



# NORTHERNSHIELD

TSX-V: NRN

## RESOURCES INC.



C O R P O R A T E   P R E S E N T A T I O N   -   D E C E M B E R   2 0 2 2

# FORWARD LOOKING STATEMENT

- This document contains statements concerning the potential for gold, silver, copper and other mineralization at Root & Cellar geological, geophysical, geochemical and geometrical analyses of Root & Cellar and comparisons of the properties to known epithermal gold deposits, and other expectations, plans, goals, objectives, assumptions, information or statements about future events, conditions, results of operations or performance that may constitute forward-looking statements or information under applicable securities legislation. Such forward-looking statements or information are based on a number of assumptions which may prove to be incorrect, and such possible comparisons are provided for illustrative or analogical purposes only.
- Although Northern Shield believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because Northern Shield can give no assurance that such expectations will prove to be correct. Forward-looking statements or information are based on current expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by Northern Shield and described in the forward-looking statements or information. These risks and uncertainties include but are not limited to geological, geophysical, geochemical and geometrical interpretation, the ability of Northern Shield to obtain equipment, supplies and qualified personnel necessary to carry on its exploration and operations, the general risks and uncertainties involved in mineral exploration and those other risks and uncertainties set forth in Northern Shield's management's discussion and analysis filed on SEDAR at [www.sedar.com](http://www.sedar.com) under its profile.
- The forward-looking statements or information contained in this document are made as of the date hereof and Northern Shield undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws

# NORTHERN SHIELD INTRODUCTION

0 1

## Our Space and Vision

Expansive terranes,  
New ideas,  
Large targets.

0 2

## Our Assets

Supported by several gold anomalous surface samples. The geology context suggest that **Root & Cellar** (pictured above) is underlain by a vast and complete epithermal gold system. It is ready for second phase of drilling

0 3

## Our Approach

Generator of high quality early-stage exploration targets through a model driven approach.

# NEW FOUNDLAND PROJECTS

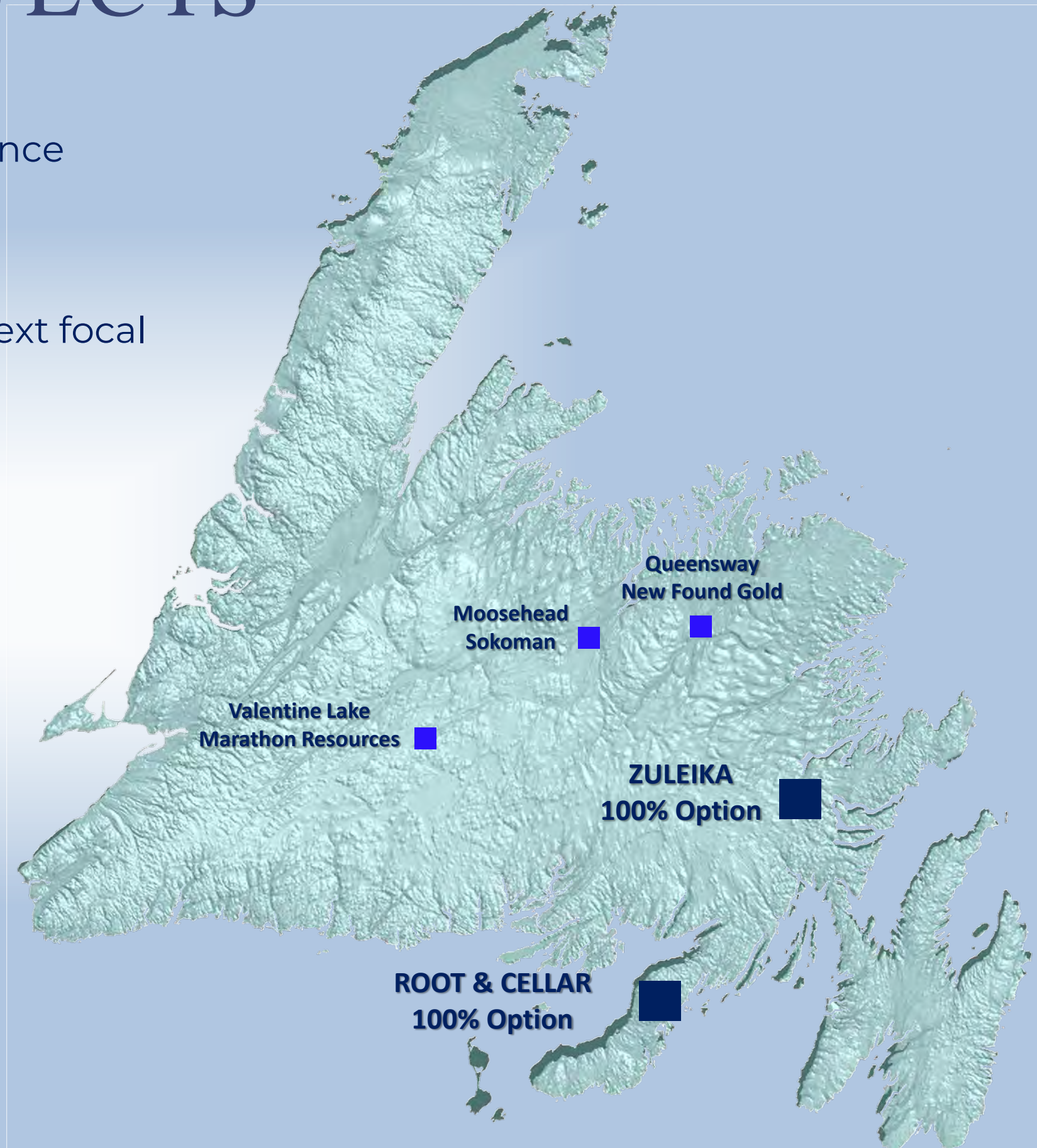
Recent discoveries in **NEWFOUNDLAND** show that the province does indeed host world class gold deposits.

After further significant gold discoveries at the Root & Cellar Property, Northern Shield is well positioned to become the next focal point on the Island.

