



**TRAILBREAKER**  
RESOURCES LTD.






TSX.V: TBK

A Canadian mineral exploration company focused on precious metals and copper in British Columbia and Yukon Territory.



## LIBERTY PROJECT

### PROJECT HIGHLIGHTS

-  **LOCATION** - *Central British Columbia*
-  **ACCESS** - *60 km WNW of Quesnel*
-  **INFRASTRUCTURE** - *Year-round access via network of Forest Service Roads*
-  **CU-MO PORPHYRY POTENTIAL** - *Analogous mineralization to Taseko's Gibraltar Mine*
-  **FIRST MOVER ADVANTAGE** – *Claims encapsulate majority of known prospective geology*

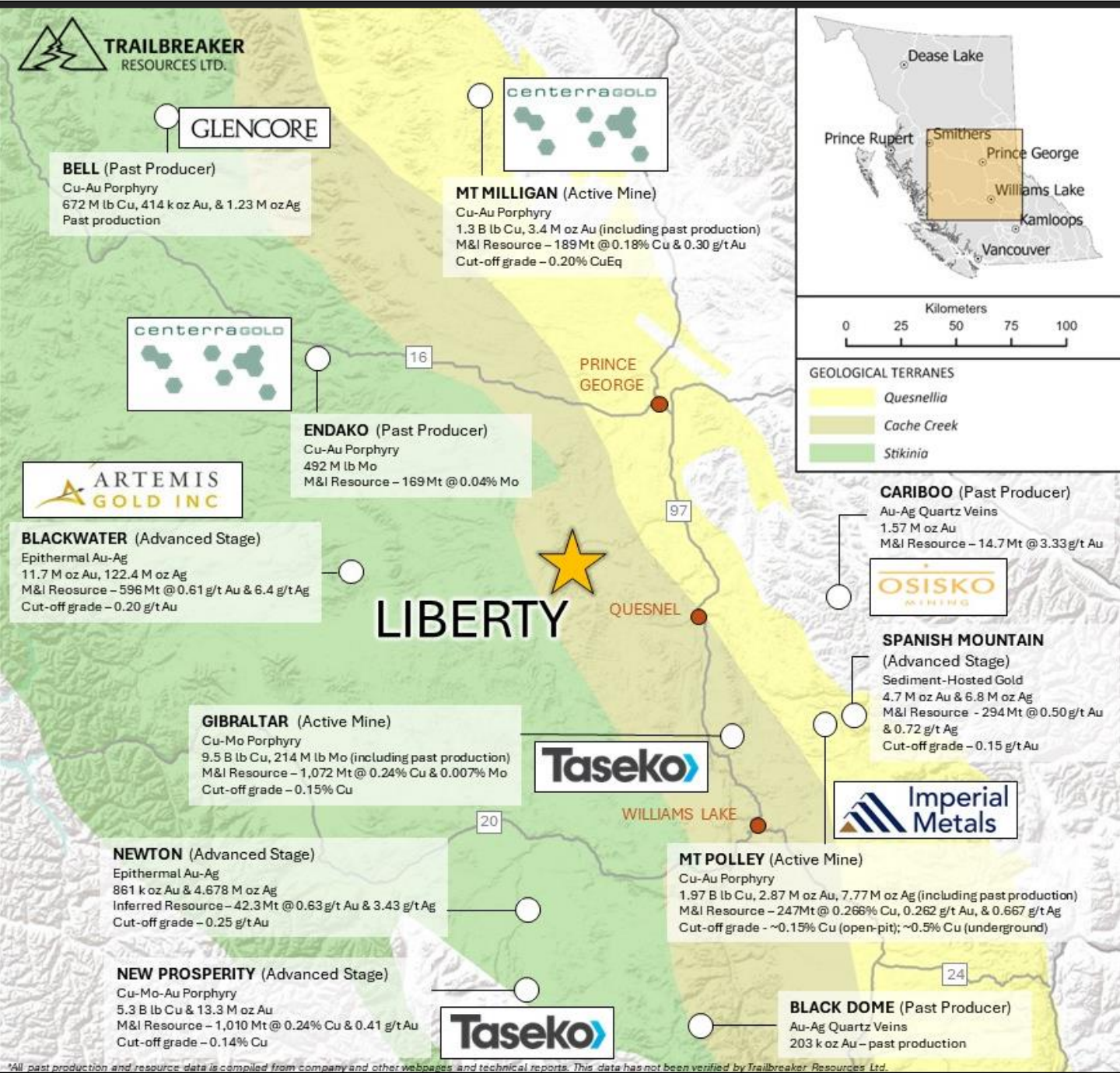
### OVERVIEW

The Liberty project is an early-stage Cu-Mo porphyry target with associated skarn and epithermal-style mineralization. Liberty is located ~60 km northwest of Quesnel, within the Fraser Plateau. The property is fully accessible via a network of Forest Service Roads.

