

2 September 2021

# SolGold plc

("SolGold" or the "Company")

# **Ecuador Regional Exploration Update - Drilling Underway at Rio Amarillo**

The Board of Directors of SolGold (LSE & TSX code: SOLG) is pleased to provide an update on the Regional Exploration Programme in Ecuador with the much anticipated commencement of drilling at its Rio Amarillo project in northern Ecuador, held by Carnegie Ridge Resources S.A., a 100% owned subsidiary of SolGold.

#### **HIGHLIGHTS**

- Exploration drilling at the Varela porphyry Cu-Au-Mo target at the Rio Amarillo project is now underway. Drill hole 1 (RDH-21-001) is currently at 90m depth, drilling towards a planned depth of 1,500m
- ➤ Hole 1 at Varela is testing underneath outcropping porphyry style vein stockworks which returned encouraging surface rock-saw channel sample results of 99m @ 0.34% CuEq including 25.1m @ 0.58% CuEq
- ➤ The Varela target is part of a cluster of preserved porphyry lithocap zones discovered at the Rio Amarillo project, approximately 30km southeast of the Company's flagship Alpala porphyry copper-gold-silver deposit in northern Ecuador
- The Varela target exhibits a well-preserved metalliferous lithocap and hydrothermal alteration system with a full complement of porphyry plume chemical elements, the classic signature of a large scale strongly mineralised porphyry copper-gold(-molybdenum) system
- ➤ The Varela target holds strong similarities with the lithocap footprint and geochemical signature of the Alpala deposit
- ➤ The regional position of the Rio Amarillo project is geologically consistent with the district's distribution of porphyry deposits, with the Tier 1 Alpala and the Llurimagua porphyry deposits occurring some 30km and 60km away, respectively

SolGold's Technical Services Manager, Mr Benn Whistler, commented on the drilling underway at Rio Amarillo Project, saying:

"Drill hole RDH-21-001 marks the much-anticipated drill testing of the first target within the cluster of large porphyry systems at the Rio Amarillo project.

The regional geological setting and gross geological architecture at Rio Amarillo is very impressive. The large-scale porphyry targets at Varela, Chalanes and Palomar are three of the Company's highest priority targets and have similarities to those discovered at the Company's Cascabel project some 30km to the northwest.

Surface mapping and sampling at Rio Amarillo has identified outcropping surface copper-gold-molybdenum mineralisation within each of the lithocap areas at Varela, Chalanes and Palomar. The project area is mountainous with a vertical surface extent of up to 1,500m, and we envisage that exploratory drilling will test a vertical column of 3 to 3.5km.

At Varela, where drilling has commenced, the lithocap area covers 1,200m x 800m and contains porphyry style quartz-chalcopyrite vein stockworks, which returned encouraging surface rock-saw  $1 \mid P \mid a \mid g \mid e$ 



channel results of around 100m grading 0.1% Cu and 0.3 g/t Au, including 25m grading 0.1% Cu and 0.6 g/t Au.

Varela's surface assay results are encouraging as they are the tenor of copper and gold that would be expected when situated central and above to a preserved porphyry column displaying a complete range of porphyry plume chemical elements (Bi, Se, Li, Te). Moreover, this occurs within coincident copper-molybdenum-gold geochemical highs within highly altered host rocks. In my opinion, Varela is a perfect example of a metalliferous lithocap formed above a porphyry copper-gold(-molybdenum) deposit."

#### **FURTHER INFORMATION**

SolGold's 100% owned Rio Amarillo project in northern Ecuador lies approximately 30km southeast of the Company's flagship Alpala porphyry copper-gold-silver deposit which holds a Measured plus Indicated Resource of 2,663 Mt @ 0.53% CuEq and contained metal content of 9.9 Mt Cu, 21.7 Moz Au and 92.2 Moz Ag <sup>[1]</sup>. The Rio Amarillo project comprises three concessions, Rio Amarillo 1, 2 & 3 (**Figure 1**).

The Rio Amarillo project area holds three large-scale porphyry targets at Varela, Chalanes and Palomar (**Figure 2**). Surface mapping and sampling at Rio Amarillo has identified outcropping surface coppergold-molybdenum mineralisation within each of the preserved lithocap areas.