## ROOT & CELLAR PROPERTY

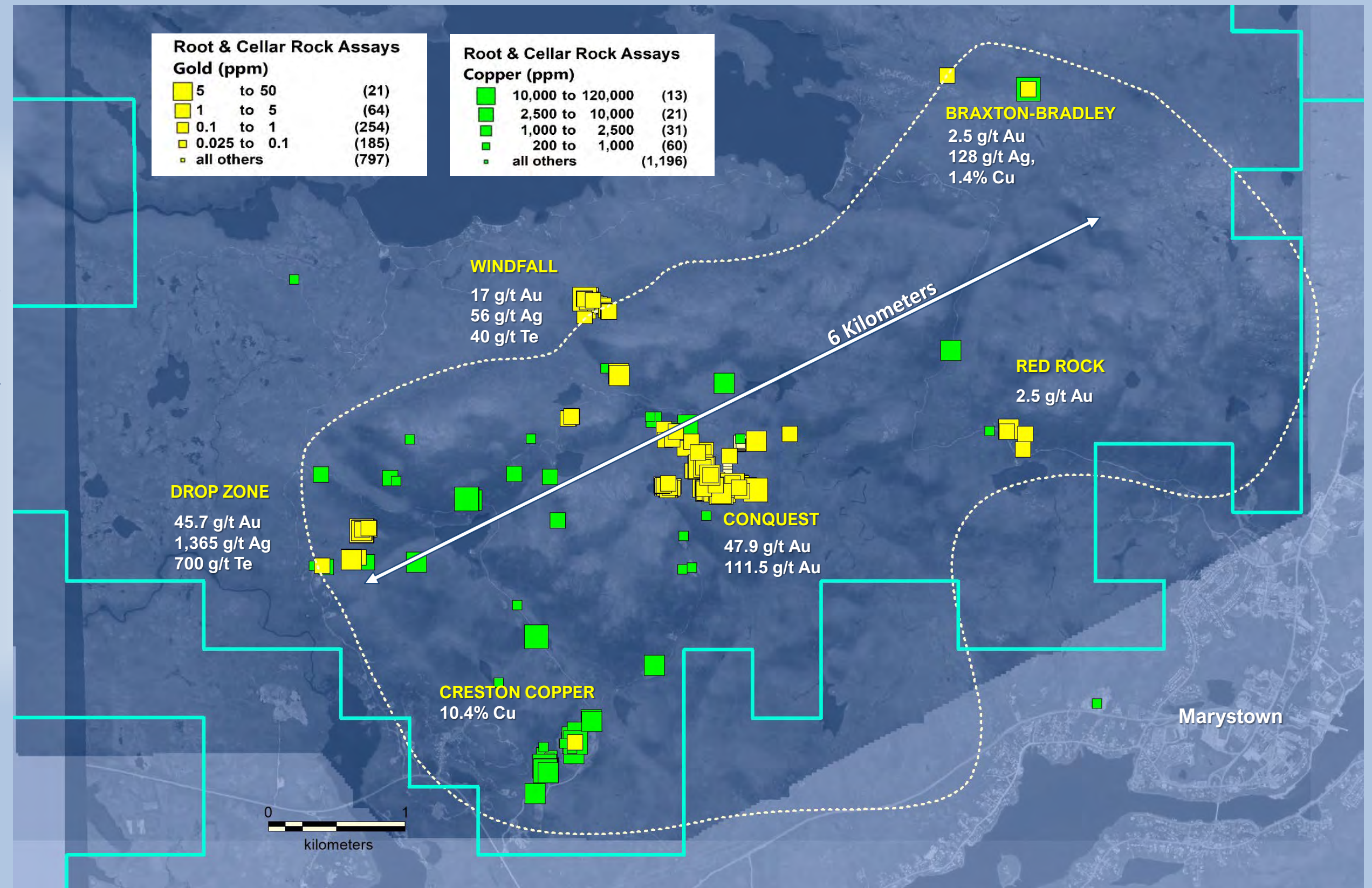
100% Option

- Hosts several recently discovered, high grade epithermal gold occurrences and
- Copper mineralization with grades up to 10.4% in a porphyry-style setting



# ROOT & CELLAR – GOLD AND COPPER

- The Property hosts prolific gold and copper mineralization over a large area.
- Mineralization is hosted in a distinct volcanic complex.
- Exploration model is based on an **alkaline-driven** epithermal and copper porphyry system
- First 2,500m of drilling intersected near surface gold mineralization.



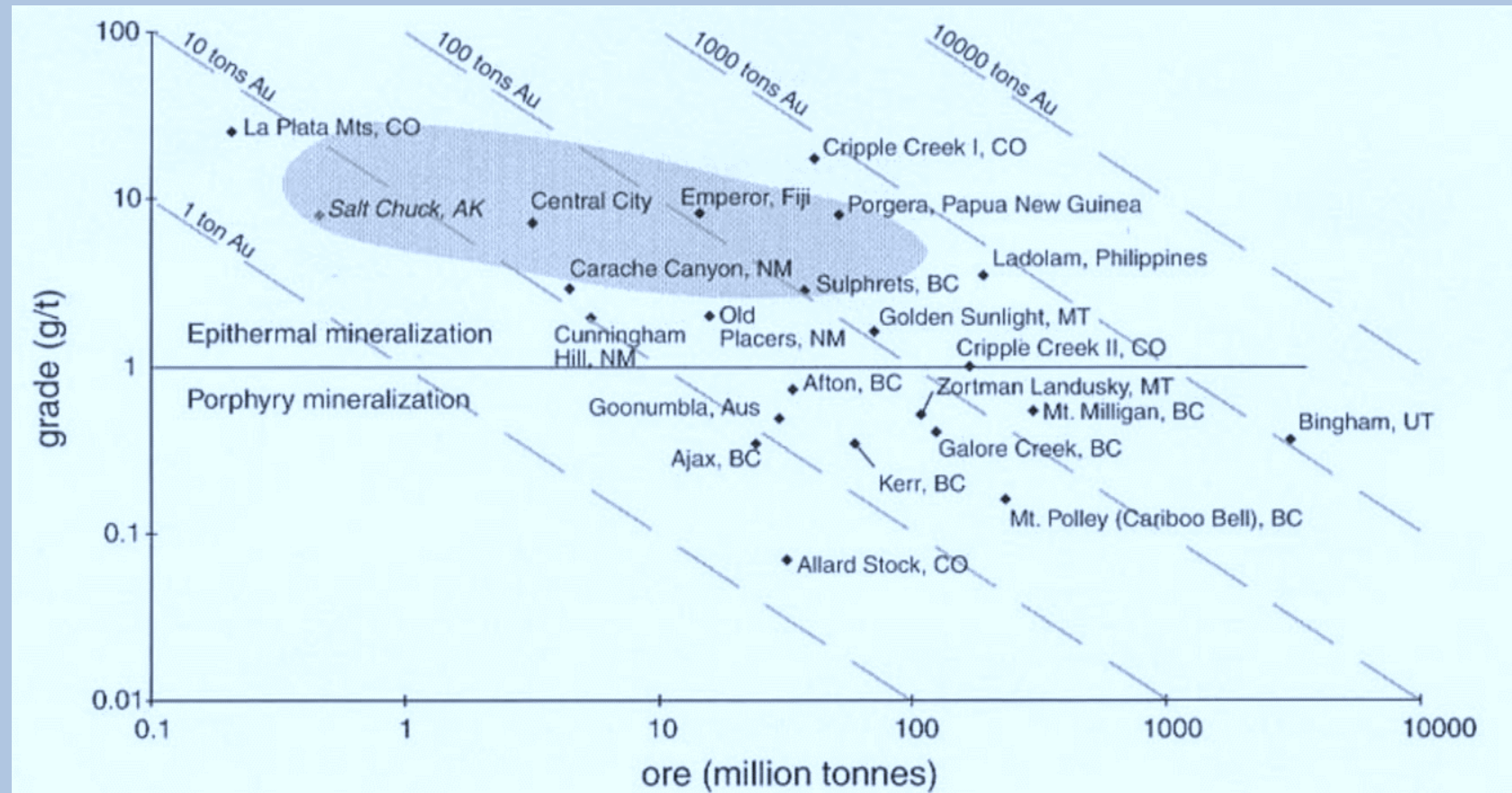
Root & Cellar Rock Assays Gold (ppm)		
5	to 50	(21)
1	to 5	(64)
0.1	to 1	(254)
0.025	to 0.1	(185)
all others		(797)

Root & Cellar Rock Assays Copper (ppm)		
10,000	to 120,000	(13)
2,500	to 10,000	(21)
1,000	to 2,500	(31)
200	to 1,000	(60)
all others		(1,196)



# ALKALINE RELATED SYSTEMS

Alkaline related epithermal systems can produce very large and high-grade deposits



- Alkaline systems characterized by;
  - Telluride-rich mineralization
  - Elevated vanadium can be a good pathfinder
  - Extensive carbonation
  - Voluminous K (potassium) metasomatism

*We see all these features at Root & Cellar!*



▲ Thematic plot of elevated vanadium (green squares) from rock samples



▲ Alkaline Gabbro from drill-hole 21RC-11

# MINERALIZED SAMPLES



Drop Zone – Quarts-hessite vein in altered rhyolite  
RC19-5012A– 5.3 g/t Au, 113 g/t Ag, 50 g/t Te



