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21 February 2022

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

**Trench Sampling Results Confirm Potential for Large-Scale, Multi-Target Porphyry style Cu-Au mineralisation at San Lorenzo**

Great Southern Copper plc (LSE: GSCU), the company focused on copper-gold exploration in Chile, is pleased to announce that it has received final assay results for 526 samples from the Phase I and Phase II trenching programmes at its San Lorenzo copper-gold (Cu-Au) project.

**Highlights:**

- Twelve of the thirteen trenches excavated recorded anomalous Cu-Au geochemistry and/or significant widths of variably oxidised porphyry-style sheeted fracturing.
- Results confirm anomalous porphyry style Cu-Au mineralisation associated with monzonitic intrusives. Trench CET009 returned anomalous Cu-Au assays ranging from 224ppm Cu to 3.51% Cu over a 57.8m wide interval including visible copper observed over intervals of 20.5m and 17.2m.
- Confirms potential for higher grade Cu-Au mineralisation;
  - **3.36% Cu, 2.53 ppm Au and 5.27 ppm Ag** from single trench sample (508580) recorded in trench CET008 (associated with visible chalcopyrite and Cu-oxide).
  - **1.2% Cu, 14.4 ppm Au** from single trench sample (574747) recorded in trench CET007 (associated with visible Cu-oxide).
  - **3.51% Cu, 0.95 ppm Au** from a single trench sample (574630) recorded in trench CET009 (associated with visible chalcopyrite and Cu-oxide) within an anomalous zone of 57.8m (Cu grades range from 224ppm – 3.51% Cu).
- Confirms potential for large mineralised system indicated by extensive oxidised sheeted fracturing. Phase III trenching programme underway (nine trenches for 2,507 m completed) designed to in-fill areas of known mineralisation plus test for lateral extensions.
- Additional porphyry Cu-Au targets to test. Phase III trenching will also target a zone of clustered monzonite porphyries located 2km west of the current programme.
- Maiden diamond drilling programme to commence in May-June 2022 subject to rig availability and permitting approvals.

**Sam Garrett, Chief Executive Officer of Great Southern Copper, said:** *"We are highly encouraged by these results which continue to support the potential for broad zones of porphyry-style Cu-Au mineralisation with significant strike potential at San Lorenzo. Anomalous Cu-Au mineralisation in trenches associated with monzonitic intrusions is particularly encouraging and supports our alkaline porphyry Cu-Au model for the project. Phase III of the trenching programme is progressing targeting new areas of clustered monzonite porphyries plus extensions to the existing work. The trench assay results and associated geological information, in conjunction with the interpretation of magnetic survey results and planned IP surveys, will be key to defining the targets for the Company's maiden drilling programme. Preliminary discussions with drilling contractors are underway and we plan to start diamond drilling by May-June 2022."*

## Trenching Results

Results have been received for Phase I and II of the San Lorenzo trenching programme comprising thirteen trenches (totalling 2,585m) which were designed to test four areas of porphyry Cu-Au style mineralisation and anomalous rock chip geochemistry located within a 7km<sup>2</sup> area. The trenches were designed to enhance geological, structural and geochemical information to assist in the targeting of potential drill holes.

Previous work by GSC at San Lorenzo identified outcropping evidence of porphyry style Cu-Au mineralisation within a broad (20 km<sup>2</sup>) zone of calc-potassic altered granodiorite defined by sheeted and stock-worked actinolite-Fe-Ox-magnetite-quartz-K feldspar fractures and regularly intruded by stocks, dykes and finger-porphyrines of monzonite to quartz-monzonite composition (Rado Monzonites).

Within each trench, rock chip samples were collected over a 1m x 0.5m panel at the start point of each 5m horizontal interval or a 2m horizontal interval where evidence of copper mineralisation was observed. Samples (between 1.7-5kg) were delivered by the Company to ALS Global laboratories in La Serena, Chile, where they were prepped for assay. Analyses were then conducted by ALS Global Laboratories in Lima, Peru for Au by 30g fire assay with ICP-AES finish, and 48 additional elements, including copper, by ICP-MS using a standard 4 acid digest.

Where copper mineralisation is visible (68 samples or 12.7% of total samples) it typically occurs as green oxides hosted within fine fractures of actinolite-magnetite-quartz-K feldspar. Individual Cu assay values across the trenches range from a low of 114 ppm Cu up to a maximum of 3.51% Cu where oxide copper is sampled. Sulphide copper (chalcopyrite) was observed in only three samples (0.6% of total samples) with copper assay values of 424 ppm Cu, 3.36% Cu and 3.51% Cu.