These main target areas exhibit porphyry style surface mineralisation and alteration covering a vertical extent of up to 1,500m over a 12km-long by 3km-wide northeast trending, magnetically anomalous, porphyry belt (**Figure 3**). The major northeast trending magnetically anomalous belt is intersected by a secondary northwest trending feature, likely to represent the intersection of two deep-seated crustal-scale fracture zones, later filled by intrusive bodies with magnetic characteristics indicative of strongly differentiated and mineralised systems. This structural regime has strong similarities to that encountered at the Alpala deposit, located about 30km to the northwest.

Field work completed at the Rio Amarillo project includes extensive rock and rock-saw channel sampling, with Terra-Spec4TM (ASD) analysis of rock samples to map hydrothermal alteration over the main lithocap areas at Chalanes, Varela and Palomar. Rock samples have been obtained from surface pits up to 1.3m deep.

Initial drilling targets the Varela porphyry copper-gold prospect, following up on highly encouraging surface rock-saw channel results of 99m @ 0.34% CuEq (0.12% Cu, 0.29 g/t Au, 38ppm Mo) including 25.1m @ 0.58% CuEq (0.12% Cu, 0.61 g/t Au, 85ppm Mo). The rock-saw channel samples were taken across outcropping porphyry style A, M and B type quartz vein stockworks within dioritic host rocks. The mineralised quartz veins and veinlets within the Varela lithocap area predominantly strike in a northwest direction.

Exploration drilling is now under way with drill hole 1 (RDH-21-001) currently at 90m depth, drilling towards a planned depth of 1,500m (Figure 4).

The Varela target exhibits a well-preserved metalliferous lithocap and hydrothermal alteration system with a full complement of porphyry plume elements, the typical signature of a large scale strongly mineralised porphyry copper-gold(-molybdenum) system. The lithocap and associated Mo-Mn ratio results hold close similarity to the footprint and geochemical signature of the lithocap at the Alpala deposit (**Figure 5**).



SolGold geologists observe a well-preserved porphyry column displaying a complete range of porphyry plume elements including bismuth, selenium and tellurium at surface (**Figure 6**). Rock geochemical contouring reveals a lithium halo surrounding a tight molybdenum high, which is inferred to indicate the top of a porphyry plume. This occurs with coincident copper-molybdenum-gold geochemical highs and the presence of B-type porphyry veins amongst highly altered host rocks, which SolGold geologists believe provides an excellent example of a metalliferous lithocap formed above a porphyry copper-gold(-molybdenum) deposit.

This interpretation is further supported by 3D geochemical modelling completed independently by Fathom Geophysics following the geochemical element zoning models for the Yerington porphyry copper deposit in Nevada (Cohen, 2011 [2]; and Halley et al., 2015 [3]). Results indicate a vertically extensive target zone seated directly beneath the coincident surface geochemical targets (**Figure 7**)

The Varela lithocap rocks are characterised by magnetite- and feldspar-destructive, clay-mica rich hydrothermal alteration with crackle and hydrothermal breccias that contain veins with mineral assemblages typical of the upper levels of some mineralised porphyry systems. Examples of lithocap rocks and alteration within the Varela lithocap are shown in **Figures 8-10**.

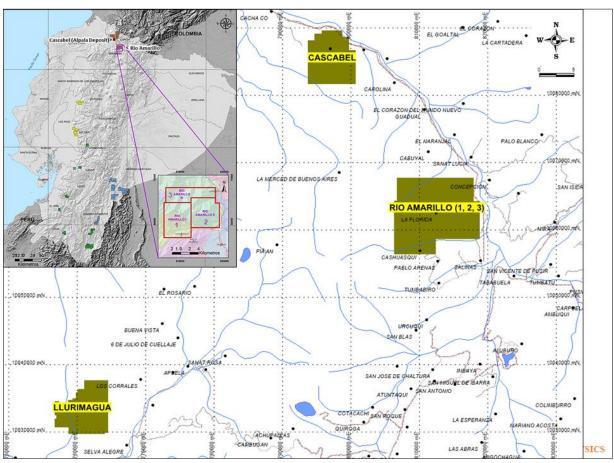
The regional position of the Rio Amarillo project is geologically consistent with the district's distribution of porphyry deposits, with the Tier 1 Alpala and Llurimagua deposits occurring some 30km and 60km away respectively.

