Pike Warden Au-Ag-Cu

Emerging Epithermal Au-Ag/Porphyry Copper System

► XTM – TSXV | Project Presentation

Q1 2024

Pike Warden
Project Overview

- Emerging Epithermal Au-Ag/Porphyry Copper System
- Located 65km southwest of Whitehorse in traditional territory of Carcross-Tagish FN
- Sampling of outcrop and scree completed since 2019 has led to the discovery of more than 26 new zones of polymetallic mineralization returning values up to:
  - *11.8 g/t Au, 1,215 g/t Ag, 5.11% Cu, and >20% Pb*
- First ever program of drilling completed in 2022 returned significant widths and grades of silver mineralization at ERT Zone including:
  - *21.34m grading 91.43 g/t Ag including 1.52m grading 362 g/t Ag*
- Seeking strategic investment from corporate sponsor to advance this opportunity

Pike Warden
Project Location

- Pike Warden situated on the margins of one of the **largest collapsed caldera** complexes in the Canadian Cordillera – the Bennett Lake complex near Yukon/British Columbia border
- Under-explored gap on margin of the Cordilleran Intermontane Belt northwest of BC's Golden Triangle which hosts deposits including:
  - Galore Creek, Shaft Creek, Sulphurets – Porphyry Cu, Au, Mo
  - Eskay Creek, KSM, Brucejack – Epithermal Au, Ag
- Along trend in similar geology to the southeast of the Dawson Range, Yukon which hosts deposits including:
  - Casino, Minto, Carmacks (**New Catch Discovery?**) – Porphyry Cu, Au
  - Coffee, White Gold, Skukum – Epithermal Au, Ag
- Close to Whitehorse and road infrastructure

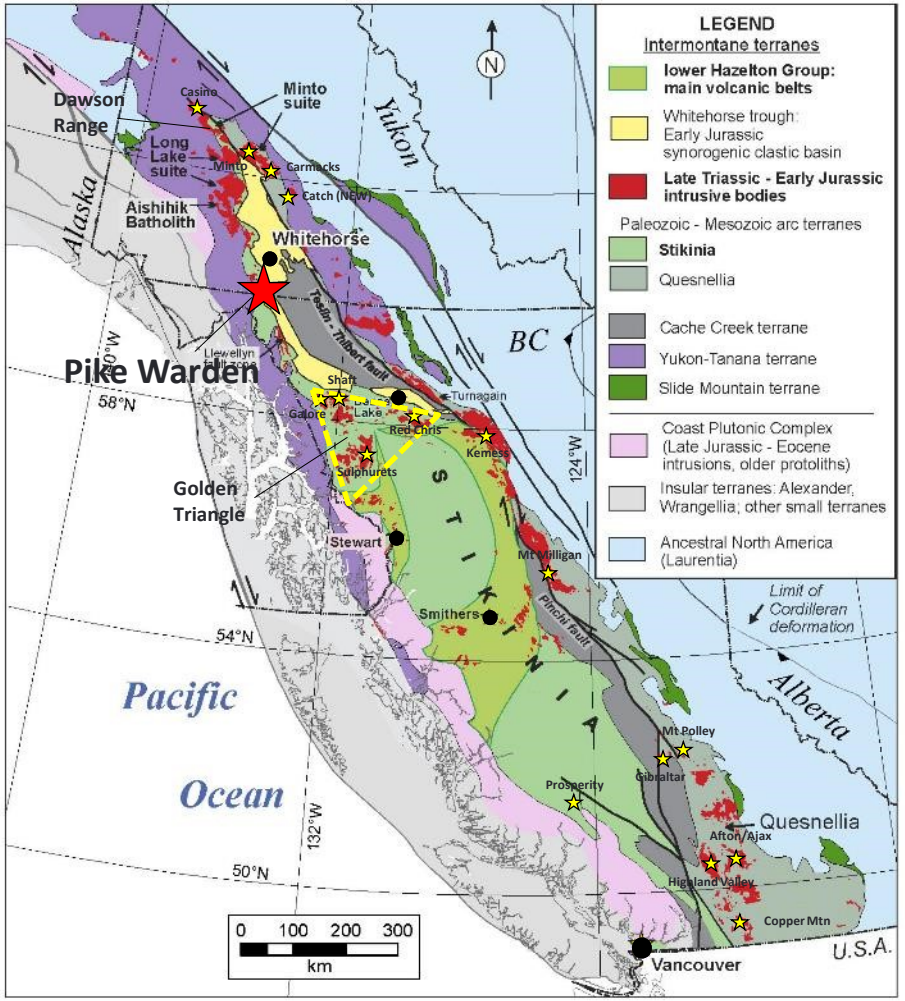
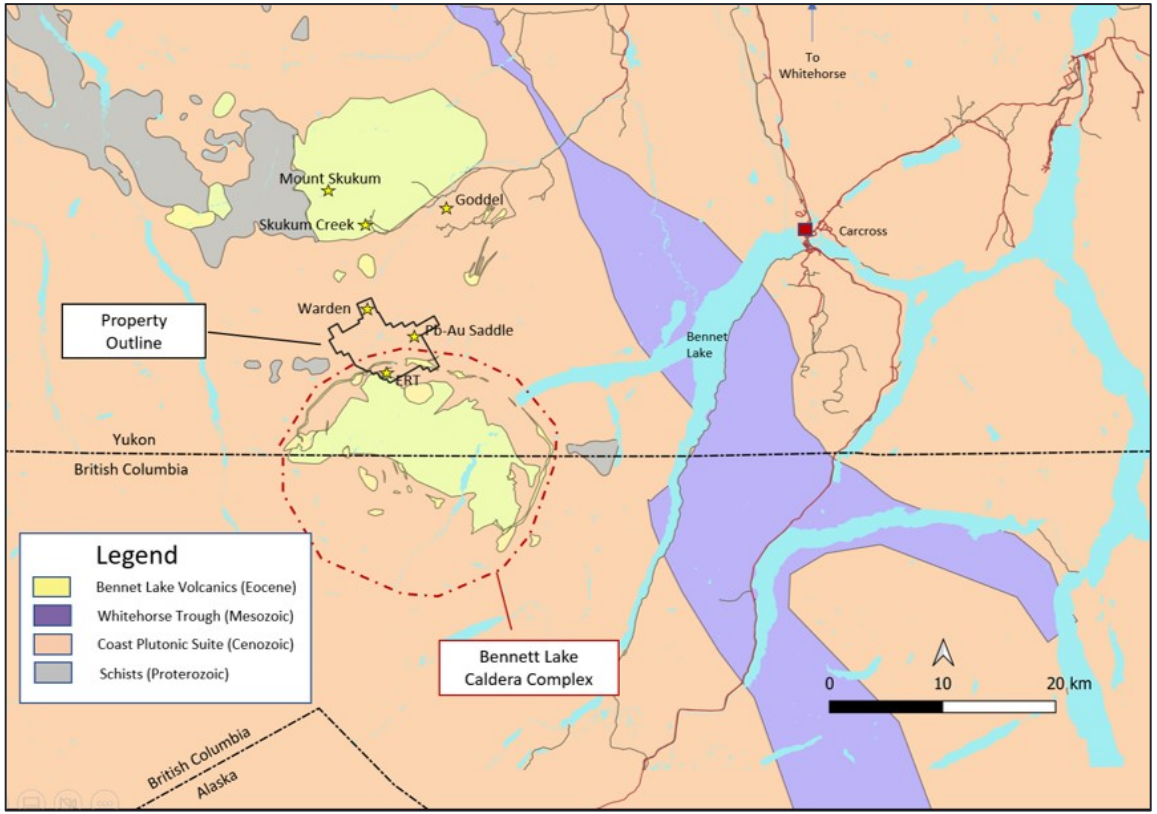


Figure 1. Terrane map of the Canadian Cordillera with emphasis on Triassic–Jurassic assemblages of Stikinia and other Intermontane terranes (Quesnellia, Yukon-Tanana, Cache Creek terrane). BC—British Columbia.