Trench CET009 in the south of the project area targeted significant copper in rock-chips (0.7–1.4% Cu) where mineralised fractures are observed overprinting an intrusion of monzonite. Monzonite stocks, occurring in clusters of small porphyries (or pipes, dykes and stocks) across the project area, are interpreted potentially to be the mineralising intrusives to the calc-alkalic Cu-Au porphyry system at San Lorenzo. Oxide copper is observed in CET009 over a 48.3m interval with copper assays ranging from 438 ppm Cu to 3.51% Cu. Coincident anomalies for Au (0.024-0.567 ppm Au) and Ag (0.23-1.62 ppm Ag) occur over the same 48.3m interval. Samples 10-20m either side of the visible copper zone within the monzonite of Trench CET009 are described as “leached” and range in copper values from 147-975 ppm Cu. Trench CET009 was the only trench in Phases I-II that targeted mineralisation hosted in monzonite. Trench CET010 located 400m to the east of CET009 records anomalous Cu-Ag-Au (250-2120ppm Cu) over a 100m interval associated with oxidised fractures hosted in biotite granodiorite.

Deep surficial weathering across the project area at San Lorenzo potentially acts to strip copper and other metals from the surficial oxide zone. Hence, where iron oxide-rich fractures occur adjacent to similar fractures hosting copper mineralisation, it may be relevant to interpret that the iron-oxides on such fractures are a result of the weathering process and as such these fractures may potentially host sulphides (such as pyrite and chalcopyrite) at depth. Trenches CET001 to CET005, located approximately 1.8km north of Trench CET009, targeted anomalous rock-chip Cu-Au geochemistry in highly weathered biotite granodiorite. All trenches record anomalous Cu-Au; however, the central trench, trench CET002, is notable in that sheeted actinolite-Fe-Ox fractures are mapped over almost the entire 478.5m of the trench. Copper oxide mineralisation is patchy throughout the length of the trench (with assays ranging up to 1.74% Cu, 1.6 ppm Au and 5.62 ppm Ag) and most prominent between 222 – 242.7m (from the south end of the trench) with copper assays ranging from 342 ppm

to 0.25% Cu. However, anomalous copper associated with the oxidised fracture sets is also evident over the full length of the trench and most prominent between 105 – 202m and 222 – 330m (from the south end of the trench) with assays ranging up to 864 ppm Cu, 0.21ppm Au and 0.57 ppm Ag. Hence, in the weathering profile, copper and other elements are observed to have been significantly depleted although trace quantities remain in anomalous (above background) concentrations.

A further 1.8km northeast of CET002 (and 3.4km northeast of CET009) trenches CWT001 (200m long) and CWT002 (205m long) targeted anomalous rock-chip Cu-Au geochemistry associated with small monzonitic plugs intruding inner calc-potassic altered biotite granodiorite adjacent to the eastern margin of the Chinchillon Fault. Sheeted actinolite-Fe-Ox fracturing with narrow monzonitic dykes (or felspathic alteration zones) associated with anomalous Cu-Ag-Au geochemistry is prominent throughout the full length of both trenches, although oxide copper mineralisation is uncommon. Anomalous assays range up to 0.16% Cu, 0.27 ppm Au and 11.65 ppm Ag in CWT002 and up to 0.8% Cu, 0.16 ppm Au and 6.77 ppm Au in CWT001. Silver geochemistry is notably more consistent in this area of the project.

On the west side of the Chinchillon Fault, 150-200m west of trench CWT002, trench CWT003 (160m long) tested silica-clay-pyrite altered diorite intruded by mafic dyke rocks. Assay results show only weak anomalism for copper with sampling results up to 345 ppm Cu.

In addition to this release, a PDF version with supplementary information and images can be found on the Company's website: <https://gscplc.com>

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**Notes for Editors:**

**About Great Southern Copper**

Great Southern Copper is a mineral exploration company focused on copper-gold deposits in Chile. The Company has the option to acquire rights to 100% of two projects that are prospective for large porphyry copper-gold deposits in the under explored coastal belt of Chile, a globally significant mining jurisdiction and the world’s largest copper producer.