Windfall - Ag-Au-Te +/- (Pb-Zn-Cu)  
RC20-3046 4.4 g/t Au, 8.1 g/t Ag



Conquest – Specularite veined rhyolite  
CN15-31 0.8 g/t Au, 0.8 g/t Ag



Drop Zone - Au-(Ag)  
CN-14-63 – 25.8 g/t Au, 487 g/t Ag



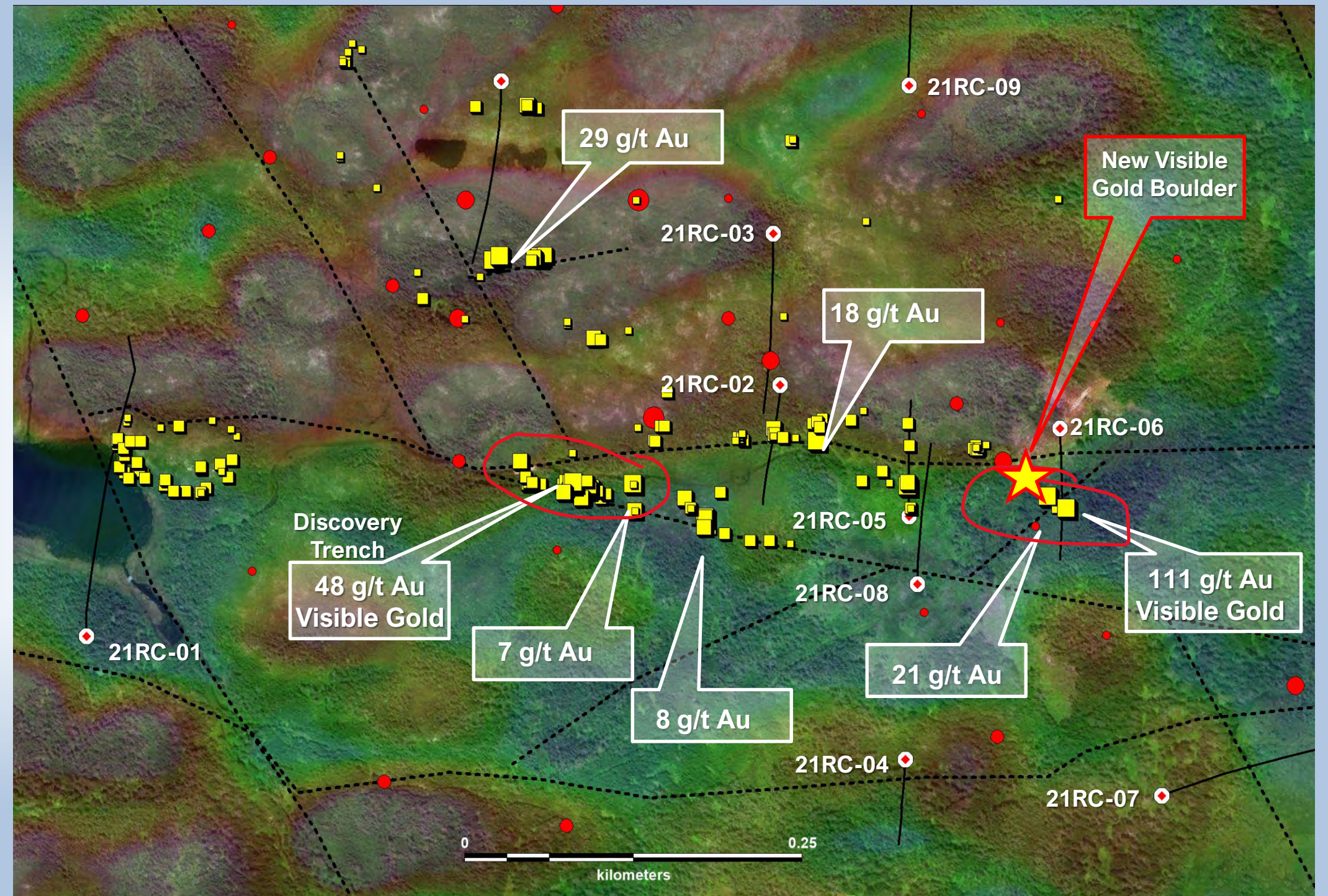
Windfall - Ag-Au-Te +/- (Pb-Zn-Cu)  
RC20-3046 17 g/t Au, 17.8 g/t Ag



Conquest – Au-Ag  
RC21-5014 28.8 g/t Au, 3.4 g/t Ag

# CONQUEST DISCOVERY AREA

- Significant gold was discovered at Root & Cellar by a local prospector in a hand dug trench
- On-going surface sampling has identified gold over a near continuous 700 meter strike-length.
- Variety of mineralization styles, including quartz veins, stockwork, breccias and disseminated sulphides.
- Gold is associated with elevated As +/- Sb +/- Mo and ubiquitous K and elevated V
- 2021 maiden drill program focused on this area.
- Best results from drill-hole RC21-05



▲ Gold-bearing surface samples represented in yellow squares, with gold anomalous soil samples shown in red circles draped over total magnetic intensity.



# CENTRAL ZONE: DRILL PROGRAM RESULTS

Hole ID	From	To	Length	Au	Ag	As
21RC-05	28.05	29	0.95	1.23	0.9	124
	29	30	1	1.86	1.7	145
	30	31	1	5.71	4.4	298
	31	32	1	0.18	1.9	264
	32	33	1	0.64	3	385
	33	33.95	0.95	0.66	2.6	397
	33.95	34.8	0.85	1.12	3.9	606
	34.8	36	1.2	0.193	3.2	256

- Maiden, 14 drill-hole program completed at Root & Cellar in 2021
- 1.43 g/t Au over 7.95 m within 30 meter of surface.

Close up at 30.4m showing quartz veins with arsenian pyrite in siliceous matrix ▼



