

21 July 2017

## **SolGold plc**

("SolGold" or the "Company")

# **Cascabel Exploration Update**

## **Ground Magnetic Survey Refines Drilling Targets**

### **Rig 5 Expands Alpala Drill Fleet**

The Board of SolGold (AIM and TSX code: SOLG) is pleased to advise that a revised magnetic model for the Cascabel porphyry copper-gold exploration tenement in Northern Ecuador has been completed based on ground magnetic data.

#### **HIGHLIGHTS:**

- **Drilling to date at Alpala has established strong correlation between copper-gold grades and magnetite content.**
- **Exceptionally high-quality ground magnetic data collected over Cascabel tenement allows upgrade of existing airborne 3D magnetic inversion models.**
- **Amended models over greater Alpala replicate subsurface mineralised envelopes and reveal northwest trending line of significant magnetic bodies at Moran, Trivinio, Alpala Northwest, and Alpala Central.**
- **Additional targets at Alpala West, Carmen and Parambas supported by ground magnetics and 3D models.**
- **Alpala Southeast magnetic indicators masked by intense hydrothermal alteration.**
- **Alpala Central is the only extensively drilled target along the greater Alpala trend.**
- **Second constrained magnetic inversion models based on airborne data, ground magnetic data and magnetic susceptibility in 41,000m of drilling to date at Alpala - expected to provide highly predictive model to further refine drill targeting at Alpala.**
- **Amendments to Aguinaga and Tandayama America targets underway.**
- **Rig 5 has arrived at Alpala to expedite preparation for maiden inferred resource estimate expected to be completed by the end of December 2017.**
- **Drilling progress update on four drill holes 23R-D1, 24-D1R, 26, and 27 in preparation and imminent.**
- **Spartan Orion 3D Magnetotelluric survey planned to enable 3D sulphide mineralisation mapping to 3km depth, refining drill targets at Alpala and other prospects within the Cascabel concession.**

References to figures and tables relate to the version of this release on the Company's website ([www.solgold.com.au](http://www.solgold.com.au)) or visible in PDF format by clicking the link below:

[http://www.rns-pdf.londonstockexchange.com/rns/6994L\\_-2017-7-21.pdf](http://www.rns-pdf.londonstockexchange.com/rns/6994L_-2017-7-21.pdf)

## **FURTHER INFORMATION:**

### **Ground Magnetic Survey Refines Drilling Targets**

Drilling to date at Alpala has established a strong correlation between copper-gold grades and magnetic susceptibility in drill core, confirming magnetite as a strong proxy for porphyry style copper-gold mineralisation within the Cascabel project area.

High-quality ground magnetic data, collected from 650km of total field data acquired at line spacing of 50m, over the Cascabel tenement has allowed upgrade of existing tenement wide airborne 3D magnetic inversion modelling. This dataset compliments the detailed geological and geochemical datasets used to more accurately model subsurface mineralised envelopes.

Ground magnetic data has been processed using filtering tools to enhance gradients over a range of wavelengths and depths to improve the detection of mineralised intrusions, magnetite-bearing veins and hydrothermal alteration, and associated faults and structures.

Reduced to pole magnetic imagery shows greatly improved resolution over existing airborne magnetic data, revealing several magnetic bodies that coincide with known copper-gold mineralization, such as at Aguinaga, Tandayama-America, Moran, Parambas, Carmen, Alpala West and Alpala East (**Figure 1**).

A major zone of magnetite-destruction occurring over much of the Alpala porphyry cluster is related to intense hydrothermal (phyllic and advanced argillic) alteration that has converted magnetite to pyrite, and hematite (a non-magnetic iron-oxide mineral) veining with chalcopyrite and bornite (copper minerals) to approximately 750m depth (**Figure 2**).

Below this depth, high-grade copper and gold mineralization occurs with magnetite-rich, hydrothermally altered intrusions. Recently amended 3D magnetic inversion models over greater Alpala replicate subsurface mineralised envelopes and reveal a northwest trending line of significant magnetic bodies at Moran, Trivinio, Alpala Northwest, and Alpala Central (**Figure 3**).

The central body defined by recently amended 3D magnetic inversion models coincides with the 1.0% copper equivalent model at Alpala Central and well defines the current growing exploration target confirmed by drilling at the Alpala Central porphyry copper-gold deposit (**Figure 4**).