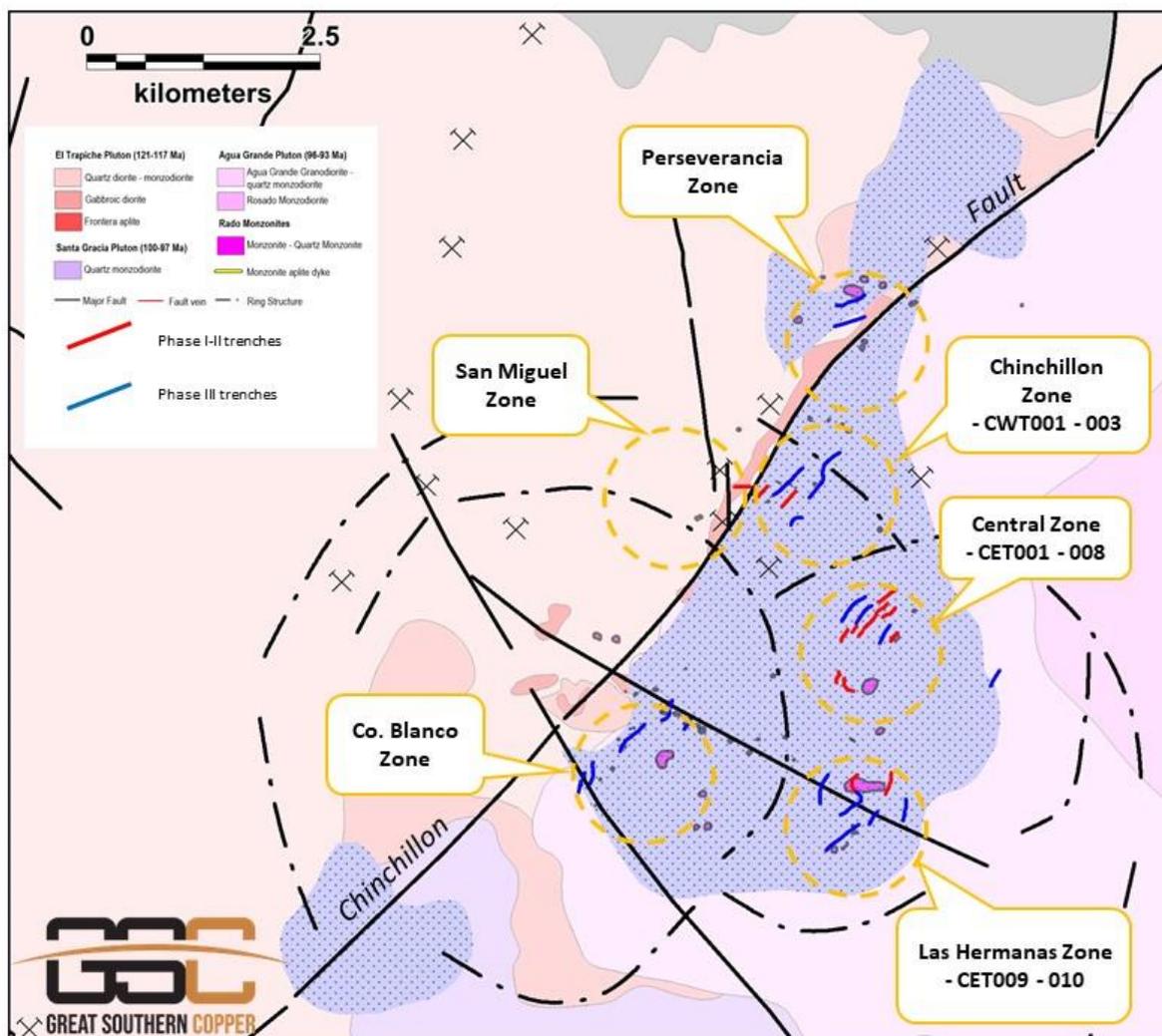
The two projects comprise the San Lorenzo Project, northeast of the coastal town of La Serena in northern Chile, and the Especularita Project located approximately 170km to the south of the San Lorenzo project. The two early-stage Cu-Au projects are within the same metallogenic belt as major coastal producing operations including Teck’s Andacollo copper and gold mine. Significant historical small-scale and artisanal workings for both copper and gold are readily evident in both exploration project areas.