The primary target at Liberty is a coincident MMI soil geochemical (Cu-Mo±Au±Ag) and IP chargeability anomaly on the margin of a Mesozoic granitic pluton. A historic drillhole, drilled south of this anomaly in 1969 by Rio Tinto, returned 123.1 m of 0.11% Cu and 0.04% MoS<sub>2</sub> from the top of bedrock to the end of hole. This was the most northerly drilled hole and no subsequent drilling has been conducted on the property.

# LOCATION AND INFRASTRUCTURE

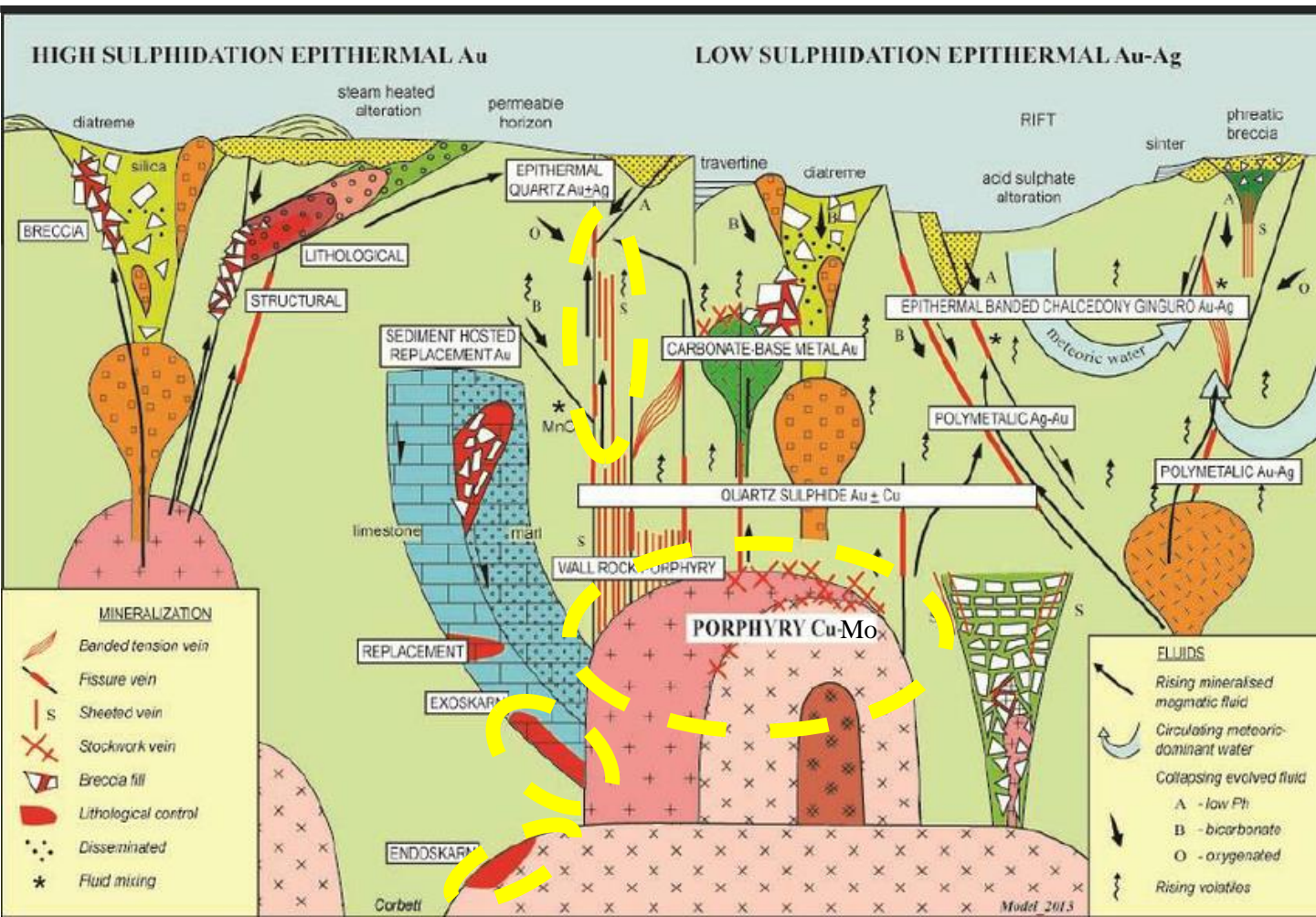
- 5,054 hectare claim package, covering prospective geology of the area
- Located ~60 northwest from Quesnel, BC
- High-density network of forest service roads throughout the property
- Low annual precipitation means access to the property can be achieved year-round