[1] See "Cascabel Property NI 43-101 Technical Report, Alpala Porphyry Copper-Gold-Silver Deposit - Mineral Resource Estimation, January 2021" with an Effective date: 18 March 2020 and Amended Date: 15 January 2021 (the "Amended Technical Report"), filed at <a href="https://www.Sedar.com">www.Sedar.com</a> on January 29, 2021.

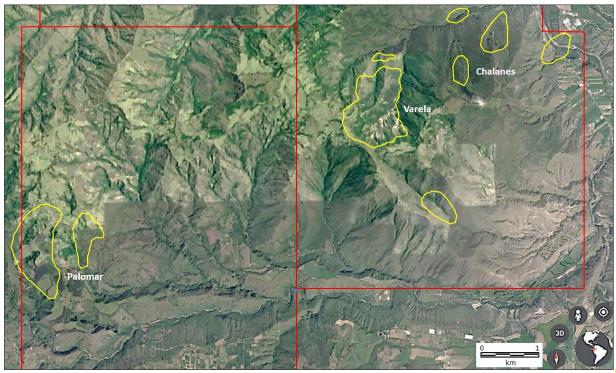
[2] Cohen, J.F., 2011, Mineralogy and geochemistry of alteration at the Ann-Mason copper deposit, Nevada: Comparison of large-scale ore exploration techniques to mineral chemistry: M.Sc. thesis, Corvallis, Oregon, Oregon State University, 112 p. plus appendices.

[3] Halley, S., Dilles, J.H, and Tosdal, R.M., 2015, Footprints: Hydrothermal alteration and geochemical dispersion around porphyry copper deposits, Society of Economic Geologists Newsletter v. 100, p 1, 12-17.



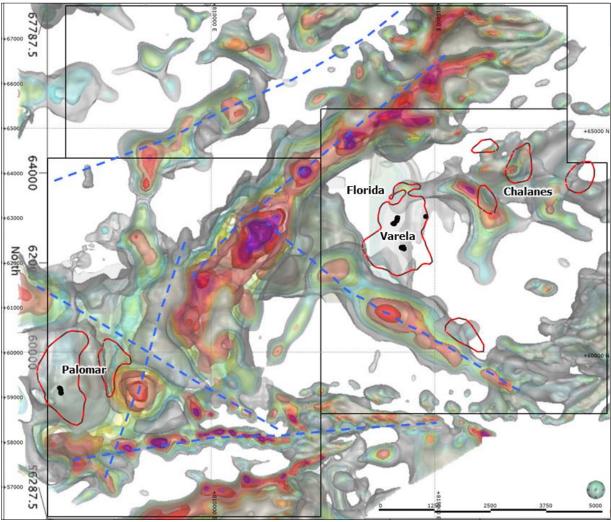


**Figure 1**: Location plan showing the Rio Amarillo project in relation to the Alpala (SolGold) and the Llurimagua (ENAMI-Codelco) deposits. The Rio Amarillo project holds similar infrastructure advantages to the Alpala project.



**Figure 2**: Location plan of mapped lithocap areas (outlined yellow) within the Rio Amarillo project concessions (red), showing the highly visible natural scarring at Varela lithocap area.





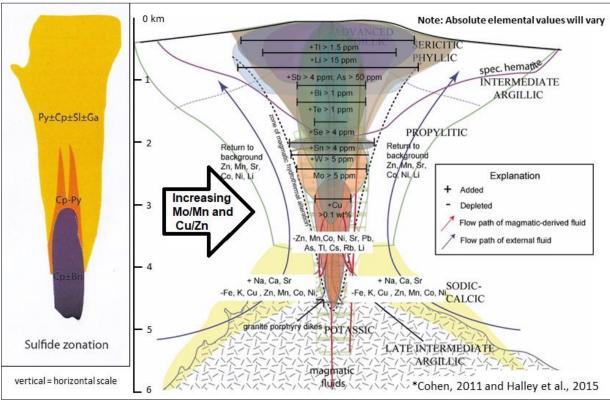
**Figure 3**: Location plan showing mapped lithocap areas (outlined red), comprising the four target areas of outcropping porphyry mineralisation at Palomar, Varela, Florida and Chalanes. Rock-saw channel sample sites within the Palomar and Varela lithocap areas are marked as large black circles. Recent 3D magnetic inversion models are also shown, highlighting the major north-easterly trending magnetic belt which is intersected by a secondary north-westerly trending magnetic feature, likely to represent the intersection of deep-seated crustal-scale fracture zones filled by intrusive bodies. This structural regime has strong similarities to that encountered at the Alpala project, some 30km to the northwest.