The significant recent drilling results from drill holes at Alpala Central and Alpala Southeast indicate that copper mineralization is related to the eastern margin of the zone of magnetite-destruction. Strong magnetite-destructive, late-stage hydrothermal (phyllic and advanced argillic) alteration occurs throughout the southeastern portion of the greater Alpala area and masks magnetic indicators of mineralisation at Alpala Southeast that are currently being identified by drilling such as in holes 24 and 24-D1R (**Figure 5**).

Additional targets at Alpala West, Carmen and Parambas are also supported by ground magnetics and 3D inversion models.

The newly acquired ground magnetic data may enable the direct detection of secondary magnetite associated with porphyry mineralisation, while at the same time greatly aiding in the delineation of existing porphyry resources through detailed 3D inversion modelling.

A second group of constrained magnetic inversion models based on airborne data, ground magnetic data and magnetic susceptibility in 41,000m of drilling to date at Alpala are being processed and are expected to provide highly predictive model to refine drill targeting at Alpala. Amendments to Aguinaga and Tandayama-America target configuration are being included in this work.

Structure detection filters applied to the Reduced to Pole magnetic data confirm major northwest, north and northeast trending structures that locally coincide with mineralized corridors recognized by SolGold geologists through the mapping of copper sulphide minerals, porphyry-related quartz veins and hydrothermal alteration (**Figure 6**).

The application of radial symmetry filters indicates the location of magnetic bodies at varying levels beneath surface, which have the potential to coincide with magnetite-bearing intrusions and zones of hydrothermal alteration associated with high-grade copper-gold mineralization. Several of these bodies show a connection from near-surface to depths that exceed 750m, which is the approximate level that coincides with high-grade copper-gold mineralization associated with magnetite-rich quartz veins and hydrothermal alteration at Alpala. Target areas characterized by magnetic bodies at multiple levels include Aguinaga, Tandayama-America, Chinambicito and Carmen. Additional vertically-connected magnetic bodies occur to the east of Tandayama-America, northwest of Carmen, southeast of Cristal and in the western and southwestern portions of the tenement. These areas represent further targets for exploration (**Figure 7**).

#### **Rig 5 expands Alpala Drill Fleet**

The recent arrival of Rig 5 to site on 18 July 2017, and scheduled arrival of Rig 6 in late July 2017 will expedite preparation for maiden inferred resource estimate by end December 2017, and expand on growing resource potential at Alpala Central and Alpala Northwest.

Rig 7 is scheduled for mobilisation in late August for drill testing of Aguinaga porphyry copper-gold prospect.

#### **Planned Spartan-Orion hybrid, distributed IP/3DMT survey**

A planned state of the art, Spartan-Orion hybrid, distributed IP/3DMT survey (SO3DIP Survey), scheduled to commence late July 2017 will extend over a similar area as the ground magnetic survey. The SO3DIP survey will enable direct detection and modelling of copper sulphides in 3D. Hydrothermal alteration will also be detected and modelled in 3D by Spartan EM to depths in excess of 3km.

Increased sensitivity of the SO3DIP survey will allow feedback on the degree of sulphide mineral-bearing, magnetite destruction, allowing for better classification of hydrothermal alteration zoning. This improved understanding will assist in better delineation and modelling of secondary magnetite associated with hydrothermally altered intrusions in the porphyry systems at Cascabel.

#### **Qualified Person:**

Information in this report relating to the exploration results is based on data reviewed by Mr Nicholas Mather (B.Sc. Hons Geol.), the Chief Executive Officer of the Company. Mr Mather is a Fellow of the Australasian

Institute of Mining and Metallurgy who has in excess of 25 years' experience in mineral exploration and is a Qualified Person under the AIM Rules. Mr Mather consents to the inclusion of the information in the form and context in which it appears.

## Market Abuse Regulation (MAR) Disclosure

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of the Regulation (EU) No 596/2014 until the release of this announcement.

By order of the Board  
Karl Schlobohm  
Company Secretary  
Brisbane, Australia

## CONTACTS

**Mr Nicholas Mather**  
SolGold Plc (Executive Director)  
[nmather@SolGold.com.au](mailto:nmather@SolGold.com.au)

**Tel: +61 (0) 7 3303 0665**  
**+61 (0) 417 880 448**

**Mr Karl Schlobohm**  
SolGold Plc (Company Secretary)  
[kschlobohm@SolGold.com.au](mailto:kschlobohm@SolGold.com.au)

**Tel: +61 (0) 7 3303 0661**

**Mr Ewan Leggat / Mr Richard Morrison**  
SP Angel Corporate Finance LLP (NOMAD and Broker)  
[ewan.leggat@spangel.co.uk](mailto:ewan.leggat@spangel.co.uk)