# REGIONAL GEOLOGY AND DEPOSIT MODEL

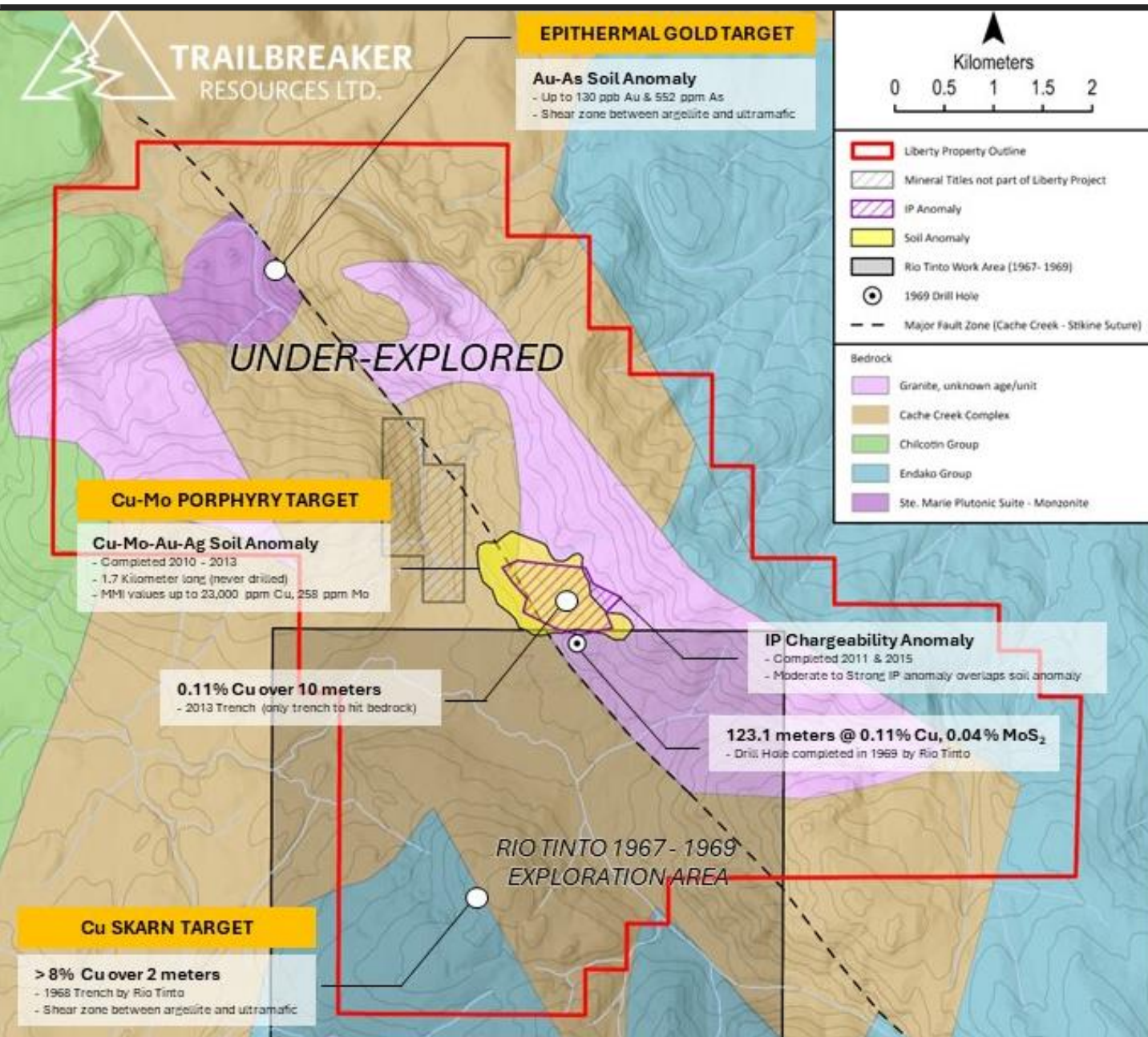
## Cu-Mo Porphyry Potential

- The Liberty project sits along the western edge of the Cache Creek terrane, which is host to Cu-Mo porphyry deposits including Taseko's Gibraltar Mine, north of Williams Lake, BC, which is the second largest open-pit copper mine in Canada.
- The Gibraltar Mine is a calc-alkalic Cu-Mo porphyry deposit, hosted in the Late Triassic Granite Mountain batholith. The mine contains 9.5 billion pounds of copper from past production and in current measured and indicated resources. The current resources have an average copper grade of 0.24% and a cut-off grade of 0.15% Cu.
- Cu-Mo porphyry deposits are associated with felsic to intermediate plutons, which have intruded to a level of 2-5 km in the crust. Mineralization is often associated with Cu-bearing vein stockworks and disseminations hosted within or on the margin of the intrusion.
- Numerous other mineralization styles are associated with Cu-Mo porphyry deposits, such as skarn deposits, and epithermal Au-Ag quartz vein deposits.
- In BC, these deposits range in ages from Triassic-Jurassic (210-180 Ma) and Cretaceous/Tertiary (85-45 Ma).