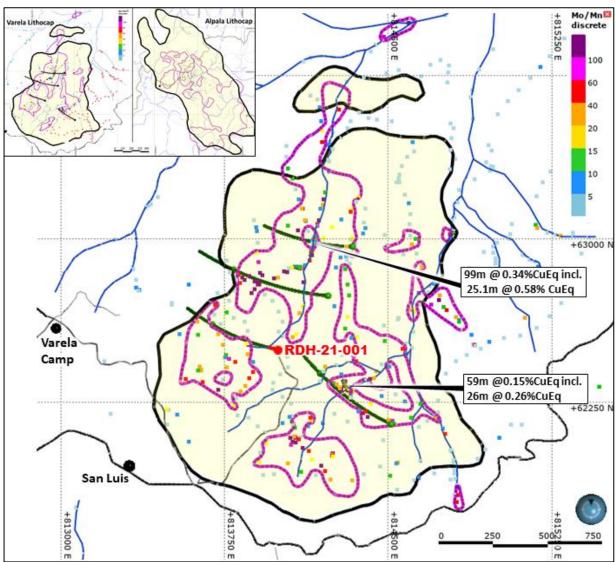
**Figure 4**: Drill hole 1 (RDH-21-001) underway at 90m depth, drilling towards a planned depth of 1,500m utilising customised man-portable drill rig.





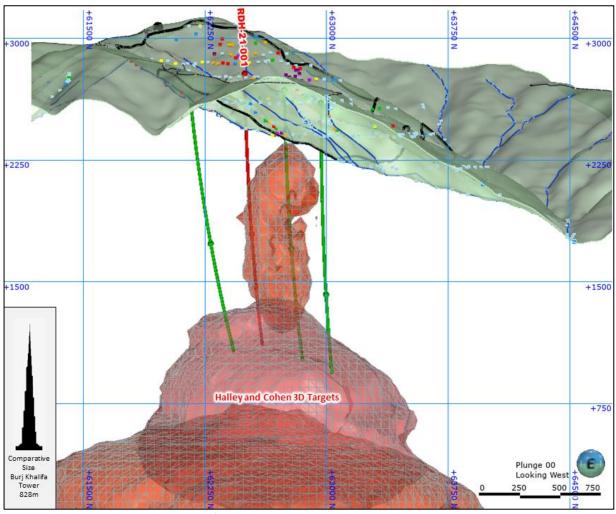
**Figure 5**: Element distribution in global porphyry systems showing the porphyry plume vertical geochemical dispersion model in porphyry Cu-Au-Mo systems (after Cohen, 2011 and Halley et al., 2015). In this model Mo/Mn and Cu/Zn increase towards the porphyry centre. Many global porphyry systems, including Alpala, show a telescoping of metal zoning and Cu-Mo-Au mineralisation, such that the ore zones lie closer to the paleosurface than indicated in this schematic section.





**Figure 6**: Plan view of the Varela target, showing SolGold's Varela Camp, the mapped lithocap area (yellow), and molybdenum-manganese (Mo/Mn) geochemical high (magenta outline). Rock Mo/Mn results, north and west of the current data limit are colour-coded in the legend (top right). Rock geochemistry samples with assay results pending lie east and south of the current data limit. The overall size of the Varela Mo/Mn anomaly is approximately 1,200m x 800m. The initial four drill holes proposed are shown in black, with hole 1 (RDH-21-001) progress shown in red. INSET: Same-scale comparison between the Varela and Alpala Lithocap footprints and geochemical signatures, showing mapped lithocap areas (yellow), and Mo/Mn geochemical highs (magenta outlines).





**Figure 7**: Sectional view looking west of 3D geochemical modelling results at Varela Target, indicating a vertically extensive target zone (red hash) seated directly beneath the lithocap area (black outline). The model indicates potential for a porphyry copper deposit at depth, based on the comparison of geochemical zoning at Varela to the Yerington porphyry deposit in Nevada (Cohen, 2011; and Halley et al., 2015).