*3-6% Potassium associated with gold; excellent pathfinder!*



# CONQUEST: 111.5 G/T GOLD



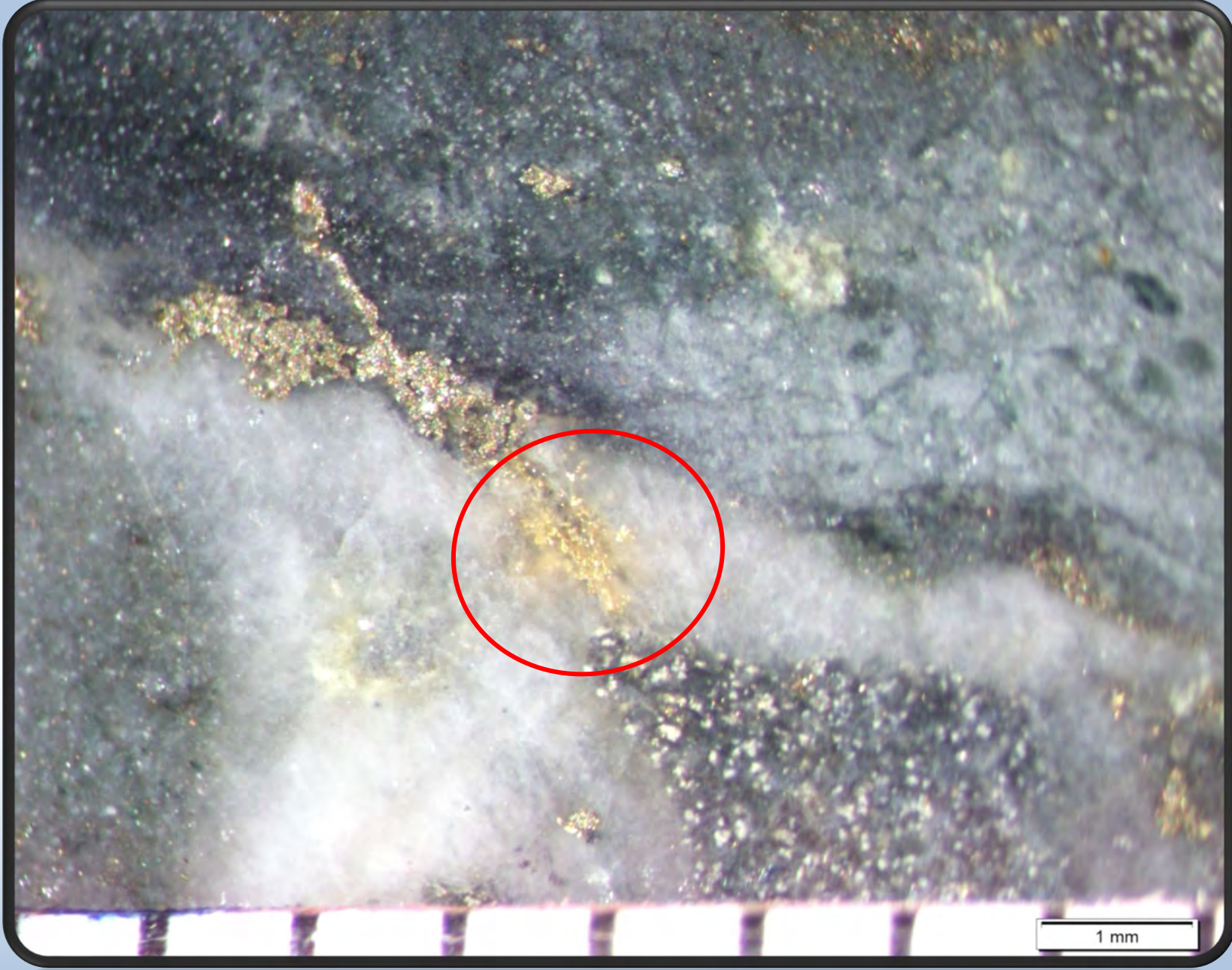
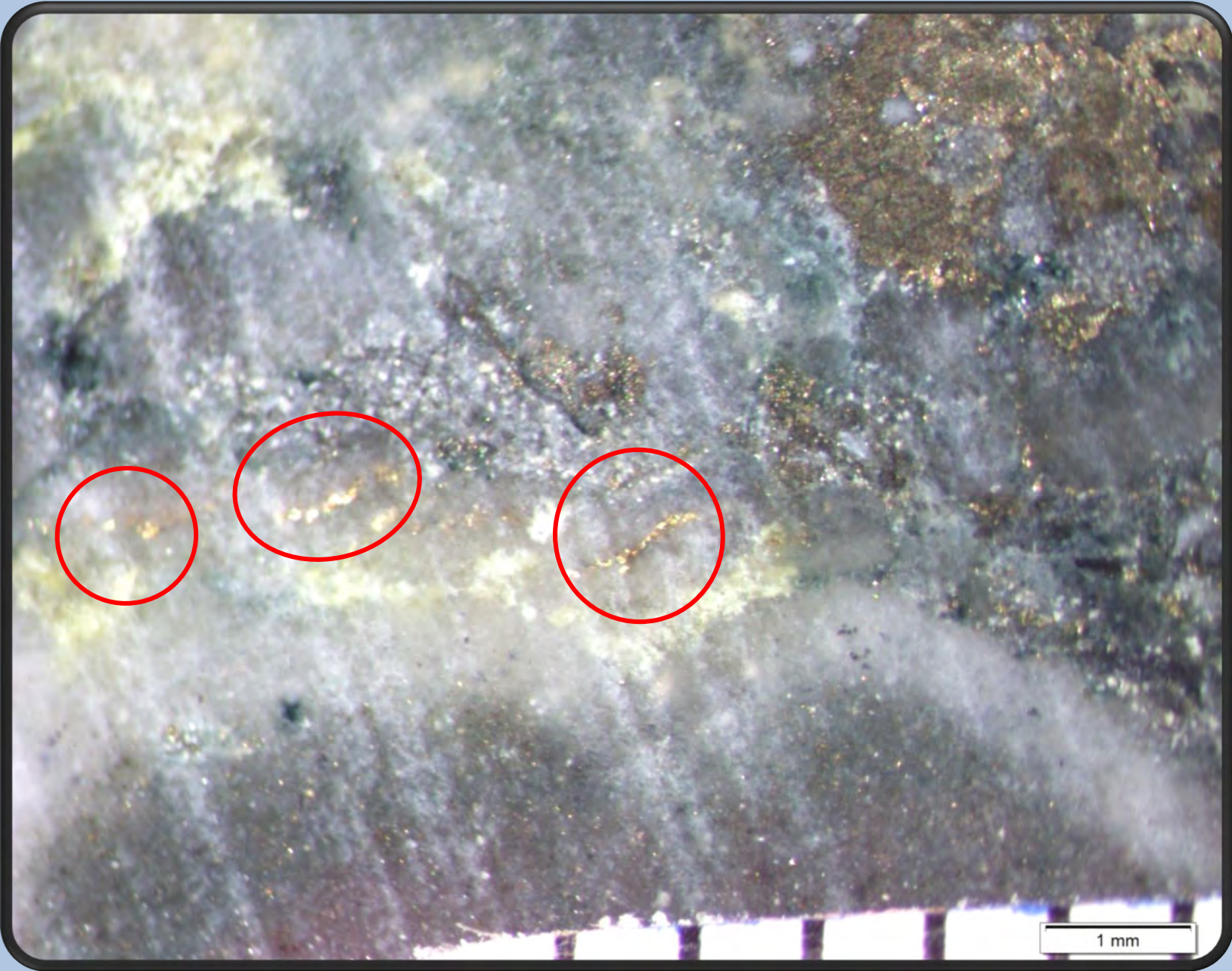
Boulder containing visible gold and assaying 111.5 g/t Au. See close-up on following slide. ▲

- Sampling and prospecting has resulted in the discovery of a boulder hosting visible gold and assaying 111.5 g/t gold.
- The large angular boulder was found in the immediate vicinity of several high priority, near surface IP anomalies.