**Tel: +44 (0) 20 3470 0470**

Follow us on twitter [@SolGold\\_plc](https://twitter.com/SolGold_plc)

## NOTES TO EDITORS

SolGold is a Brisbane, Australia based, dual AIM and TSX-listed (SOLG on both exchanges) copper gold exploration and future development company with assets in Ecuador, Solomon Islands and Australia. SolGold's primary objective is to discover and define world-class copper-gold deposits. The Board and Management Team have substantial vested interests in the success of the Company as shareholders as well as strong track records in the areas of exploration, mine appraisal and development, investment, finance and law. SolGold's experience is augmented by state of the art geophysical and modelling techniques and the guidance of porphyry copper and gold expert Dr Steve Garwin.

SolGold was shortlisted as a nominee for the Mining Journal Explorer Achievement Award for 2016. The Company announced USD54m in capital raisings in September 2016 involving Maxit Capital LP, Newcrest International Ltd and DGR Global Ltd, and a USD41.2m raising in June of 2017 largely from Newcrest International with USD1.2m raised from Ecuadorean investors. All of these raisings were undertaken at substantial premiums to previous raisings, and SolGold currently has circa USD68 million in available cash to continue the exploration and development of its flagship Cascabel Project.

Mr Craig Jones joined the SolGold Board on 3 March 2017, nominated to the Board of SolGold by Newcrest Mining, now a 14.54% shareholder in SolGold. Mr Jones is a Mechanical Engineer and is currently the Executive General Manager Wafi-Golpu (Newcrest-Harmony MMJV). He has held various senior management and executive roles within the Newcrest Group, including General Manager Projects, General Manager Cadia Valley Operations, Executive General Manager Projects and Asset Management, Executive General Manager Australian and Indonesian Operations, Executive General Manager Australian Operations and Projects, and Executive General Manager Cadia and Morobe Mining Joint Venture. Prior to joining Newcrest, Mr Jones worked for Rio Tinto.

Cascabel, SolGold's 85% owned "World Class" (Ref: Cautionary Notice) flagship copper-gold porphyry project, is located in northern Ecuador on the under-explored northern section of the richly endowed Andean Copper Belt. SolGold owns 85% of Exploraciones Novomining S.A. ("ENSA") and approximately 8% of TSX-V-listed Cornerstone Capital Resources ("Cornerstone"), which holds the remaining 15% of ENSA, the Ecuadorian registered company which holds 100% of the Cascabel concession. Subject to the terms of existing agreements, Cornerstone is debt financed by SolGold for its share of costs to completion of a Feasibility Study.

In particular, the investments by Newcrest for 14.54% of SolGold endorses Ecuador as an exploration and mining destination, the management team at SolGold, the dimension, size and scale of the growing Alpala deposit, and the prospectivity of Cascabel and its multiple targets. The gold endowment, location, infrastructure, logistics are important competitive advantages offered by the project.

To date SolGold has completed geological mapping, soil sampling, rock saw channel sampling, geochemical and spectral alteration mapping over 25km<sup>2</sup>, along with an additional 9km<sup>2</sup> of Induced Polarisation and 14km<sup>2</sup> Magnetotelluric "Orion" surveys over the Alpala cluster and Aguinaga targets.

SolGold has completed over 41,000m of drilling and expended over USD49M on the program, which includes corporate costs and investments into Cornerstone. This has been accomplished with a workforce of up to 176 Ecuadorean workers and geoscientists, and 6 expatriate Australian geoscientists. The results of 35 holes drilled (including re-drilled holes) and assayed to date have produced some of the greatest drill hole intercepts in porphyry copper-gold exploration history, as indicated by Hole 12 (CSD-16-012) returning 1560m grading 0.59% copper and 0.54 g/t gold including, 1044m grading 0.74% copper and 0.54 g/t gold. The average grade of all metres drilled to date on the project currently stands at 0.32% copper and 0.27 g/t gold. Intensive diamond drilling is planned for the next 12 months with 10 drill rigs expected to be operational by early 2018, targeting over 90,000m of drilling per annum.

Cascabel is characterised by fifteen (15) identified targets, "World Class" drilling intersections over 1km in length at potentially economic grades, and high copper and gold grades in richer sections, as well as logistic advantages in location, elevation, water supply, proximity to roads, port and power services; and a progressive legislative approach to resource development in Ecuador.