**Figure 8**: Looking north from the southern end of the lower Varela lithocap area, towards the Varela rock-saw outcrop location in the deeply incised Varela Creek below. Intense acid alteration within the highly leached lithocap is evident in the natural scarring of this land-slip area. The photograph field of view is approximately 250m wide.



**Figure 9**: Example of gold bearing hydrothermal breccia containing clay altered lithocap fragments. This sample returned an assay result of 1.0g/t Au.





**Figure 10**: Strongly altered rocks from the upper Varela lithocap, containing B-type porphyry veins and visible trace chalcopyrite and molybdenite mineralisation. Assay results pending.



## 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.

#### **Qualified Person:**

Information in this report relating to the exploration results is based on data reviewed by Mr Jason Ward ((CP) B.Sc. Geol.), the Chief Geologist of the Company. Mr Ward is a Fellow of the Australasian Institute of Mining and Metallurgy, holds the designation FAusIMM (CP), and has in excess of 20 years' experience in mineral exploration and is a Qualified Person for the purposes of the relevant LSE and TSX Rules. Mr Ward consents to the inclusion of the information in the form and context in which it appears.

By order of the Board Dennis Wilkins Company Secretary

#### **CONTACTS**

#### **Dennis Wilkins**

SolGold Plc (Company Secretary)

dwilkins@solgold.com.au

Tel: +61 (0) 7 3303 0660

#### **Ingo Hofmaier**

SolGold Plc (GM – Project & Corporate Finance) Tel: +44 (0) 20 3823 2130

ihofmaier@solgold.com.au

### Fawzi Hanano

SolGold Plc (Investors / Media)
Tel: +44 (0) 20 3823 2130
fhanano@solgold.com.au

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#### **ABOUT SOLGOLD**

SolGold is a leading resources company focussed on the discovery, definition and development of world-class copper and gold deposits. In 2018, SolGold's management team was recognised by the "Mines and Money" Forum as an example of excellence in the industry and continues to strive to deliver objectives efficiently and in the interests of shareholders. SolGold, with 76 concessions covering approximately 3,100km², is a large and active concession holder in Ecuador and is aggressively exploring the length and breadth of this highly prospective and gold-rich section of the Andean Copper Belt which is currently responsible for c40% of global mined copper production.

The Company operates with transparency and in accordance with international best practices. SolGold is committed to delivering value to its shareholders, while simultaneously providing economic and social benefits to impacted communities, fostering a healthy and safe workplace and minimizing the environmental impact.



#### **Dedicated stakeholders**

SolGold employs a staff of over 800 employees of whom 98% are Ecuadorean. This is expected to grow as the operations expand at Alpala, and in Ecuador generally. SolGold focusses its operations to be safe, reliable and environmentally responsible and maintains close relationships with its local communities. SolGold has engaged an increasingly skilled, refined and experienced team of geoscientists using state of the art geophysical and geochemical modelling applied to an extensive database to enable the delivery of ore grade intersections from nearly every drill hole at Alpala. SolGold has over 80 geologists on the ground in Ecuador exploring for economic copper and gold deposits.

#### About Cascabel and Alpala

The Alpala deposit is the main target in the Cascabel concession, located on the northern section of the heavily endowed Andean Copper Belt, the entirety of which is renowned as the base for nearly half of the world's copper production. The project area hosts mineralisation of Eocene age, the same age as numerous Tier 1 deposits along the Andean Copper Belt in Chile and Peru to the south. The project base is located at Rocafuerte within the Cascabel concession in northern Ecuador, an approximately three-hour drive on sealed highway north of the capital Quito, close to water, power supply and Pacific ports.

Having fulfilled its earn-in requirements, SolGold is a registered shareholder with an unencumbered legal and beneficial 85% interest in ENSA (Exploraciones Novomining S.A.) which holds 100% of the Cascabel concession covering approximately  $50 \text{km}^2$ . The junior equity owner in ENSA is required to repay 15% of costs since SolGold's earn in was completed, from 90% of its share of distribution of earnings or dividends from ENSA or the Cascabel concession. It is also required to contribute to development or be diluted, and if its interest falls below 10%, it shall reduce to a 0.5% NSR royalty which SolGold may acquire for US\$3.5million.