Pike Warden
Giant Collapsed Caldera

- Property straddles the northern margin of the Eocene **Bennett Lake Caldera**
- One of the **largest collapsed caldera structures in Canada** (>30 km diameter)
- Former (now dormant) major center of magmatic and hydrothermal activity
- Responsible for eruption of Mt. Skukum group volcanics of the Bennett Lake Volcanic Complex (BLVC)
- BLVC Rocks intrude and overlie late Mesozoic to Paleozoic granitoid intrusions preserving pendants and inliers of Triassic - older schists



Pike Warden - History

Boots on the Ground Meets Overlooked Area

History:

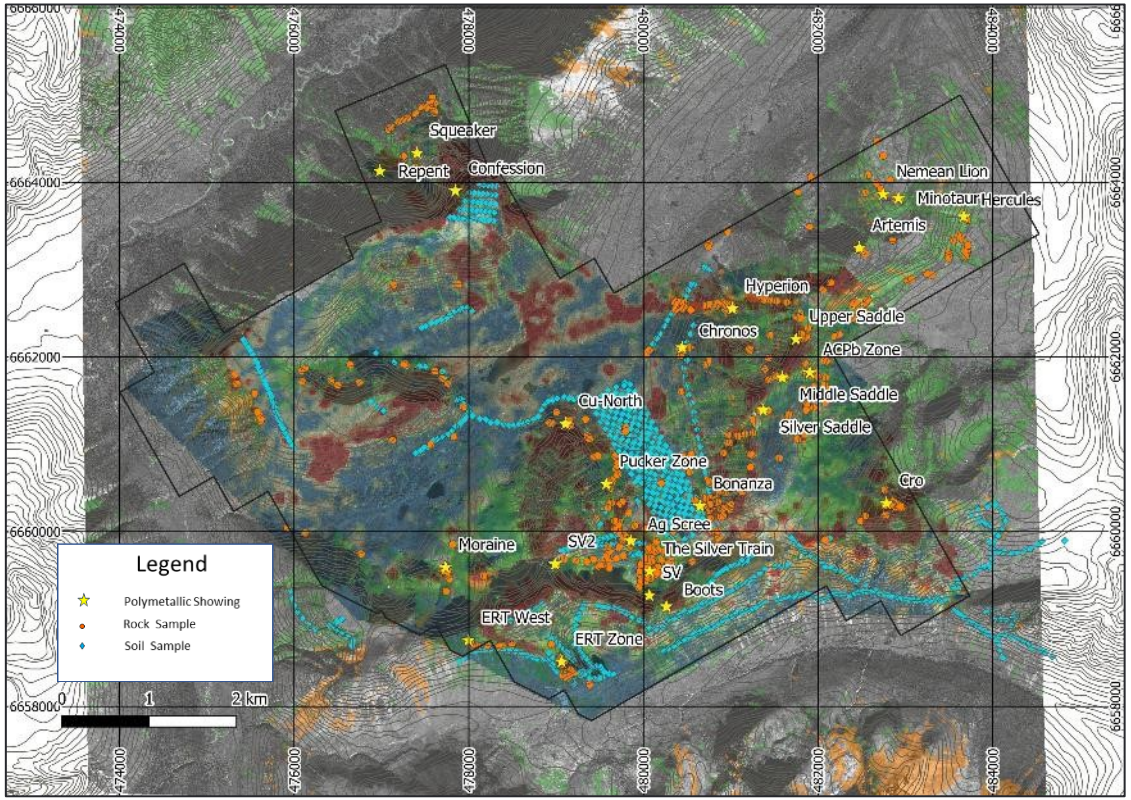
- Area prospected during the Klondike Gold Rush - Not much free gold recovered
- Limited exploration until 1980's when the GSC highlighted Pb, Zn, As, Ag and Au stream sediment anomalies
- This work led to the identification of the Skukum Gold deposits which produced ~80,000 ounces of gold from 1986-1989. Pike, Warden and ERT showings were discovered during this period but not followed up

New Generation:

- Award Winning Yukon Geologist Ryan Burke (then GIT) presented the project as the winning submission at the 2020 Prospect Generation Challenge at the PDAC
- Ryan's work resulted in the identification of **more than 15 new high-grade polymetallic showings** on the property
- In June of 2022, Transition entered into an option agreement with Ryan to earn a 100% interest in the project

Work By Transition (2022-2023)

To Establish Context and Controls in a New Area



- **Objectives:** enhance the level of geoscientific data at Pike Warden towards better understanding at system scale
- Robust dataset now coming together:
  - 770 grab and chip rock samples
  - 758 fine fraction soils
  - Property scale high resolution mag, VLF and radiometrics
  - High resolution Lidar and ortho photographic coverage
  - High resolution multispectral (Quickbird) coverage with alteration study completed by Photosat
  - Synchrotron mineral cluster analysis study
- Additional staking completed in 2023 to cover off newly identified trends

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*ASIG Mag and Propylitic (Green), Sericitic (Orange), and Py/Hem (Red) multispectral alteration polygons

New Showings Each Season

Different Styles of Au-Ag and Cu-Mo Mineralization

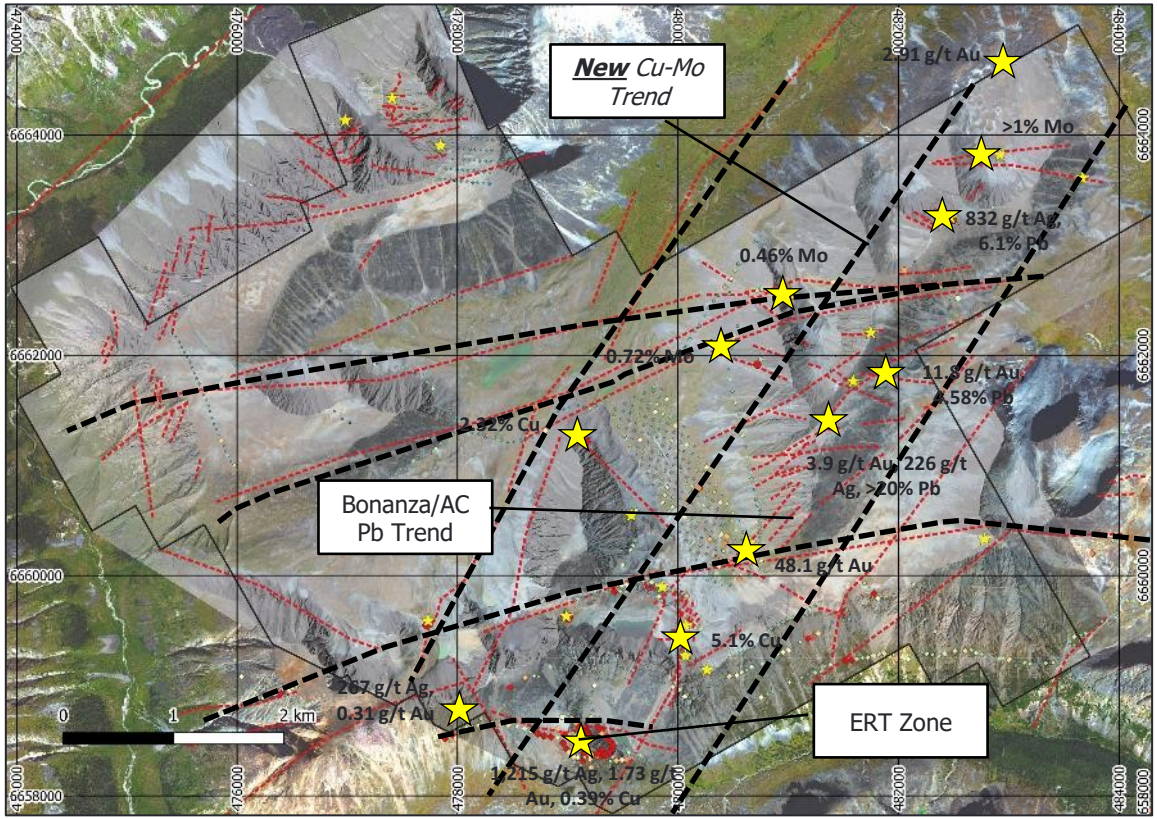
Transition Metals

2022

- Two new showings discovered. Values up to: *11.8 g/t Au, 1,215 g/t Ag, 5.11% Cu, and >20% Pb*
- Chip sampling at ERT returned: *42m grading 53 g/t Ag, 0.12 g/t Au incl. 0.7m grading 526 g/t Ag*
- Inaugural RC Drill Program at ERT