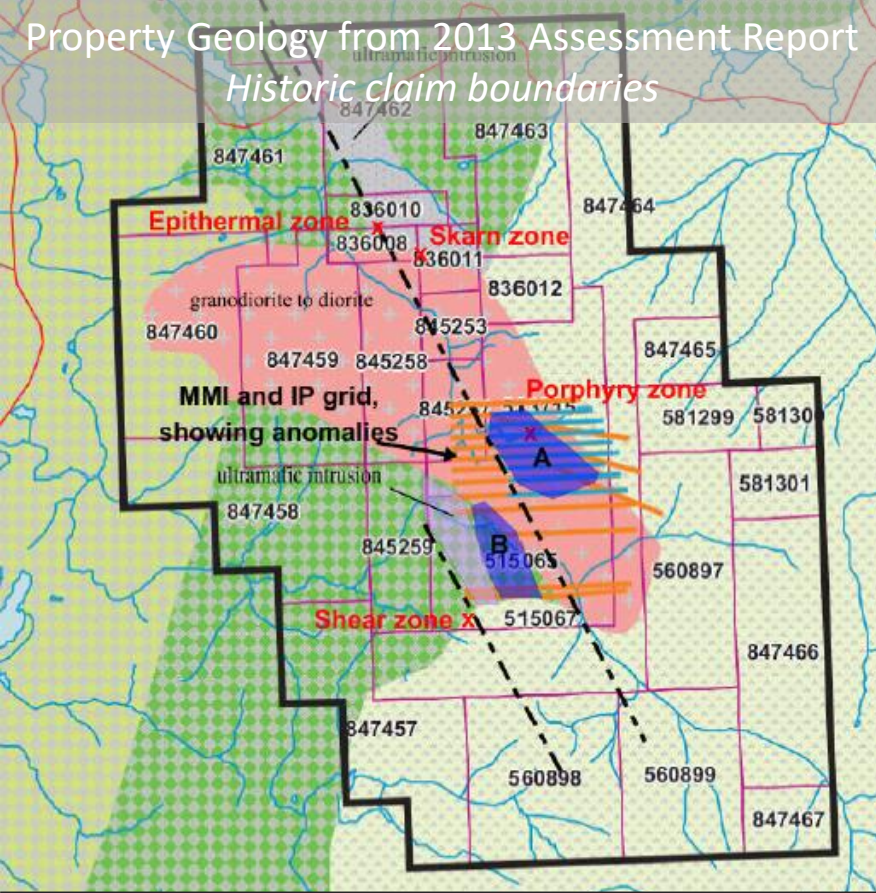


# PROPERTY GEOLOGY & MINERALIZATION

- The property covers a moderate-sized polyphase granodiorite to diorite pluton (~8 km long and 2-4 km wide) Jurassic to Cretaceous in age, which has intruded into the volcanic and sedimentary rocks of the Mississippian to Triassic aged Cache Creek Group.
- To the east of the property, Eocene-aged Endako Group volcanic rocks unconformably overly the Cache Creek Group and the granodiorite pluton. Chilcotin Group plateau basalts are present along the western margin of the claims.
- ~90% of the property is covered by unconsolidated glacial tills from Pleistocene glaciation
- Drill hole descriptions from the historic 1969 program indicate disseminated pyrite, chalcopyrite, and molybdenite occur in the granodiorite pluton
  - The most northerly of holes from this program encountered 123.1 m of 0.11% Cu and 0.04% MoS<sub>2</sub> from the top of sampling at 29.3 m to the bottom of the hole at 152.4 m. This hole is believed to have been drilled at the southern end of presently defined MMI and IP anomalies.
  - Drilling 975 m to the south encountered significant pyrite, with little base metal sulphides.
  - This may indicate a gradient toward higher-grade mineralization toward the north



*Historic claim boundaries*



## EXPLORATION HISTORY

- Rio Tinto conducted exploration from 1967 to 1970, due to anomalous Cu in stream sediment samples. Work consisted of soil sampling, IP, trenching, and diamond drilling exploring for porphyry-style and shear-hosted Cu. However, data and reports from this work are unavailable, except that referenced in subsequent assessment reports
- The most northerly drillhole (DDH-A8) returned 123.1 m of 0.11% Cu and 0.04% MoS<sub>2</sub> starting at 29 m and extending to the end of hole. Drilling to the south intersected granodiorite with abundant pyrite, which is interpreted to be part of the outer phyllic zone.
- The project remained dormant until 1997, when William Poole staked the area. Between 1997 and 2003 prospecting found wollastonite skarn, polymetallic vein, vein-gold, and talc-magnesite showings.
- In 2011 and 2012, IP and MMI surveys defined a coincident Cu-Mo±Au±Ag soil and IP-chargeability anomaly atop a Jurassic-aged pluton
- Trenching in 2013 was designed to test the surface exposure. Deep overburden prevented most trenches from reaching bedrock. However, those that did encountered chlorite-altered diorite with disseminated chalcopyrite, assaying up to 0.39% Cu and continuous chip sample of 0.11% Cu over 10 m.
- The project has changed ownership a few times since 2013, with minimal work being completed, including a single IP line and some biogeochemical sampling.