*Note the similarity of drill-core to the high-grade boulder*

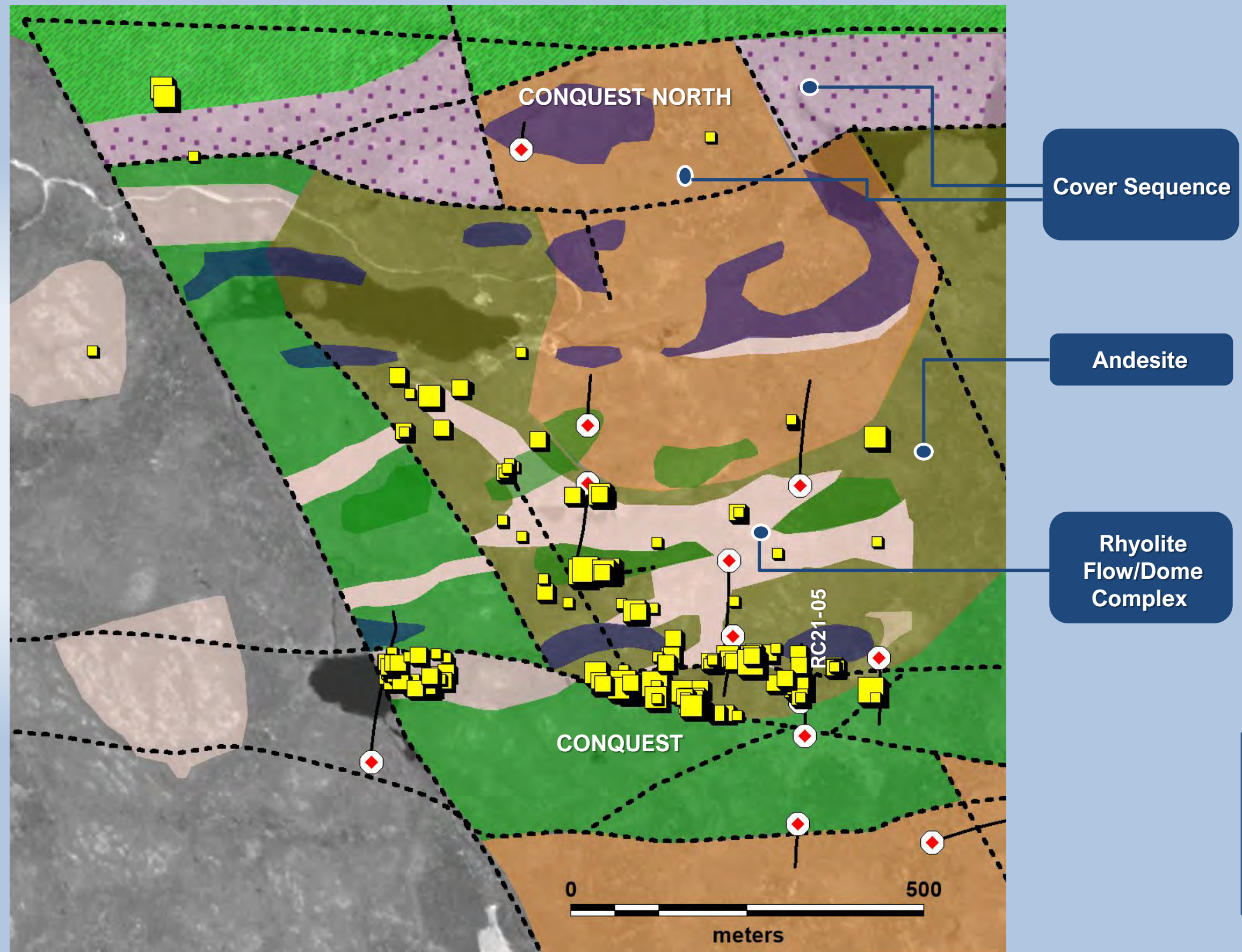
# CONQUEST: VISIBLE GOLD



# CONQUEST GEOLOGY AND MINERALIZATION

- Mineralization is constantly expanding
- Over 500 samples anomalous in Au. Grades up to 111.5 g/t gold +/- silver, tellurium.
- Much of the mineralization discovered on surface to date is spatially associated with a rhyolite-flow/dome complex hosted within an andesite.
- The rhyolites and andesites represent the very top of the mineralized system.
- The Conquest North target area is largely covered by a post mineralization sequence of pyroclastic rocks

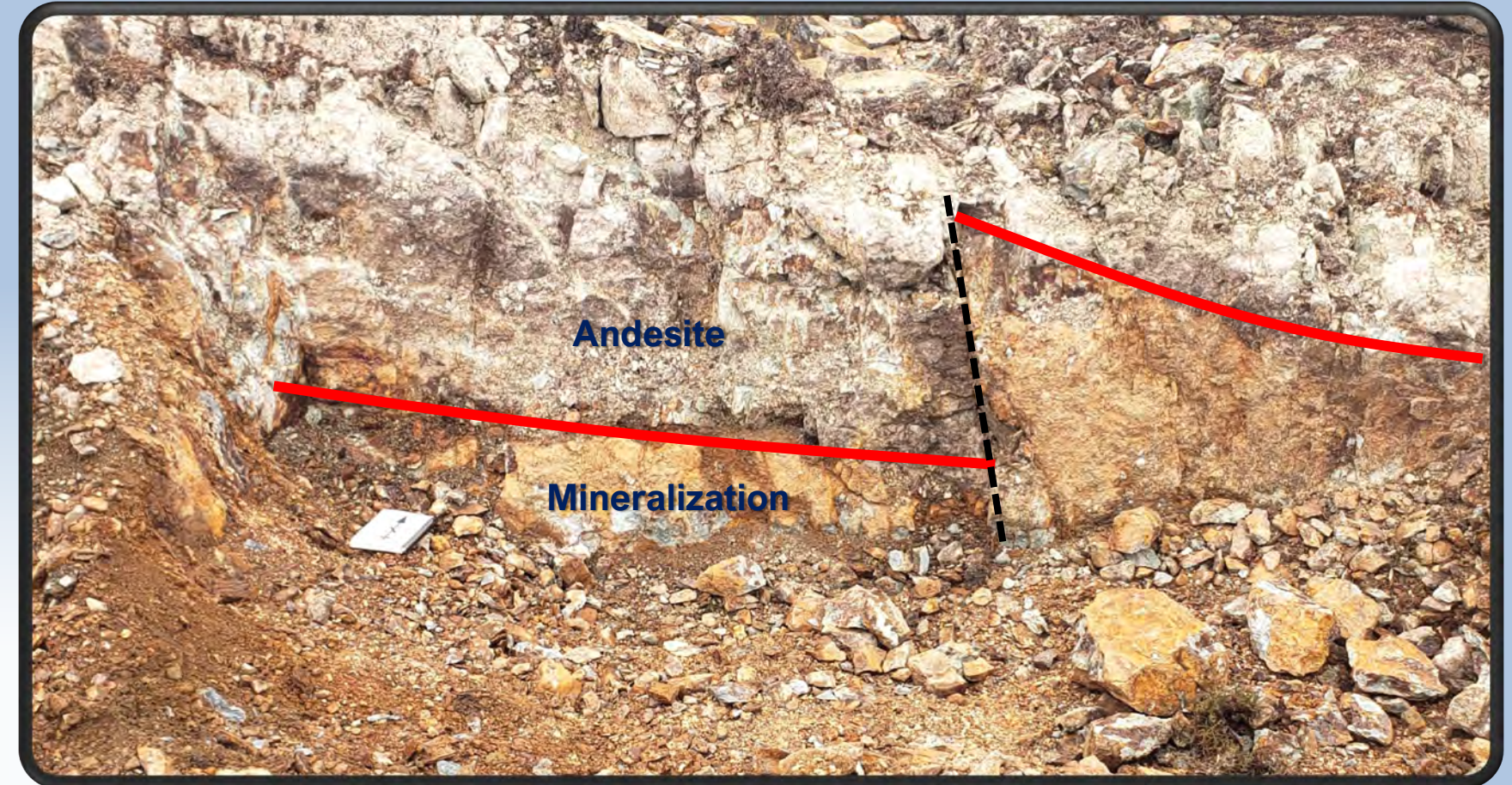
*Note how the gold bearing fluids have exploited faults and weaknesses formed during gentle folding at geological contacts*



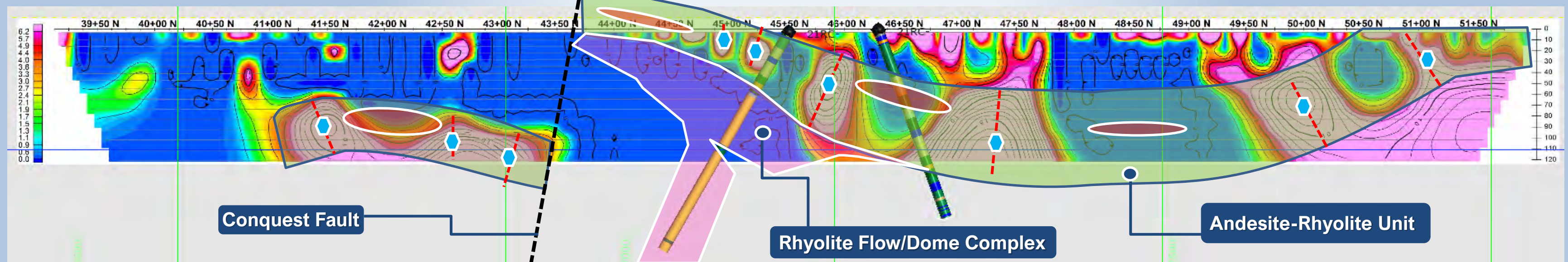
# CONQUEST IP - NEAR SURFACE TARGETS

## “LITHO-CAP-TYPE MINERALIZATION”

- Small to moderate sized IP chargeability anomalies but...
- Very abundant
- Largely confined to faults, contacts and voids in Andesite-Rhyolite Unit and along Conquest Fault Zone
- Potential for near surface resource



▲ Example of flat-lying litho-cap type mineralization at contact of andesite and underlying rhyolite.