2023

- **7 new showings discovered** across northern portion of property. Values up to: *2.91 g/t Au, 832 g/t Ag, 0.24% Cu, 6.1% Pb and >1% Mo*
- High resolution multispectral satellite, orthophotos and Lidar highlight: *alteration trends and major structures*
- Additional 376 Ha staked

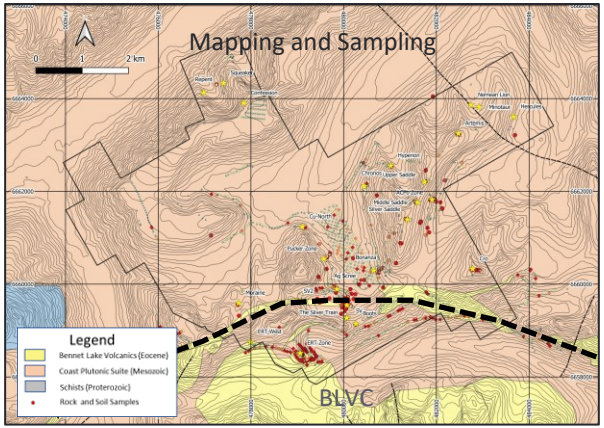


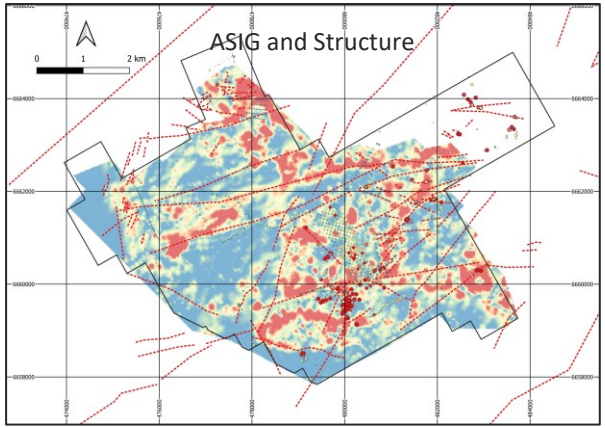
Robust New Data Sets

Highlight Patterns at System Scale

Transition Metals

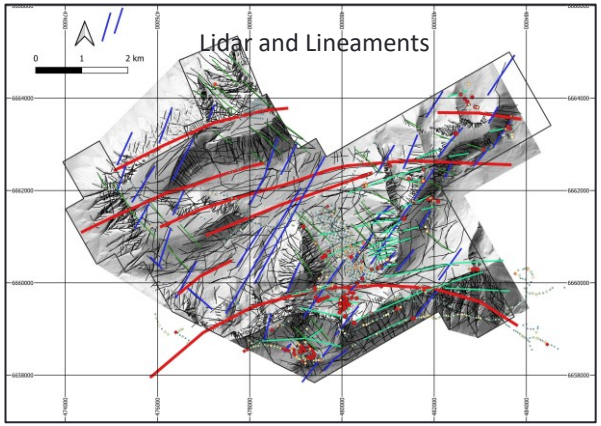
- Rocks and soils highlight elevated trends in Au, Ag, Cu and Mo
- >25 polymetallic showings returning up to 48.1 g/t Au, 1,215 g/t Ag, 5.11% Cu, 2.37% Mo, >20% Pb

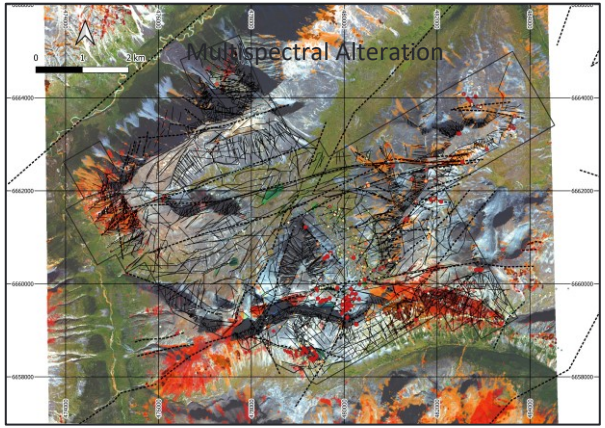




- High resolution Mag, VLF and Radiometric
- Highlight geology, structure and alteration
- Strong influence of remnant magnetism
- Potassic alteration

- High density Lidar to generate high quality DEM
- Lineaments from Lidar, Orthophotos, Magnetics, Spectral data
- Highlight structural relationships



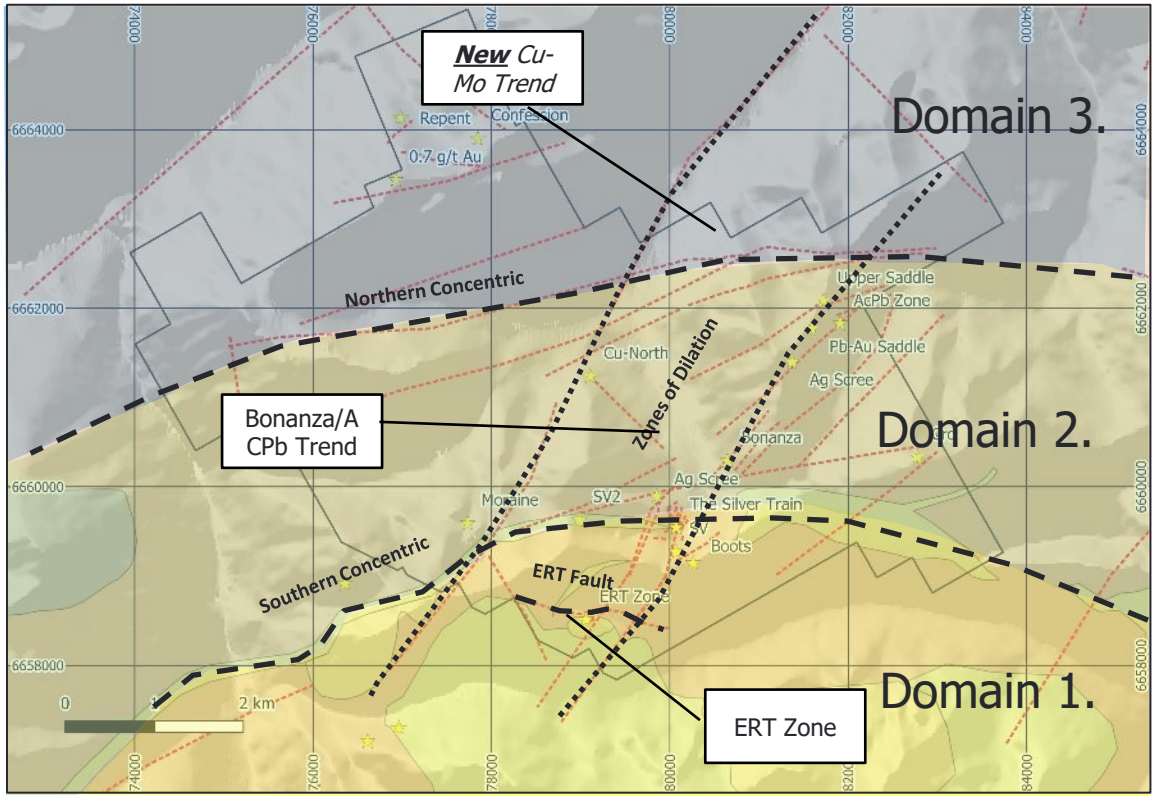


- Alteration mapping based on Quickbird multispectral
- Trends of argillic alt. associated with Au-Ag
- Trends of phyllic alt. associated with Cu-Mo
- Radiometrics and Mag highlight Potassic alt.