Fracture fillings of chalcopyrite, bornite and trace molybdenite

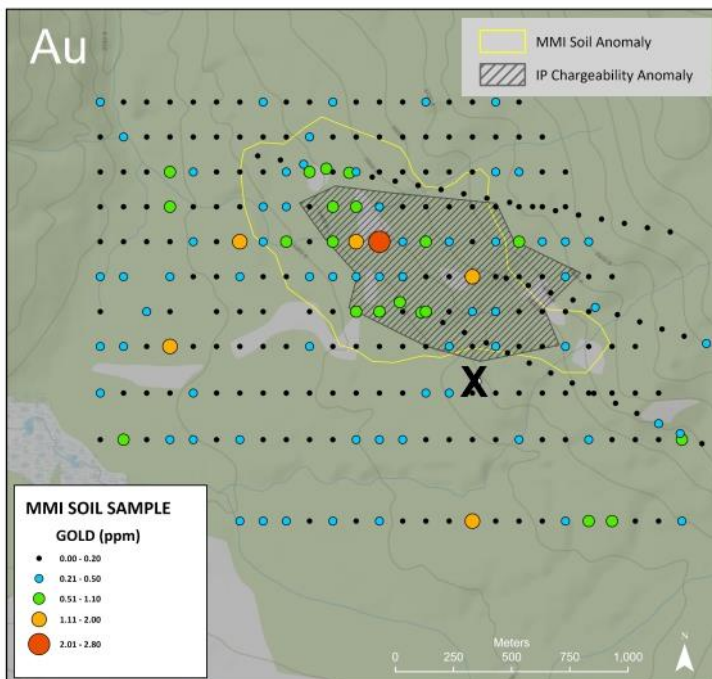