To date, SolGold has drill tested 4 of the 15 targets, being Alpala Northwest, Alpala Central, Hematite Hill, and Alpala Southeast. Currently drill testing of Alpala Northwest, Alpala Central and Alpala Southeast targets is underway, with drill testing of the Aguinaga target to commence in August 2017.

The Alpala deposit is open in multiple directions and the mineralised corridor marked for drill testing of the greater Alpala cluster occurs over a 2.2km strike length from Trivinio in the northwest to

Cristal in the southeast. The mineralised corridor is known to be prospective over approximately 700m width.

High priority targets within the Alpala cluster, at Moran approximately 700m to the north, and at Aguinaga approximately 2.3km north east, are closely modelled by 3D MVI magnetic signatures that currently encompass over 10Bt of magnetic rock. Based on a strong spatial and genetic relationship between copper sulphides and magnetite, this body of magnetic rock is considered to be highly prospective for significant copper and gold mineralisation, and requires drill testing.

SolGold is focussing on extending the dimensions of the Alpala deposit including Hematite Hill, Alpala South East, Cristal, Alpala Northwest and Trivinio before completing a resource estimate and drill testing of the other key targets within the Cascabel concession at Aguinaga, Tandayama-America, Alpala West, Carmen, Alpala East, Moran, Parambas, and Chinambicito.

The Company is currently planning further metallurgical testing and completion of an independent Pre-Feasibility Study at Cascabel. SolGold is investigating both high tonnage open cut and underground block caving operations, as well as a high grade / low tonnage initial underground development towards the economic development of the copper gold deposit/s at Cascabel.

Drill hole intercepts have been updated to reflect current commodity prices, using a data aggregation method, defined by copper equivalent cut-off grades and reported with up to 10m internal dilution, excluding bridging to a single sample. Copper equivalent grades are calculated using a gold conversion factor of 0.63, determined using an updated copper price of USD3.00/pound and an updated gold price of USD1300/ounce. True widths of down hole intersections are estimated to be approximately 25-50%.

Following a comprehensive review of the geology and prospectivity of Ecuador, SolGold and its subsidiaries have also applied for additional exploration licences in Ecuador over a number of promising porphyry copper gold targets throughout the Country. 38 such concessions have been granted and announced to date. SolGold is negotiating external funding options which will provide the Company with the ability to have some of these projects fully funded by a third party while focussing on Cascabel.

In Queensland, Australia the Company is evaluating the future exploration plans for the Mt Perry, Rannes and Normanby projects, with drill testing of the Normanby project planned for the coming quarter. Joint venture agreements are being investigated for a joint venture partner to commit funds and carry out exploration to earn an interest in the tenements.

SolGold retains interests in its original theatre of operations, Solomon Islands in the South West Pacific, where the 100% owned, but as yet undrilled, Kuma prospect on the island of Guadalcanal exhibits surface lithocap characteristics which are traditionally indicative of a large metal rich copper gold intrusive porphyry system. SolGold intends in the future to apply intellectual property and experience developed in Ecuador to target additional "World Class" copper gold porphyries at Kuma and other targets in Ecuador and Argentina.

SolGold is based in Brisbane, Queensland, Australia. The Company listed on London's AIM Market in 2006, and dual-listed onto the TSX in July 2017 (both exchanges using the ticker code: SOLG) and currently has on issue a total of 1,515,555,686 fully-paid ordinary shares, 31,795,884 options exercisable at 28p and 9,795,884 options exercisable at 14p.

## **CAUTIONARY NOTICE**

News releases, presentations and public commentary made by SolGold plc (the "**Company**") and its Officers may contain certain statements and expressions of belief, expectation or opinion which are forward looking statements, and which relate, inter alia, to interpretations of exploration results to date and the Company's proposed strategy, plans and objectives or to the expectations or intentions of the Company's Directors. Such forward-looking and interpretative statements involve known and unknown risks, uncertainties and other important factors beyond the control of the Company that could cause the actual performance or achievements of the Company to be materially different from such interpretations and forward-looking statements. Accordingly, the reader should not rely on any interpretations or forward-looking statements; and save as required by the exchange rules of TSX and LSE-AIM and LSE for companies or by applicable laws, the Company does not accept any obligation to disseminate any updates or revisions to such interpretations or forward-looking statements. The Company may reinterpret results to date as the status of its assets and projects changes with time expenditure, metals prices and other affecting circumstances.