Patterns Beginning to Emerge

Multiple Styles of Polymetallic Mineralization

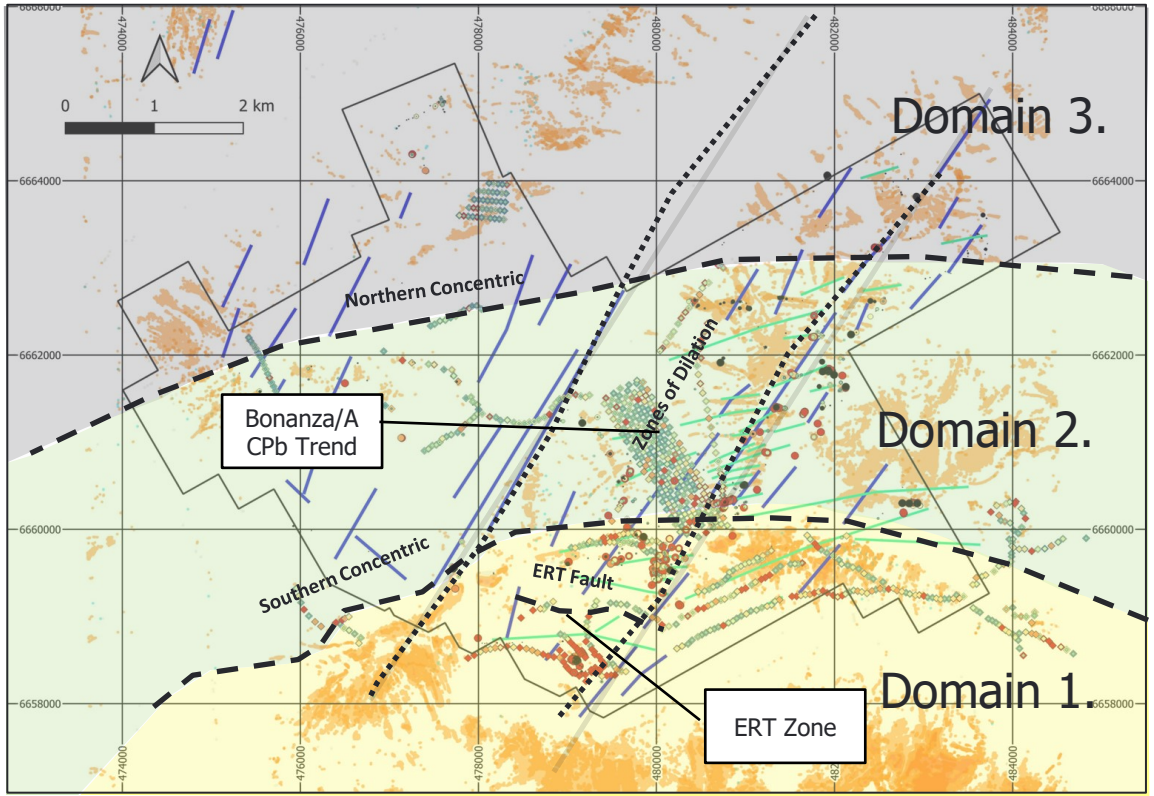
- Caldera concentric structures outline 3 domains with different host rocks or styles of alteration and mineralization:
  - **Domain 1:** BLVC volcanics, Rhyolite breccias, within/near margins of caldera. High sulphidation Ag/Au mineralization at ERT
  - **Domain 2:** Whitehorse group intruded BLVC dykes. Intermediate sulphidation Au/Ag veining
  - **Domain 3:** Whitehorse and Ruby Range group intrusive. No BLVC Dykes – Copper/Moly association
- Northeast structures
  - Seem to be important
  - Interact with /crosscut concentric structures
  - Associated with zones of weakness intruded by BLVC dykes, alteration and mineralization



Epithermal Au-Ag

Prospective Corridor Hosting Widespread Mineralization

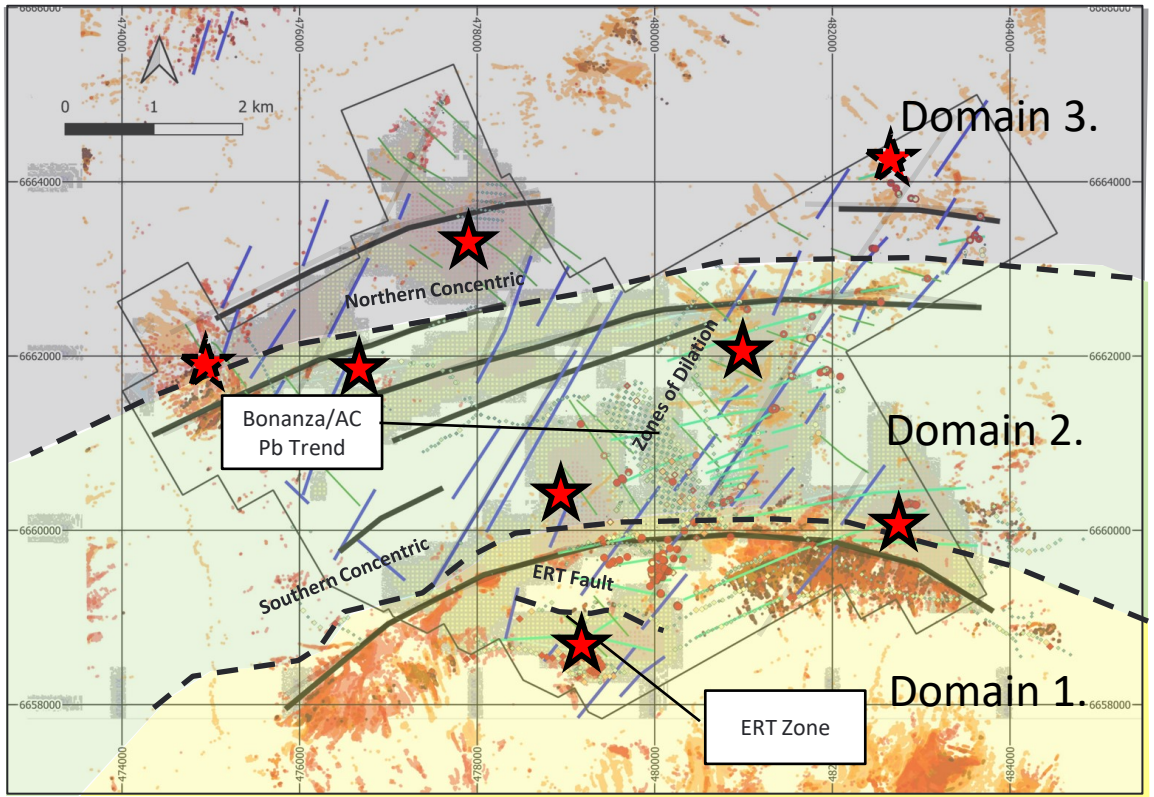
- Northeast trending zone of dilatancy
  - NE and EW trending brittle and ductile shears
  - Relationship between EW structures and Au-Ag mineralization
  - **Multiple Zones with stand alone deposit potential (ERT, Bonanza, ACPB)**
- Argillic Alteration
  - Widespread montmorillonite, illite detected by Quickbird multispectral mapping
  - Some localities with kaolinite, opal/chalcedony detected
  - More petrography and SWIR work required