Great Southern Copper is strategically positioned to support the global market for copper, a key metal in the transition to clean energy around the world. The Company is planning a two-year exploration and evaluation work programme for the copper-gold projects, targeting principally large tonnage, low to medium grade porphyry style Cu-Au deposits.

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

### Competent Person Statement

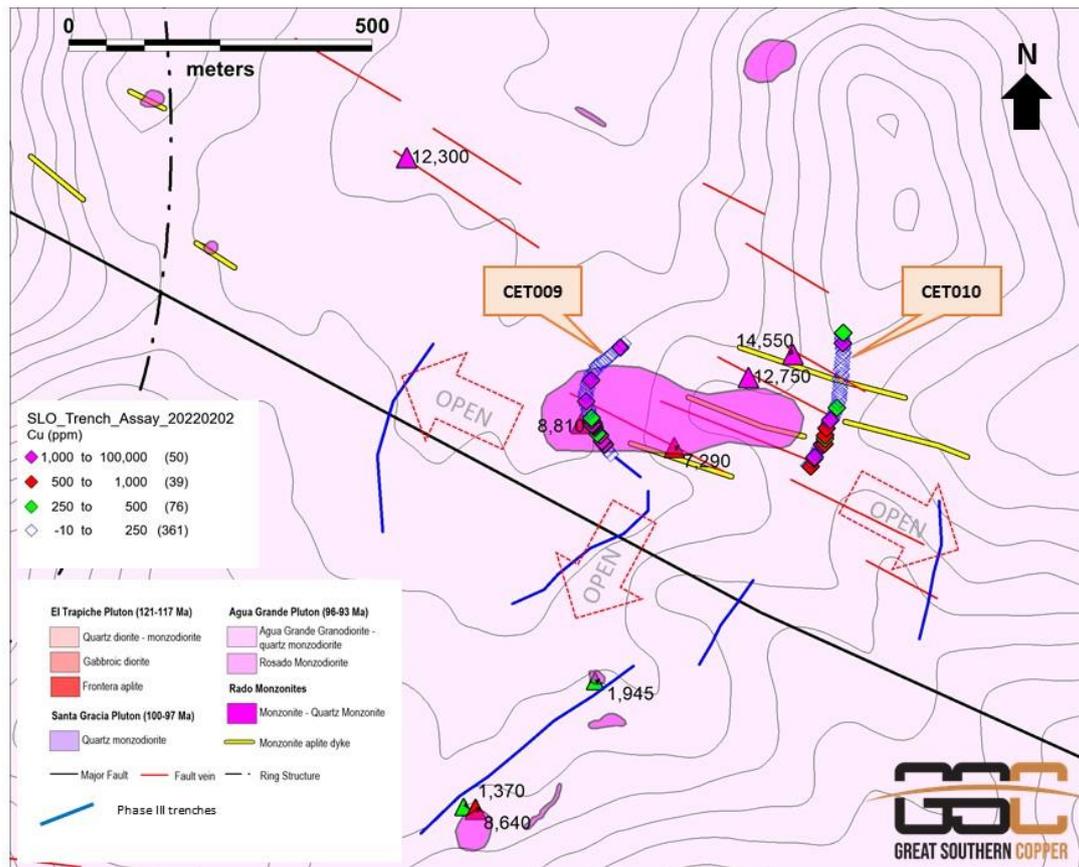
The information in this announcement that relates to exploration results is based on and fairly represents information reviewed or compiled by Mr Sam Garrett, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Garrett is the CEO of Great Southern Copper PLC. Mr Garrett 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.



**Figure 1:** Location map of Phase I-II trenching plan (red) and Phase III trenching plan (blue) with geology. Individual prospect zones are identified and typically defined by zones or clusters of monzonite porphyries within the overprinting Inner Calc-Potassic (ICP) alteration zone characterised by sheeted fractures and alteration of actinolite-quartz-Kspar+magnetite+Fe-oxide (mauve stipple). Assay results discussed in this report relate to the Phase I-II trenching plan.