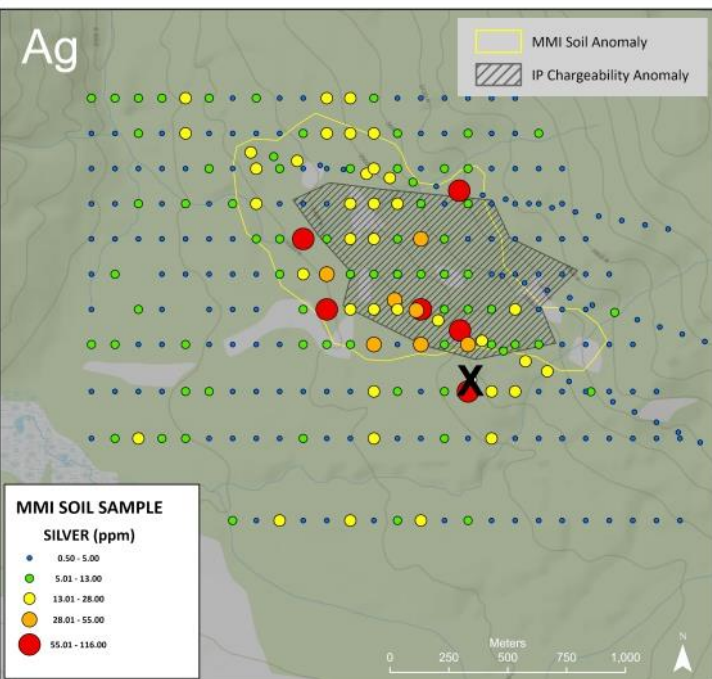
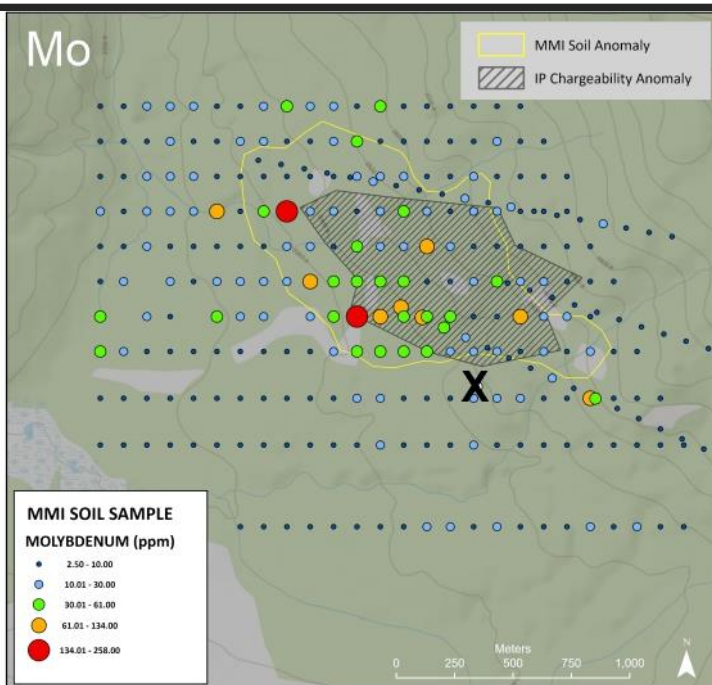
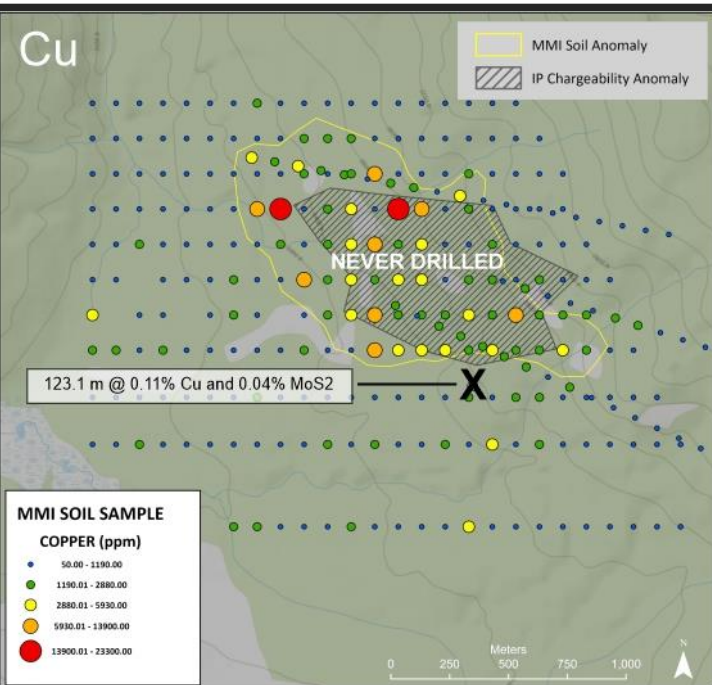