Elevated Au-Ag in rocks, soils, argillic alteration and lineaments

Porphyry Cu-Mo
Potential Highlighted at Depth

- Elevated Cu and Moly focused near intersecting concentric and radial structures
- Associated with strong pyrite/sericite/illite alteration and increasing potassic alteration
- Strong magnetic responses associated with alteration developed along structures
- Mag modelling detecting larger stronger responses punching up through non-magnetic host rocks at depth
- Mo mineralization, alteration and mag modelling suggest favourable depth to copper porphyry mineralization is close

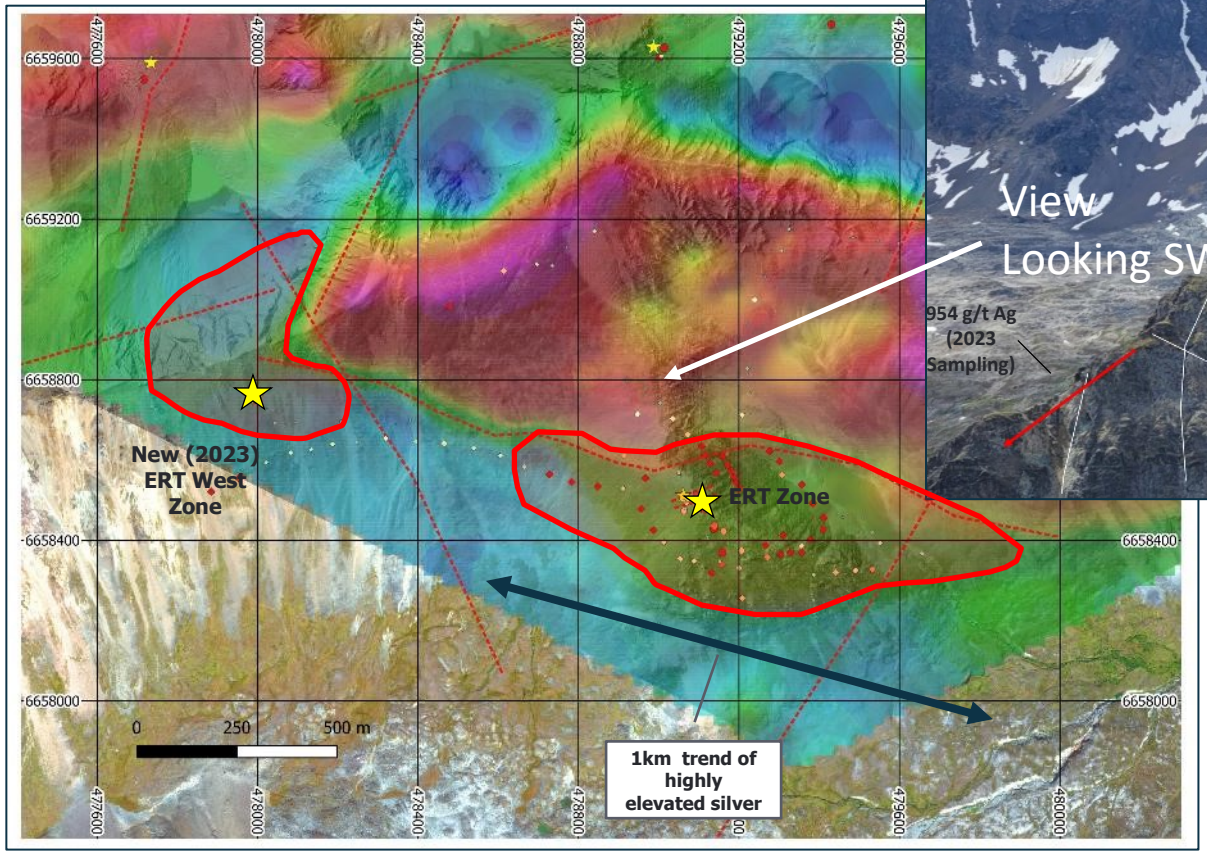


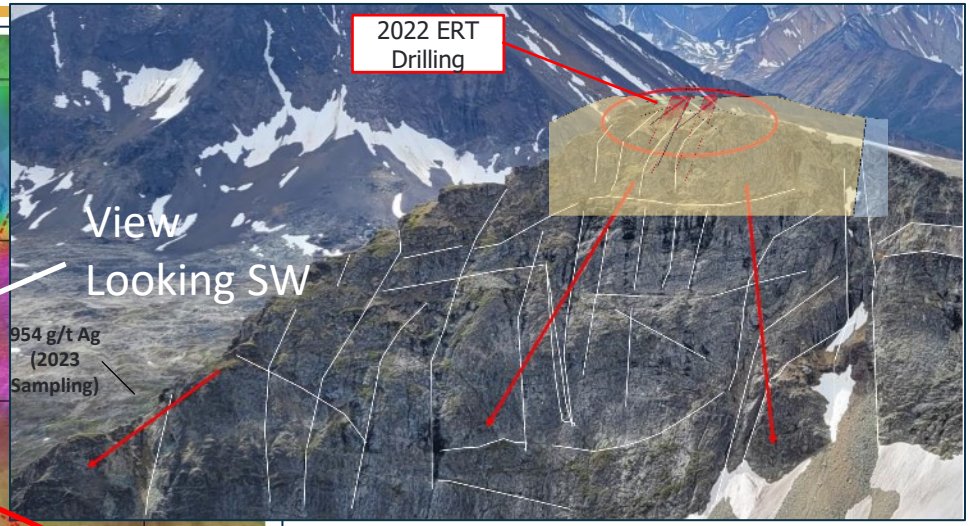
Elevated Cu-Mo in rocks, soils, phyllic and potassic alteration on MVI Inversion and lineaments. Red stars highlight potential buried porphyry stocks

Pike Warden – ERT Zone

Large Epithermal Silver Target Area

Transition Metals





- Drilling intersected 2 mineralized shear zones located 70m south of major collapse structure
- Within middle of 800m long soil anomaly that cannot be completely sourced from the exposed showings
- Other similarly oriented, possibly mineralized structures identified that require further investigation

Domain 1 – ERT Zone

Hand Trenching and Sampling

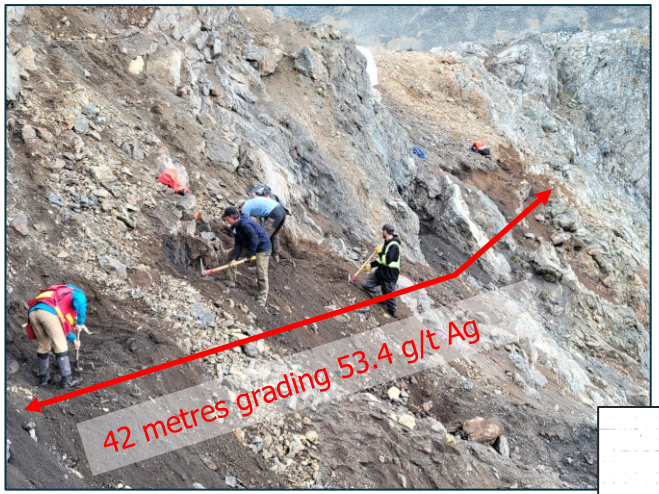
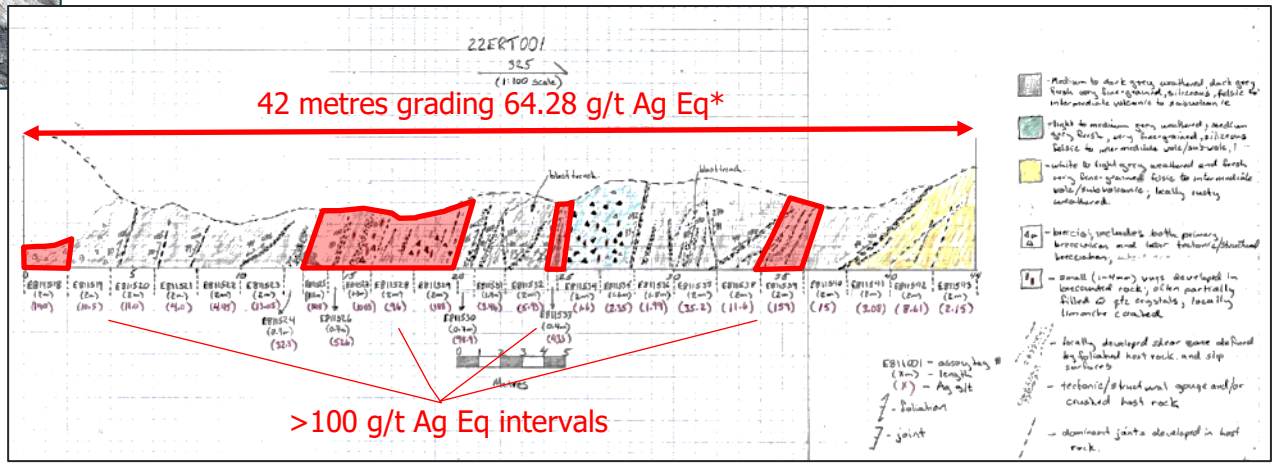