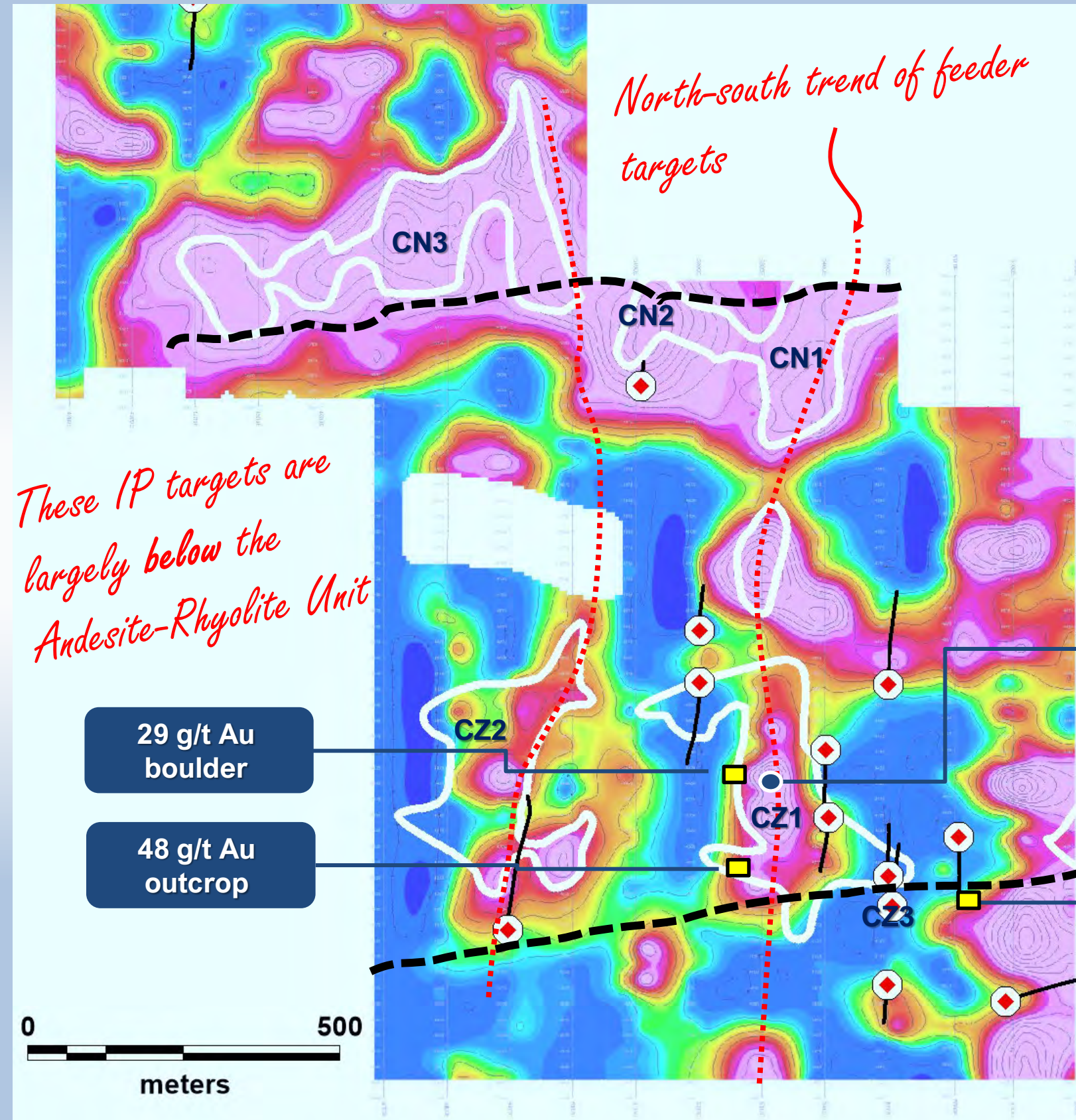
▲ IP chargeability cross-section from line 5200E showing examples of “litho-cap” type IP anomalies hosted in Andesite-Rhyolite Unit .

# CONQUEST IP: FEEDER GOLD TARGETS

- Deeper depth slices from the IP survey show multiple strong IP anomalies some of which coalesce along north-south trends
- These trends are not obviously apparent on surface where lithological units and most structures trend east-west
- Inaugural drill-program was designed to test east-west mineralization NOT north-south which is now more apparent at depth
- These north-south anomalies are believed to be the primary gold targets and the feeders to the near surface mineralization seen in Andesite-Rhyolite Unit and along Conquest Fault Zone



*It trends North!*



*These IP targets are largely below the Andesite-Rhyolite Unit*

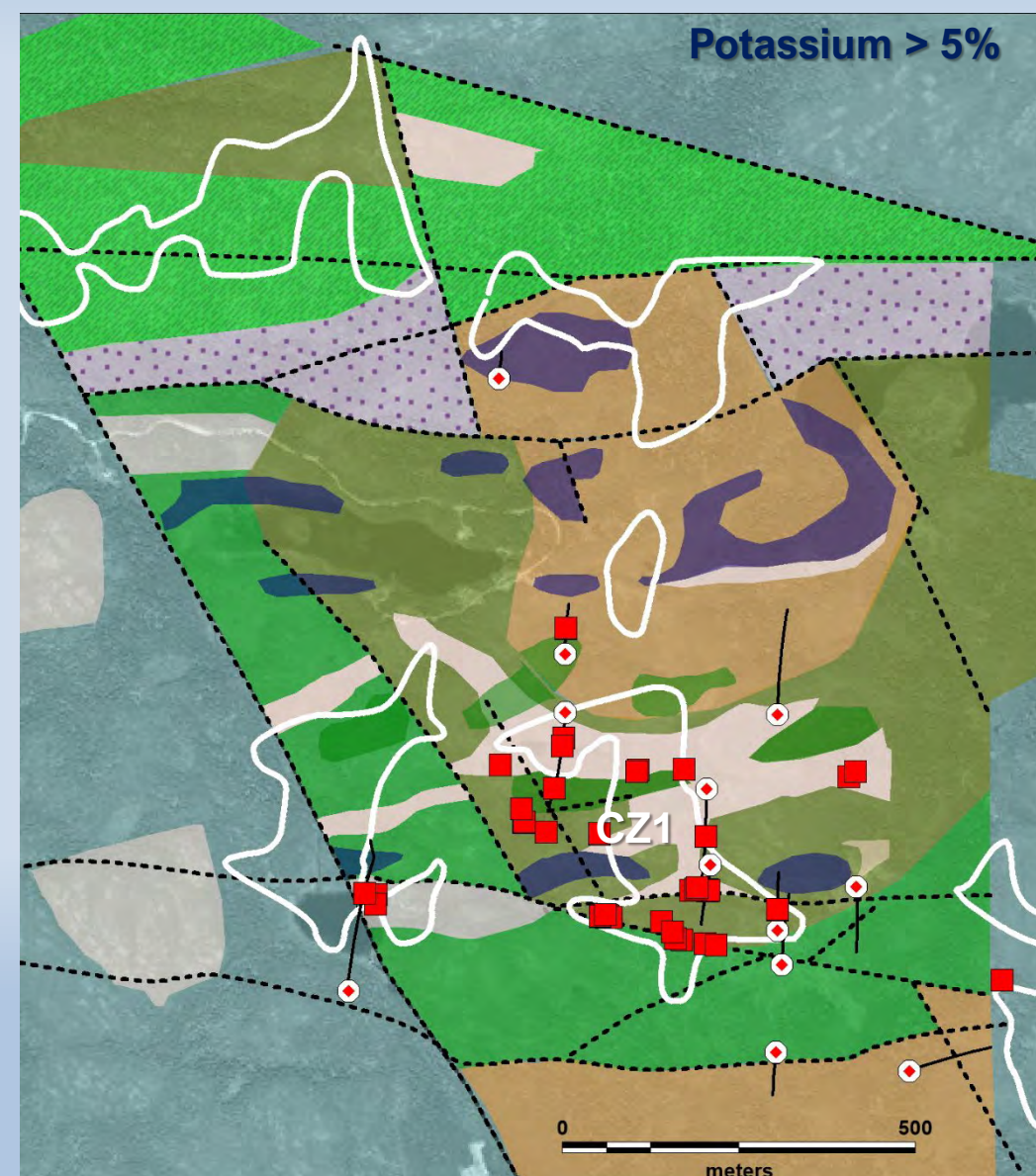
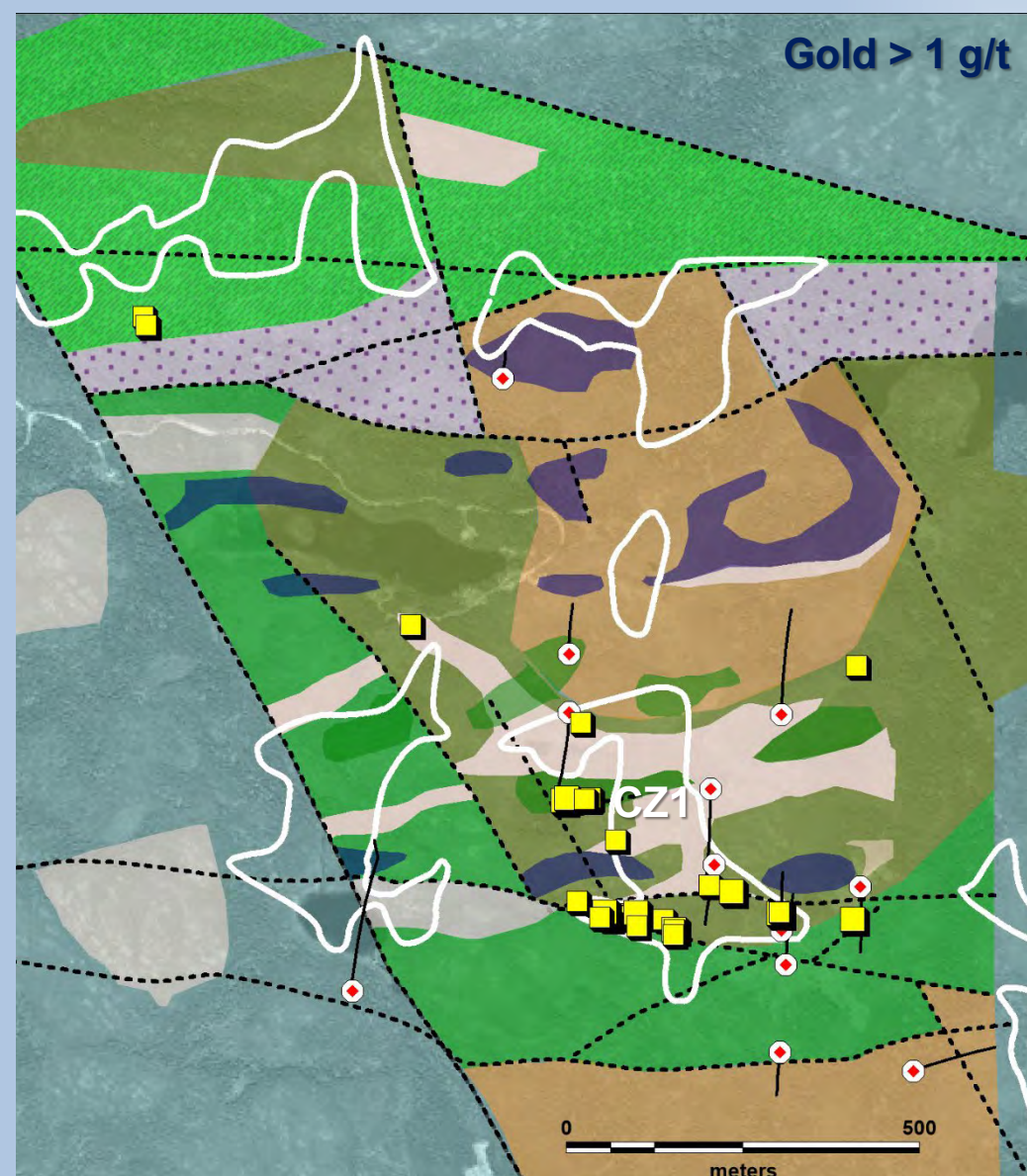
◀ IP Chargeability depth slice at -80 metres. Note white outline of IP anomalies is a compilation of multiple depth slices and 3D inversion.