Malachite staining and trace chalcopyrite and pyrite in chert overlaying granodiorite



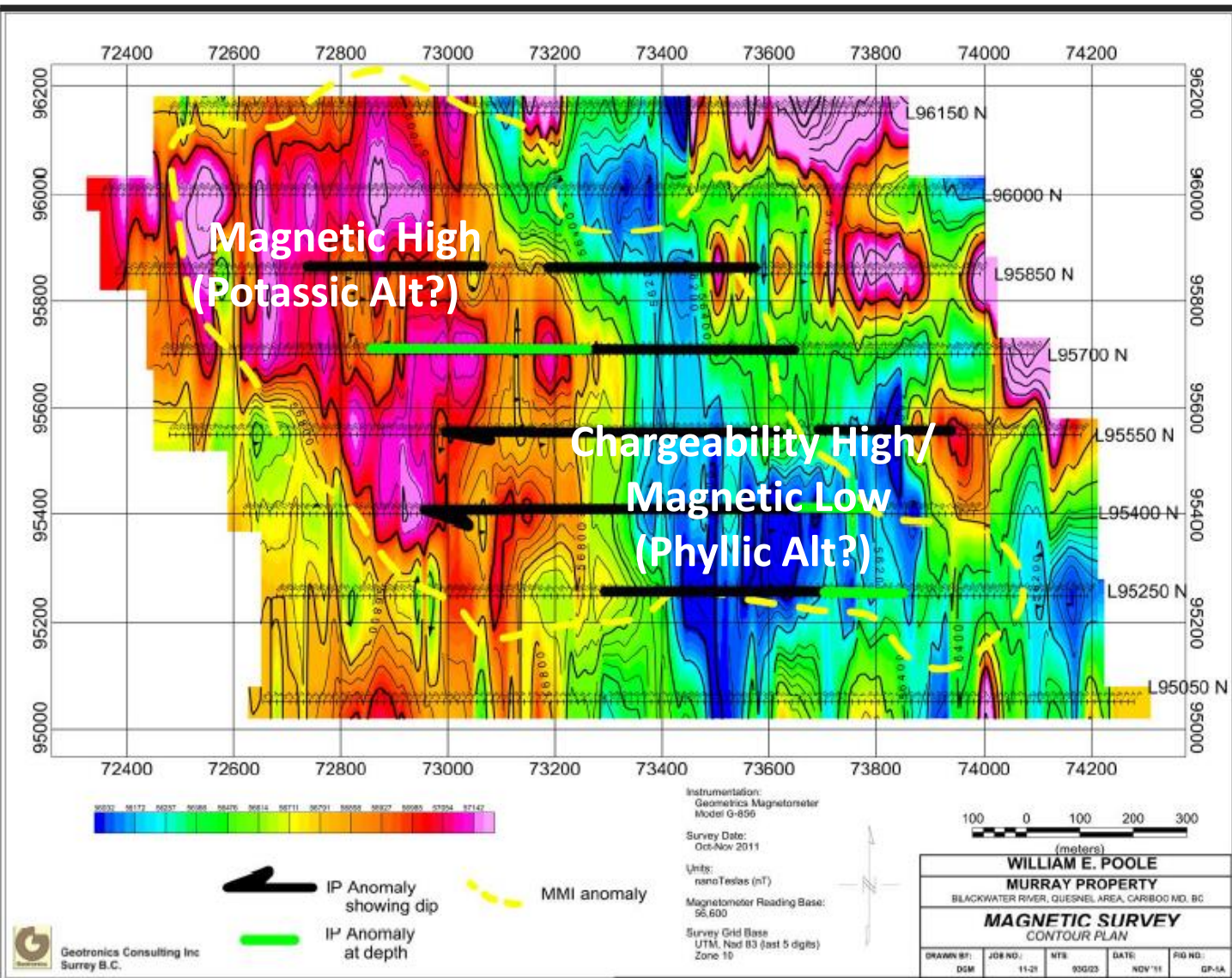
# GEOCHEMISTRY

- A 1,750 x 750 m northwest trending MMI soil anomaly is elevated in Cu-Mo±Au±Ag
  - The boundaries of this anomaly are elevated in Cd, U, and Zn – a common feature of the distal portions of a porphyry deposit
- A second MMI anomaly occurs ~600 m to the SW, principally defined by Cu-Zn-Ag. This anomaly is ~1,350 x 650 m and NNW striking. Sampling is less dense throughout this anomaly.



# GEOPHYSICS

- Coincident chargeability high and resistivity high within the Mesozoic granitic intrusion
- Chargeability highs can be caused by disseminated sulphide minerals, such as pyrite and chalcopyrite
- Resistivity highs can be caused by felsic (e.g. granitic) intrusive rocks, which can host porphyry deposits
- The chargeability anomaly corresponds with a relative magnetic low, which may represent magnetic-destructive phyllic alteration which hosts disseminated sulphides (causing the chargeability anomaly)
- The most anomalous MMI samples overlap with the relative magnetic high, which may correspond with magnetite-bearing potassic alteration



## ✓ Underexplored

- *The project has had no drilling conducted since the 1969 reconnaissance drill program, which primarily focused on the Cu-skarn target*
- *Intermittent prospecting and surface work between the late 1990s and present have focused on a variety of targets on the property*
- *2011 IP and MMI sampling defined a strong coincident anomaly that has not been properly tested*

## ✓ Strong Exploration Potential

- *Regional geological setting known to host significant Cu-Mo porphyries, such as Gibraltar Mine*
- *Robust anomalies that display key geochemical, geophysical, and geological features known to occur around porphyry environments*
- *Opportunity for low-cost exploration with large upside potential*

## RECOMMENDED EXPLORATION

- First-pass drill testing of coincident chargeability and MMI soil anomaly
- Conduct additional MMI soil sampling over prospective geology in order to identify additional targets
- Conduct property-scale geophysics – magnetic, VTEM – and larger-scale 3D IP in order to define geological contacts, alteration zonation, and intrusive centers
- Follow-up drilling on porphyry target, and other targets on the property



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**SHARE STRUCTURE** (January 2024)

Total issued and outstanding common shares: 34,189,134

Total warrants outstanding: 9,492,600 exercisable between \$0.15 and \$0.25

Total stock options outstanding: 2,992,500 exercisable between \$0.24 and \$5.95

Total fully diluted: 46,674,234

[www.trailbreakerresources.com](http://www.trailbreakerresources.com)



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