Photo – looking north at ERT Zone while hand trenching in progress by XTM staff and Archer Cathro & Associates of Whitehorse – July 2022

- 42 metre hand trench excavated, and chip sampled
- Trench mapped and sampled in detail to assess orientation of control structures on mineralization
- **Trench averaged 53.4 g/t Ag, including 7.80 metres grading 151.53 g/t Ag with higher grade intervals of 0.70 metres grading 526 g/t Ag and 0.4 m grading 433 g/t Ag and 1.47 g/t Au.**
- Higher grade intervals associated with steeply dipping zones of shearing oriented (070/-65°)



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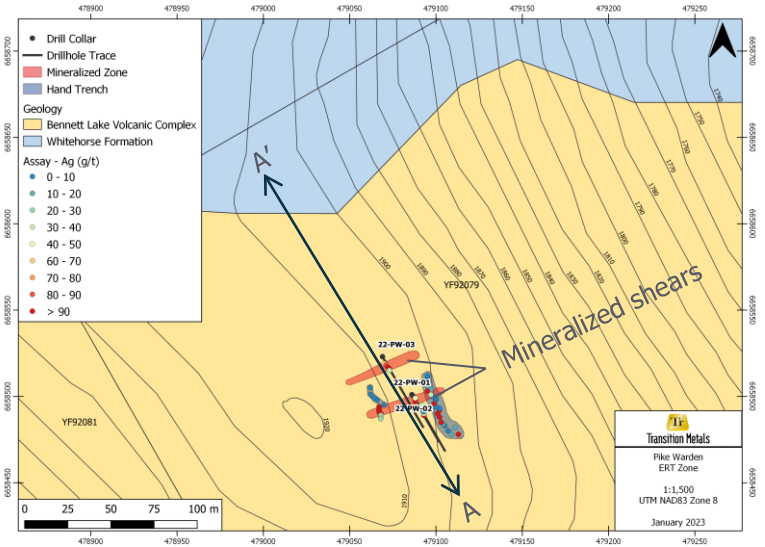
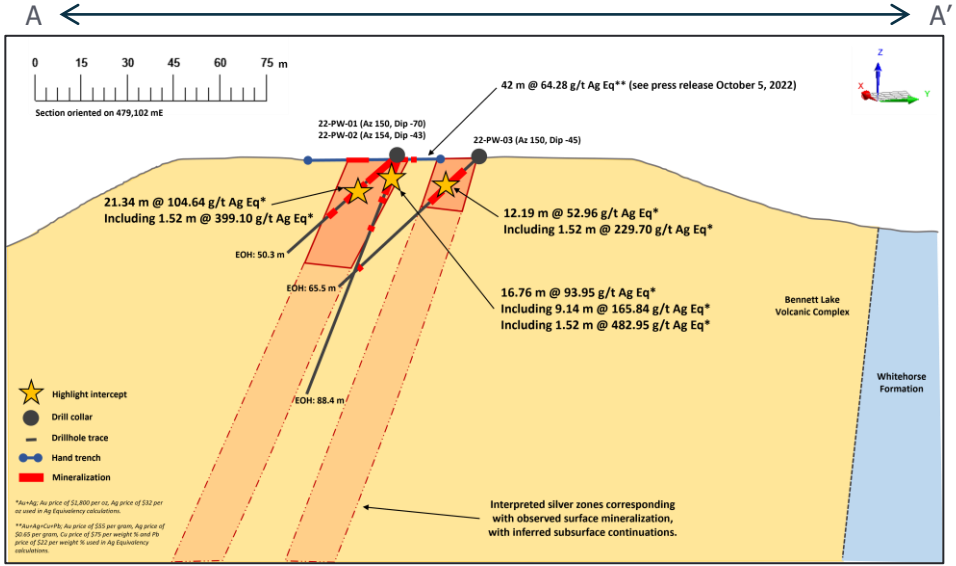
Domain 1 – ERT Zone

2022 RC Drilling Program





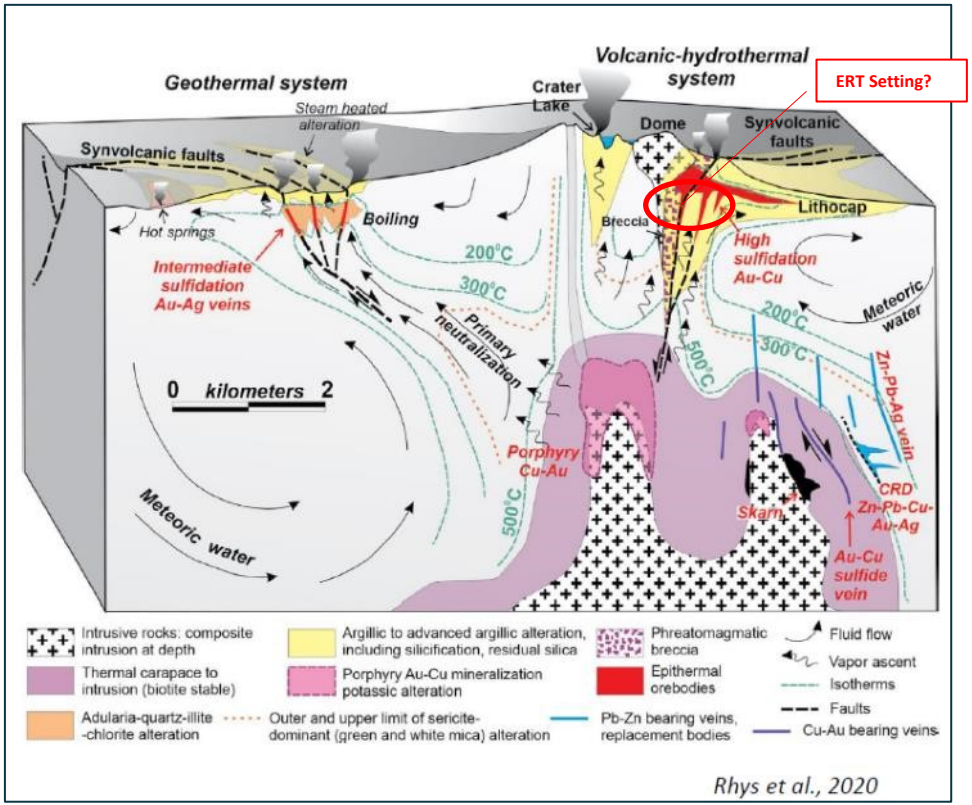
- 16.76 metres grading 88.01 g/t Ag including 1.5 metres grading 468 g/t Ag in hole 22-PW-01
- 21.34 metres grading 91.43 g/t Ag including 1.5 metres grading 362 g/t Ag in hole 22-PW-02
- 12.19 metres grading 46.2 g/t Ag including 1.5 metres grading 211 g/t Ag in hole 22-PW-03
- **The ERT Zone is only <u>one</u> of 18 identified mineralized zones discovered to date on the 37 km² property located near the margins of the Bennett Lake Volcanic Complex**