The Company and its officers do not endorse, or reject or otherwise comment on the conclusions, interpretations or views expressed in press articles or third-party analysis, and where possible aims to circulate all available material on its website.

The Company recognises that the term "World Class" is subjective and for the purpose of the Company's projects the Company considers the drilling results at the growing Alpala Porphyry Copper Gold Deposit at its Cascabel Project to represent intersections of a "World Class" deposit on the basis of comparisons with other drilling intersections from "World Class" deposits tabulated in **Table 1**, some of which have become, or are becoming, producing mines and on the basis of available independent opinions which may be referenced to define the term "World Class" (or "Tier 1").

The Company considers that "World Class" deposits are rare, very large, long life, low cost, and are responsible for approximately half of total global metals production. "World Class" deposits are generally accepted as deposits of a size and quality that create multiple expansion opportunities, and have or are likely to demonstrate robust economics that ensure development irrespective of position within the global commodity cycles, or whether or not the deposit has been fully drilled out, or a feasibility study completed.

Standards drawn from industry experts (1Singer and Menzie, 2010; 2Schodde, 2006; 3Schodde and Hronsky, 2006; 4Singer, 1995; 5Laznicka, 2010) have characterised "World Class" deposits at prevailing commodity prices. The relevant criteria for "World Class" deposits, adjusted to current long run commodity prices, are considered to be those holding or likely to hold more than 5 million tonnes of copper and/or more than 6 million ounces of gold with a modelled net present value of greater than USD 1 Billion.

The Company cautions that the Cascabel Project remains an early exploration stage project at this time. Despite the relatively high copper and gold grades over long intersections and broad areas, and widespread surface mineralization discovered at the Cascabel Project to date, much of which has still not yet been drill tested, the Company has yet to prepare an initial mineral resource estimate at the Cascabel Project and any development or mining potential for the project remains speculative. There is inherent uncertainty relating to any project at an exploration stage, prior to the determination of a mineral resource estimate, preliminary economic assessment, pre-feasibility study and/or feasibility study. There is no certainty that future results will yield the results seen to date or that the project will continue to be considered to contain a "World Class" deposit. Accordingly, past exploration results may not be predictive of future exploration results.

From the drilling results at the growing Alpala Porphyry Copper Gold Deposit (only) within the Cascabel Project, the Company considers the deposit to have significant resource potential and the data gathered has provided the basis for the estimation of an exploration target over the area drilled to date. Initial 3D modelling and grade shell interpolants have outlined an approximate exploration target at Alpala that ranges from 630Mt at 1.10% copper equivalent, using a cut-off grade of 0.4% copper equivalent, to 845Mt at 0.90% copper equivalent, using a cut-off grade of 0.3% copper equivalent. These estimates equate to an endowment of between 6.9-7.9Mt of contained copper equivalent (**Figure A**).

Copper equivalent grades used are calculated using a gold conversion factor of 0.63, determined using a copper price of USD 3.00/pound and a gold price of USD 1300/ounce. Drill hole intercepts are calculated using a data aggregation method, defined by copper equivalent cut-off grades and reported with up to 10m internal dilution, excluding bridging to a single sample. True widths of down hole intersections are estimated to be approximately 25-50%.

The Company cautions that the potential quantity and grade ranges (exploration target) disclosed above for the Alpala Porphyry Copper Gold Deposit within the Cascabel Project is conceptual in nature, and there has been insufficient exploration to define a mineral resource, and the Company is uncertain if further exploration will result in the exploration target being delineated within a mineral resource estimate.

On this basis, the reference to the Cascabel Project as "World Class" (or "Tier 1") is considered to be appropriate. Examples of global copper and gold discoveries since 2006 that are generally considered to be "World Class" are summarised in **Table 2**.

#### **References cited in the text:**

1. Singer, D.A. and Menzie, W.D., 2010. *Quantitative Mineral Resource Assessments: An Integrated Approach*. Oxford University Press Inc.
2. Schodde, R., 2006. *What do we mean by a world class deposit? And why are they special*. Presentation. AMEC Conference, Perth.
3. Schodde, R and Hronsky, J.M.A, 2006. *The Role of World-Class Mines in Wealth Creation*. Special Publications of the Society of Economic Geologists Volume 12.
4. Singer, D.A., 1995, *World-class base and precious metal deposits-a quantitative analysis*: *Economic Geology*, v. 90, no.1, p. 88-104.
5. Laznicka, P., 2010. *Giant Metallic Deposits: Future Sources of Industrial Metal, Second Edition*. Springer-Verlag Heidelberg.