### SolGold's Regional Exploration Drive

SolGold is using its successful and cost-efficient blueprint established at Alpala, and Cascabel generally, to explore for additional world class copper and gold projects across Ecuador. SolGold is the largest and most active concessionaire in Ecuador.

The Company wholly owns four other subsidiaries active throughout the country that are now focussed on thirteen high priority gold and copper resource targets, several of which the Company believes have the potential, subject to resource definition and feasibility, to be developed in close succession or even on a more accelerated basis compared to Alpala.

SolGold is listed on the London Stock Exchange and Toronto Stock Exchange (LSE/TSX: SOLG). The Company has on issue a total of 2,293,816,433 fully paid ordinary shares and 105,125,000 share options.

## Quality Assurance / Quality Control on Sample Collection, Security and Assaying

SolGold operates according to its rigorous Quality Assurance and Quality Control (QA/QC) protocol, which is consistent with industry best practices.

Primary sample collection involves secure transport from SolGold's concessions in Ecuador, to the ALS certified sample preparation facility in Quito, Ecuador. Samples are then air freighted from Quito to the ALS certified laboratory in Lima, Peru where the assaying of drill core, channel samples, rock chips and soil samples is undertaken. SolGold utilises ALS certified laboratories in Canada and Australia for the analysis of metallurgical samples.

Samples are prepared and analysed using 100g 4-Acid digest ICP with MS finish for 48 elements on a 0.25g aliquot (ME-MS61). Laboratory performance is routinely monitored using umpire assays, check



batches and inter-laboratory comparisons between ALS certified laboratory in Lima and the ACME certified laboratory in Cuenca, Ecuador.

In order to monitor the ongoing quality of its analytical database, SolGold's QA/QC protocol encompasses standard sampling methodologies, including the insertion of certified powder blanks, coarse chip blanks, standards, pulp duplicates and field duplicates. The blanks and standards are Certified Reference Materials supplied by Ore Research and Exploration, Australia.

SolGold's QA/QC protocol also monitors the ongoing quality of its analytical database. The Company's protocol involves Independent data validation of the digital analytical database including search for sample overlaps, duplicate or absent samples as well as anomalous assay and survey results. These are routinely performed ahead of Mineral Resource Estimates and Feasibility Studies. No material QA/QC issues have been identified with respect to sample collection, security and assaying.

Reviews of the sample preparation, chain of custody, data security procedures and assaying methods used by SolGold confirm that they are consistent with industry best practices and all results stated in this announcement have passed SolGold's QA/QC protocol.

The data aggregation method for calculating Copper Equivalent (CuEq) for down-hole drilling intercepts and rock-saw channel sampling intervals are reported using copper equivalent (CuEq) cut-off grades with up to 10m internal dilution, excluding bridging to a single sample and with minimum intersection length of 50m.

Copper Equivalent is currently calculated (assuming 100% recovery of copper and gold) using a Gold Conversion Factor of 0.751 (CuEq = Cu + Au x 0.751), calculated from a current nominal copper price of US\$3.30/lb and a gold price of US\$1,700/oz.

See www.solgold.com.au for more information. Follow us on twitter @SolGold plc

## **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, including the plan for developing the Project currently being studied as well as the expectations of the Company as to the forward price of copper. 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 the TSX and LSE 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.

This release may contain "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, statements regarding the Company's plans for developing its properties. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or



"believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved".

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: transaction risks; general business, economic, competitive, political and social uncertainties; future prices of mineral prices; accidents, labour disputes and shortages and other risks of the mining industry. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Factors that could cause actual results to differ materially from such forward-looking information include, but are not limited to, risks relating to the ability of exploration activities (including assay results) to accurately predict mineralization; errors in management's geological modelling and/or mine development plan; capital and operating costs varying significantly from estimates; the preliminary nature of visual assessments; delays in obtaining or failures to obtain required governmental, environmental or other required approvals; uncertainties relating to the availability and costs of financing needed in the future; changes in equity markets; inflation; the global economic climate; fluctuations in commodity prices; the ability of the Company to complete further exploration activities, including drilling; delays in the development of projects; environmental risks; community and non-governmental actions; other risks involved in the mineral exploration and development industry; the ability of the Company to retain its key management employees and skilled and experienced personnel; and those risks set out in the Company's public documents filed on SEDAR at www.sedar.com. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

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.