Domain 1 – ERT Zone

Prospective High Suphidation Epithermal Setting

- Replacement style sulphides and sulphosalts in altered BLVC volcanics
  - **ERT Zone:** bedrock chip sampling returned 42 m at 53.4 g/t Ag, including 7.80 metres grading 151.53 g/t Ag, with higher grade intervals of 0.70 metres grading 526 g/t Ag and 0.4 m grading 433 g/t Ag, 1.47 g/t Au

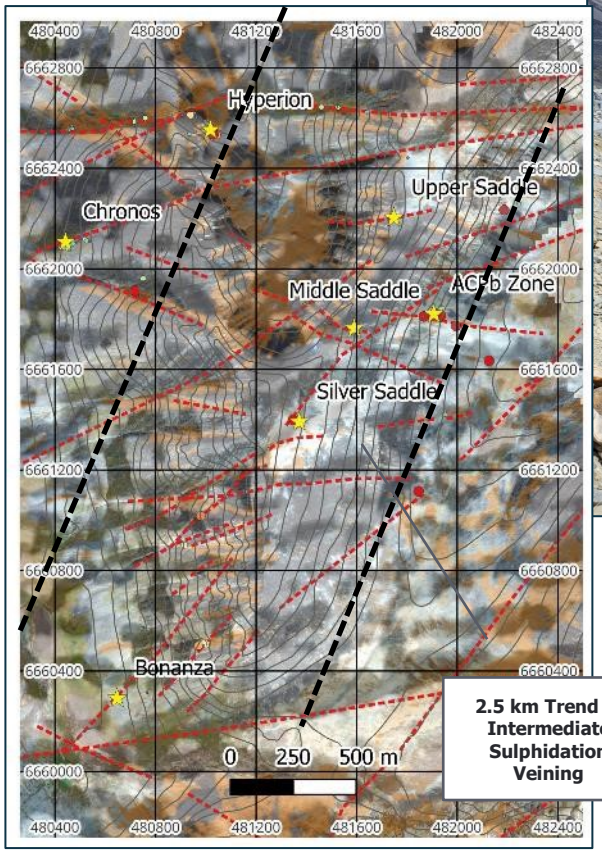
One of the mineralized shears at the ERT zone



Domain 2 – Bonanza / ACPb

High Grade Au, Ag, Pb Crustiform Vein Systems

- Zones of weakness including brittle ductile shears radial to caldera collapse structures
- Intruded in some cases by rhyolite dykes associated with Bennett Lake Volcanic Complex
- Host intermediate sulphidation style veining (similar to Skukum deposits)
- Very high grades of Au, Ag and base metals including Pb, Zn and Cu:
  - *Bonanza – 48 g/t Au, 0.74% Cu*
  - *Middle Saddle – 37.7 g/t Au, 110 g/t Ag, 4.6% Pb*
  - *Silver Saddle – 2.30 g/t Au, 68 g/t Ag, 0.27% Cu, 18.3% Pb*
  - *ACPb - 11.8 g/t Au, 457 g/t Ag, 4.6% Pb*
- Multispectral satellite imagery highlights association with carbonate, sericite and clay alteration *(montmorillonite – orange in map to right)*



2.5 km Trend of Intermediate Sulphidation Veining

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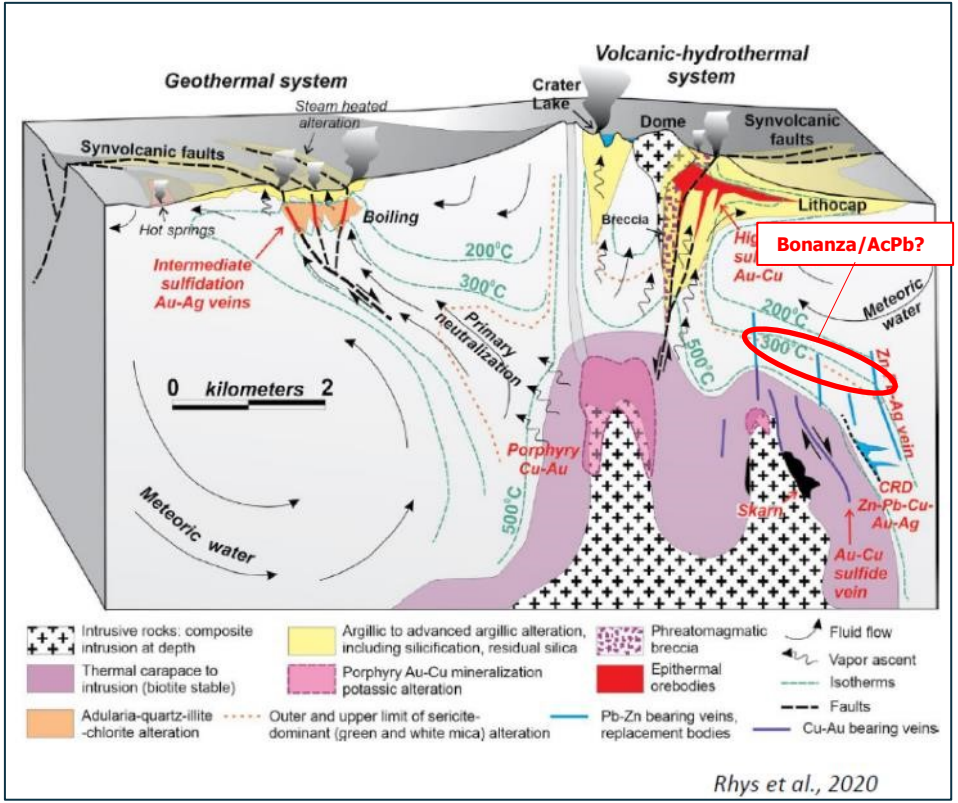
Domain 2 – Bonanza / ACPb

Bonanza Grade Intermediate Sulphidation Veining

- Narrow, brittle infilling with sometimes crustiform/vuggy base metal enriched veining hosting bonanza grades of gold and silver
  - **Silver Train:** grab samples returned up to 2.32% Cu and 1.80 g/t Ag
  - **Pb-Au Saddle:** grab samples reached peak values of 9.81 g/t Au, 226 g/t Ag and >20% Pb
  - **Boots:** grab samples returned up to 5.11% Cu and 51.1 g/t Ag
  - **Bonanza:** trench samples reached peak values of 0.54 g/t Au and 3.79 g/t Ag
  - **Cro:** grab samples returned up to 0.23 g/t Au, 87.8 g/t Ag, and 0.13% Cu
- Trenching on a newly discovered vein (**ACPb Zone**) also returned significant values up to 11.80 g/t Au, 28.90 g/t Ag and 4.58% Pb

a piece of the vein discovered at the ACPb Zone



Domain 3 – Copper/Moly Trends

Indications for Buried Copper Potential?

