Transition Metals Validates Copper Porphyry Potential at Pike Warden Project, Yukon

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- Rock sample trace element geochemistry highlights robust epithermal and porphyry style alteration signatures.
- Petrographic evidence supports timing relationships of a late epithermal alteration assemblage overprinting an earlier (hotter) copper-molybdenum enriched porphyry style alteration.
- Petrography confirms high temperature potassic alteration associated with higher grade copper mineralization.

Sudbury, May 29, 2024 - Transition Metals Corp. (TSXV: XTM) ("Transition", "the Company") is pleased to announce updates regarding ongoing geological studies, as well as provide an update on upcoming exploration plans for the Pike Warden project ("the Property"), Yukon. Petrographic and geochemical studies have further highlighted the prospectivity for porphyry style copper-molybdenum mineralization on the Property. The Pike Warden Project (Figure 1) is located in the traditional territory of Carcross/Tagish First Nation and is situated on the northern rim of the Bennett Lake Caldera Complex, one of the largest extinct volcanic centers in Canada.

Greg Collins, P.Geo., COO of Transition Metals, commented, "Our work further highlights the prospectivity of this unique part of the Cordillera. It is exciting that the petrographic and geochemical evidence has confirmed porphyry style signatures coincident with the grades of copper we are seeing. Elsewhere in the Cordillera, such signatures can be associated with large and economic copper systems. We look forward to continuing our exploration efforts this summer, once the field season in the Yukon gets underway in July."

Figure 1. - Location of the Pike Warden Project

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Discussion of Results

Petrographic analysis on a select batch of 26 rock samples is being carried out by Fabrizio Colombo, Ph.D., P.Geo., of Ultra Petrography and Geoscience Inc. ("UPG"), to characterize host lithologies, alteration assemblages, and mineralization which could be proximal to porphyry centers. Preliminary observations from this study highlight that the samples can be categorized into three subsects:

1) Samples which display alteration and veining characteristics of precious metal enriched epithermal alteration and mineralization,

2) Samples which exhibit chlorite-epidote-albite assemblage (propylitic alteration), and

3) Samples which exhibit strong alteration comprising albite-chlorite-biotite-epidote-quartz-chalcopyrite assemblage, representing a much higher temperature of alteration.

Notably, one of these samples collected in 2023 from the Copper North showing, returned a value of 2.3% Cu (see Company news release dated September 11, 2023). The significance of alteration observed in this sample was qualified by UPG as important, stating that the sample provides "a good indication of the occurrence of high temperature porphyry-type alteration assemblages associated with Cu and Cu-Mo mineralization at surface".

Three trace element indices have been reviewed and applied to further highlight and characterize mineralizing systems:

1) A thermal index[1], used as a vector for heat flow and heat-flux footprints in epithermal-porphyry systems,

2) The Mineral Deposit Research Unit's (MDRU) porphyry indices[2] (MPIx, MPIx-Lateral) are used to map the mineralization footprints both vertically and laterally, and

3) The Na-Ca depletion index[3], which helps map the intensity of muscovite and advanced argillic alteration.

These indices provide tools to compare prospects in a district, assess size, and qualify level of burial, which assists to define and prioritize drill targets. Supported by petrographic evidence, the trace element geochemical indices highlight the potential for multiple mineralized centers.

Some samples collected from high thermal index areas have been observed petrographically as being overprinted by lower temperature phyllic and argillic alteration assemblages. This relationship highlights a spatial overlap in places between an early high temperature porphyry alteration assemblage overprinted by lower temperature epithermal alteration and mineralization. Samples exhibiting higher MPIx values, and Na-Ca depletion index values, imply proximity to a Cu-Mo ± (Au/Ag) porphyry system. The data highlights multiple sites exhibiting high MPIx values clustered near intersections between strong concentric and radial structures related to the Bennett Lake caldera (Figure 2).

[1] Halley, S., Dilles, J.H., and Tosdal, R.M., 2015, Footprints: Hydrothermal alteration and geochemical dispersion around porphyry copper deposits: SEG Newsletter, no. 100, p. 1, 12-17.

[2] Bouzari, F., Bissig, T., Hart, C.J.R., and Leal-Meija, H., 2019, An exploration framework for porphyry to epithermal transitions in the Toodoggone mineral district (94E): Geoscience BC Report 2019-18, 105 p.

[3] Bouzari, F., Lee, R.G., Hart, C.J.R. and van Straaten, B.I. (2021): Mineralogical and geochemical vectors within advanced argillic-altered rocks of north-central British Columbia (NTS 094E/02, 15, 104I/05); in Geoscience BC Summary of Activities 2020: Minerals, Geoscience BC, Report 2021-01, p. 91-104.

Figure 2: Pike Warden project preliminary alteration mapping with prominent structural trends, discovered polymetallic showings, highlighting samples displaying elevated MPIx porphyry index values.

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Yukon Mineral Exploration Program

The Company is pleased to inform that the Pike Warden project has been approved to receive up to $50,000 in grant funding under the Yukon Mineral Exploration Program (YMEP) for 2024-2025. The Company would like to acknowledge the support of the Yukon government and all its stakeholders. This program supports placer and hard rock exploration projects by reimbursing a percentage of approved exploration expenditures, with the intent to support early-stage projects and stimulate new mineral discoveries. It is important to note that the opinions and views expressed in this announcement are those of Transition Metals Corp., and do not necessarily reflect those of the Government of Yukon.

Next Steps

The Company has contracted Geotech Ltd. of Aurora, Ontario, to complete a helicopter-borne Z-Axis Tipper Electromagnetic (ZTEM) geophysical survey over the property. ZTEM systems are capable of deeply penetrating electromagnetic signatures (>1-2km) that permits the mapping of geologic units, structure and

alteration based on lateral resistivity contrasts. Audio-frequency magnetic (AFMAG) data from this survey will be used to create a 3-D subsurface resistivity inversion model to help determine prospective targets for porphyry centers on the Property.

Further, the Company is also planning a robust field program, starting in July, to continue its sampling, bedrock mapping, and alteration mapping efforts on the property. These efforts will further aid in defining mineralization and further characterize prospective sites for drill targeting on the Property.

About the Pike Warden Property

The Pike Warden property is located approximately 65 kilometres southwest of Whitehorse, Yukon, and is composed of 203 contiguous mining claims totaling approximately 41 km². The property encompasses a combination of historic and recently discovered high-grade polymetallic gold, copper, and silver epithermal showings that are indicative of a large epithermal-porphyry system in the vicinity of the Bennett Lake Volcanic Complex. In June 2022, Transition entered into an option agreement to acquire a 100% interest in the property from the Vendor in exchange for cash, shares, and work expenditures over a four-year period (see Company news release dated June 28, 2022).

Qualified Person

The technical elements of this press release have been approved by Mr. Benjamin Williams, P.Geo. (PGO), who is a Qualified Person as defined under National Instrument 43-101.

About Transition Metals Corp.

Transition Metals Corp. (TSXV: XTM) is a Canadian-based, multi-commodity explorer. Its award-winning team of geoscientists has extensive exploration experience which actively develops and tests new ideas for discovering mineralization in places that others have not looked, often allowing the company to acquire properties inexpensively. Joint venture partners earn an interest in the projects by funding a portion of higher-risk drilling and exploration, allowing Transition to conserve capital and minimize shareholder's equity dilution. Further information is available at www.transitionmetalscorp.com or by contacting:

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