being the world's largest copper producer and the second-largest producer of lithium.

The two, early-stage Cu-Au projects comprise the Especularita and San Lorenzo Projects, both located in the coastal metallogenic belt of Chile which hosts significant copper mines and deposits, including Teck's Carmen de Andacollo copper mine, and boasts excellent access to infrastructure such as roads, power and ports. Significant historical small-scale and artisanal workings for both copper and gold are readily evident in both exploration project areas.

The Company's Monti Lithium project is strategically located in the pre-Andean region of Salar de Atacama which is Chile's premier lithium-producing region with well-established lithium mining operations and infrastructure.

Great Southern Copper is strategically positioned to support the global market for copper and lithium – both critical battery metals in the clean energy transition around the world. The Company is actively engaged in exploration and evaluation work programmes targeting both large tonnage, low to medium grade Cu-Au and Li deposits as well as high-grade Cu-Au deposits.

Further information on the Company is available on the Company's website: https://gscplc.com

#### **Competent Person Statement**

The information in this announcement that relates to exploration results is based on and fairly represents information reviewed or compiled by Mr Sam Garrett, a Competent Person who is a Member of the Australian Institute of Geoscientists and a Fellow of the Society of Economic Geologists. Mr Garrett is the CEO and a shareholder of Great Southern Copper PLC. Mr Garrett has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Garrett has provided his prior written consent to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

This announcement includes information that relates to Exploration Results prepared and first disclosed under the JORC Code (2012) and extracted from the Company's previous LSE

announcements as noted, and the Company's Prospectus dated 20 December 2021. Copies of these announcements are available from the LSE Announcements page of the Company's website: <u>www.gscplc.com</u>.

The Company confirms that it is not aware of any new information or data that materially affects the information included within the Prospectus dated 20 December 2021.

#### Forward Looking and Cautionary Statements

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this report are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated or anticipated results and may cause the Company's actual performance or results expressed or implied by such forward-looking statements. So, there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.