Transition Metals

Propylitic style alteration – epidote, pyrite locally becoming potassic/hematite/magnetite rich

Intrusive breccias – with heterolith inclusions, vein fragments

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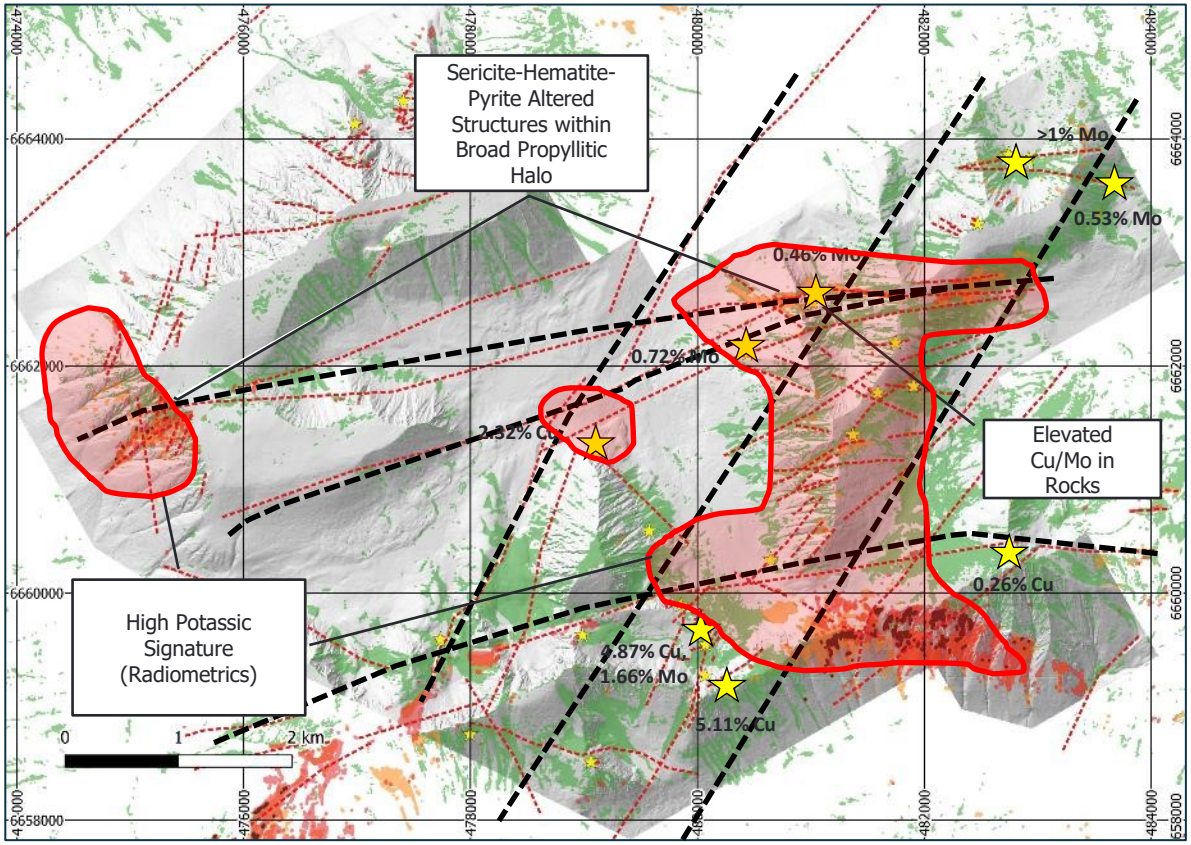
Copper/ Moly Minerals in rocks and scree



Domain 3 – Copper/Moly Trends

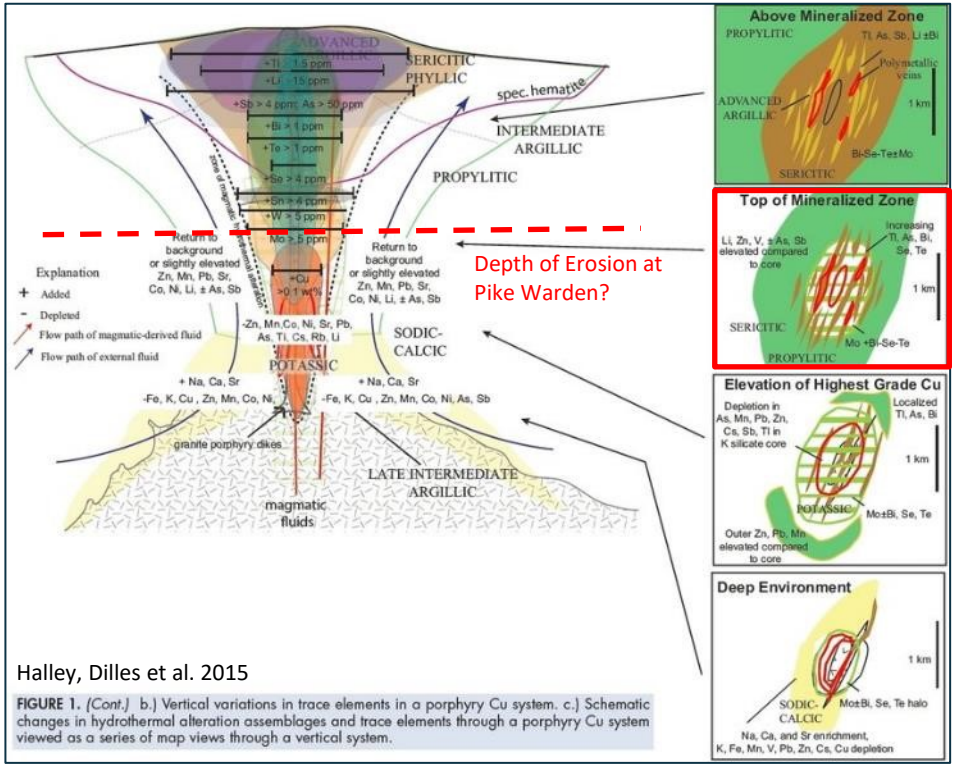
Evidence for Buried Porphyry Cu-Au-Mo System?

Transition Metals

Discussion:

- Zonation from Ag/Au epithermal styles of mineralization in the Radiometric south becoming increasingly base metal rich in the north
- Displacement across caldera concentric faults are exposing different depth slices of a major hydrothermal alteration system or systems
- Newly discovered occurrences of Cu-Mo-Au associated with Pyrite increasing sericite and potassic alteration along to major caldera collapse style structures suggests proximity at depth to more copper rich parts of system

Sample of Molybdenite collected from Pike Warden Project in late September 2023



Halley, Dilles et al. 2015

FIGURE 1. *(Cont.)* b.) Vertical variations in trace elements in a porphyry Cu system. c.) Schematic changes in hydrothermal alteration assemblages and trace elements through a porphyry Cu system viewed as a series of map views through a vertical system.

Recap and Discussion

- In Yukon, mineralization associated with both porphyry and epithermal systems is found within overlapping magmatic axes that include Jurassic, Cretaceous and Paleocene aged plutons.
    - *Examples include: the late Triassic Minto and late Cretaceous Casino Copper and the Paleocene Skukum Gold deposits*
- Newly discovered porphyry and epithermal styles of mineralization at Pike Warden occur within plutonic and volcanic rocks associated with either porphyry or epithermal mineralization found elsewhere in Yukon
- Pike Warden is uniquely situated proximal to one of the **largest collapsed caldera** structures in Canada along a cordilleran corridor favourable for large porphyry and epithermal systems
- Structural architecture around the Caldera controls and may be exposing different depth slices a variety of prospective ore hosting environments
- Uncertainties regarding age relationships and the timing of different styles of mineralization remain. The Question: Is this one system, multiple, or stacked systems? – still needs resolved.

Next Steps For Transition

More Data Review and Interpretation

- Petrographic work, detailed pathfinder mineral and alteration studies
- Interpretation and modeling of new data from 2023 field season

Field Work

- Select areas for resistivity/chargeability geophysical survey coverage
- Summer field program to map geology and collect more rock and soil samples.

Targeting and Drilling

- Select and prioritize areas for programs of RC and or Diamond Drilling

Special thanks to XTM geologists Sarah Reese and the team at Archer Cathro & Associates 1981 Ltd.

Mitigating Risk. Multiplying Opportunities.

Greg Collins P.Geo.
COO & Co-founder

gcollins@transitionmetalscorp.com
9C – 1351 Kelly Lake Road
Sudbury ON P3E 5P5
Telephone: 705-872-6390