Priority Feeder Target

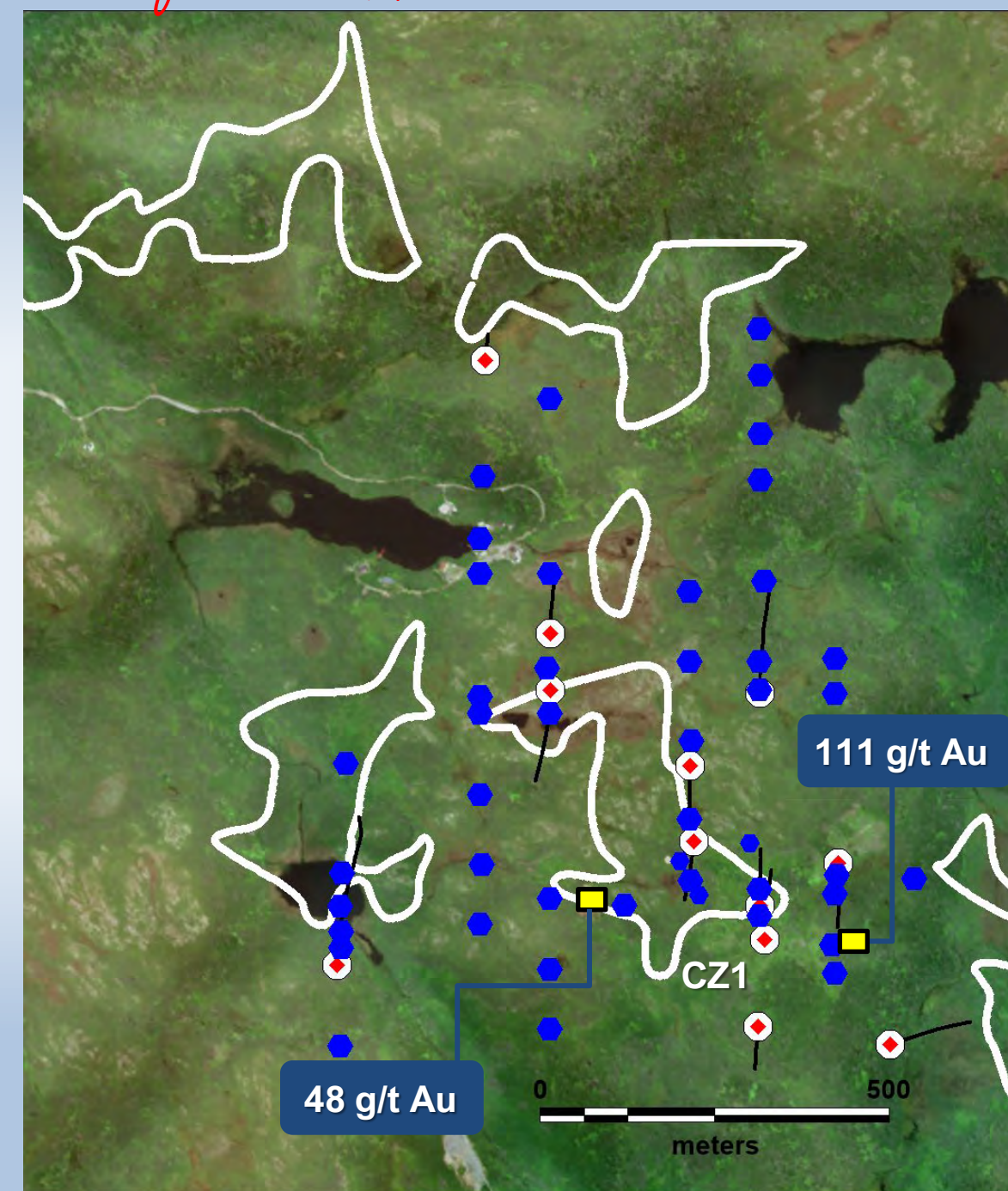
111 g/t Au boulder

# CONQUEST: SUPPORTING EVIDENCE FOR FEEDERS

- Very strong correlation between high gold samples and central Conquest IP target (Target CZ1)
- Very strong correlation between potassium alteration with rocks that immediately overlie the (CZ1)



*Near surface IP anomalies cluster along the north-south feeder trend.*



Location of near surface IP Chargeability anomalies (blue polygons) interpreted to be located in Andesite Rhyolite Unit