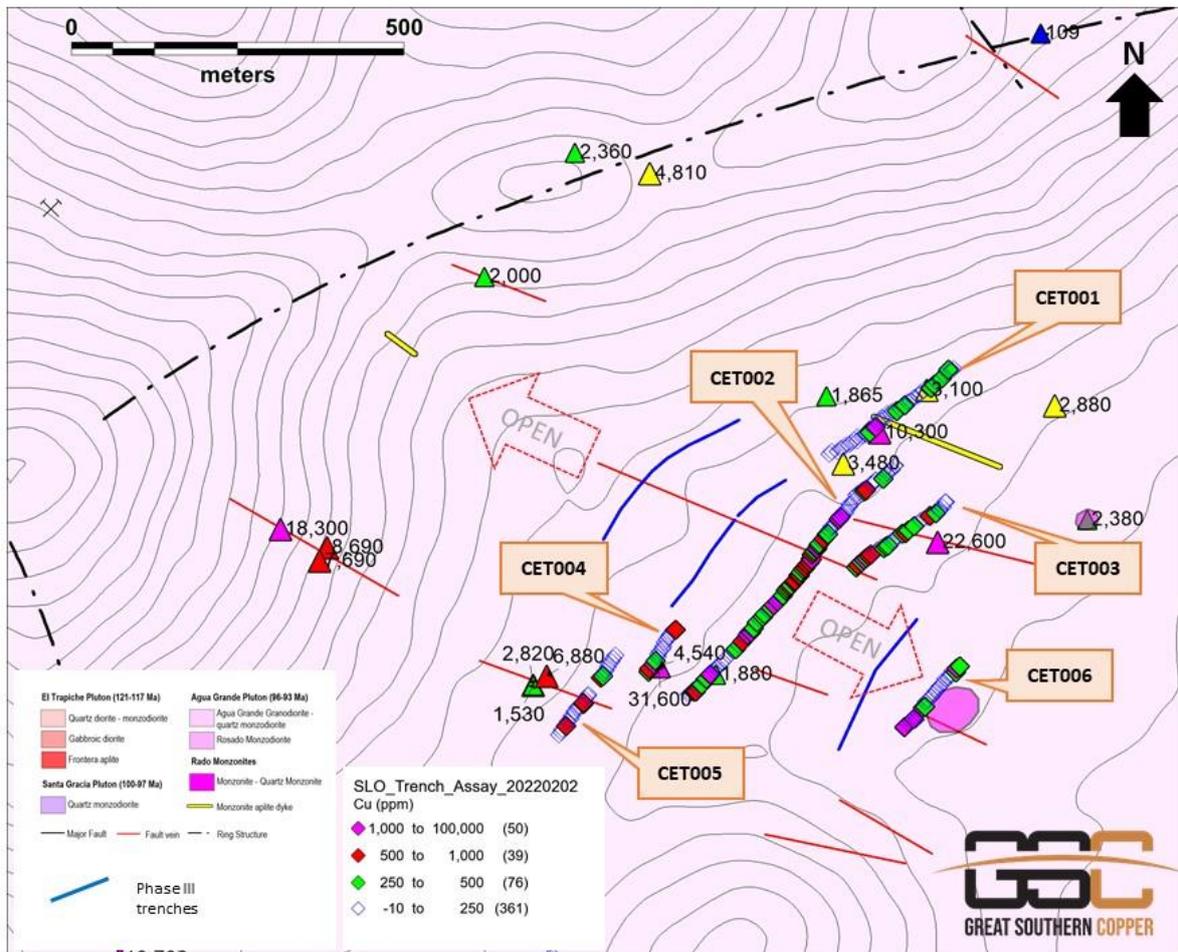
**Figure 2:** GSC geologist mapping trench CET009 (l). Oxide copper (green) on fractures in monzonite with evidence of goethitic box-works (after sulphide – inside red circle).



**Figure 3:** Trenches CET009 and CET010 with mapped geology and trench sample geochemistry (diamonds Cu ppm) and surface rock chip assays (triangles Cu ppm). Las Hermanas zone, San Lorenzo.



**Figure 4:** Sheeted and stockwork fracturing of ICP altered biotite granodiorite in trench CET002 (l). Green Cu oxide (red arrows) and Fe oxide (yellow arrow) on individual fracture surface in CET002 (r).



**Figure 5:** *Geology-geochemistry map of trenches CET001 – CET006 within the Central zone at San Lorenzo. Broad zone of anomalous Cu assays (>250ppm Cu) in CET002 is coincident with ICP sheeted fracture alteration of the biotite granodiorite.*



**Figure 6:** *Sampling of highly oxidised sheeted veins from trench CWT002 location in the Chinchillon project zone. Sample 508645 recorded weakly anomalous copper in assays of 310ppm Cu, 0.038ppm Au and 0.13ppm Ag despite the intense oxidation.*