# CONQUEST: NORTH SOUTH STRUCTURES IDENTIFIED

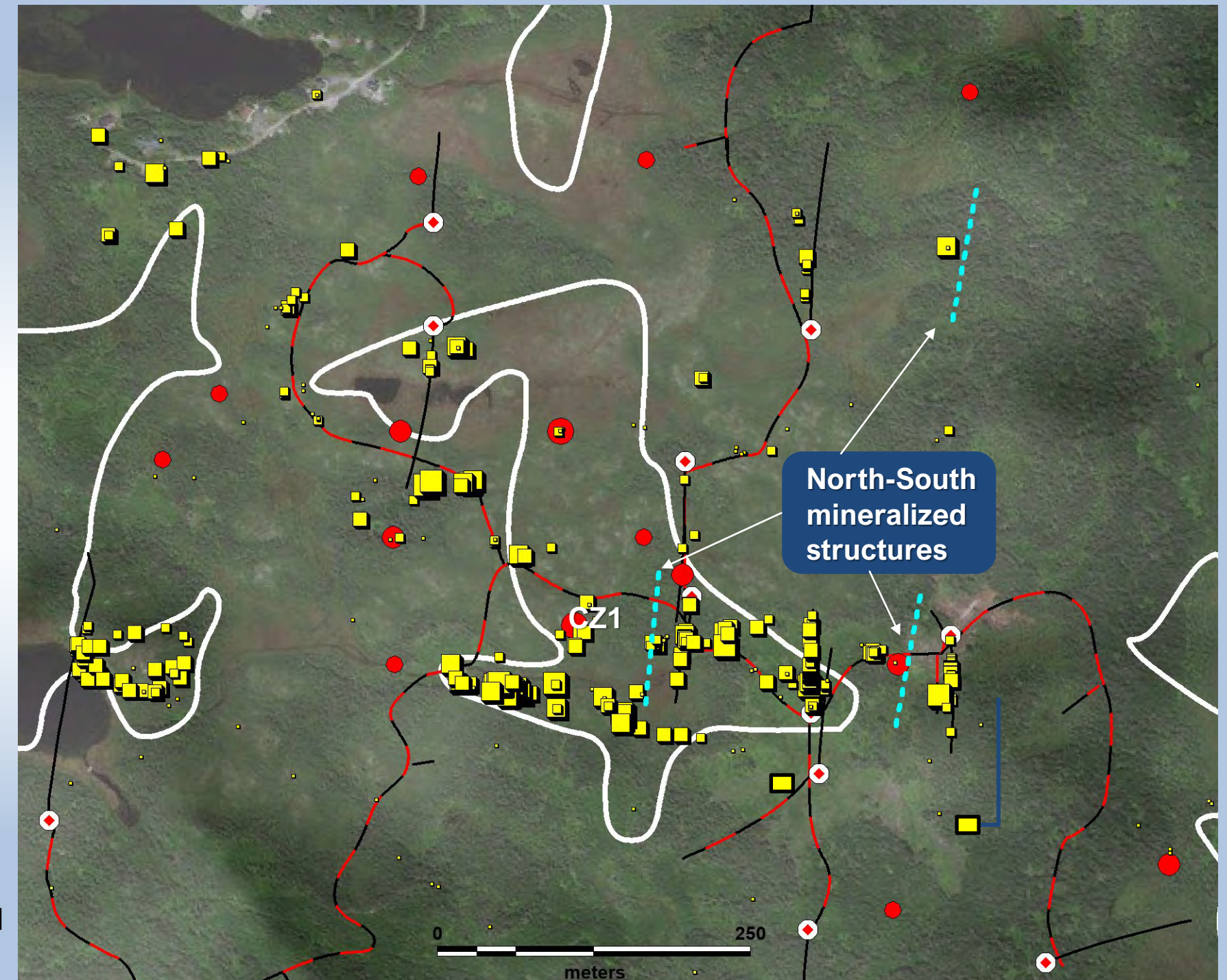
- Three outcrops hosting mineralized north-south structures have been recently identified
- These discoveries validate the interpretation that the northerly trending IP anomalies are the principal gold targets



**Silicified and mineralized rhyolite with northerly trending fractures (yellow lines) ▼**



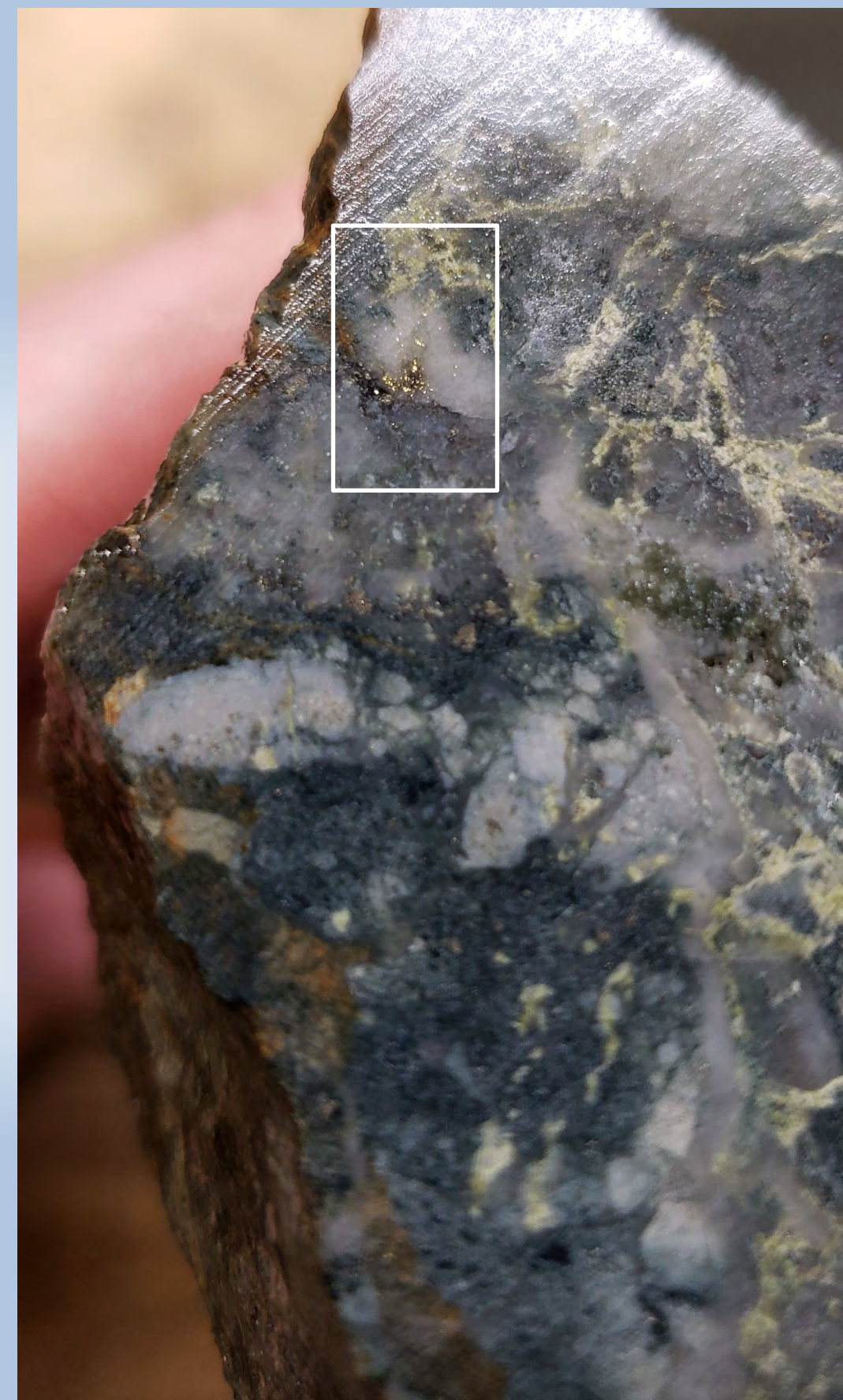
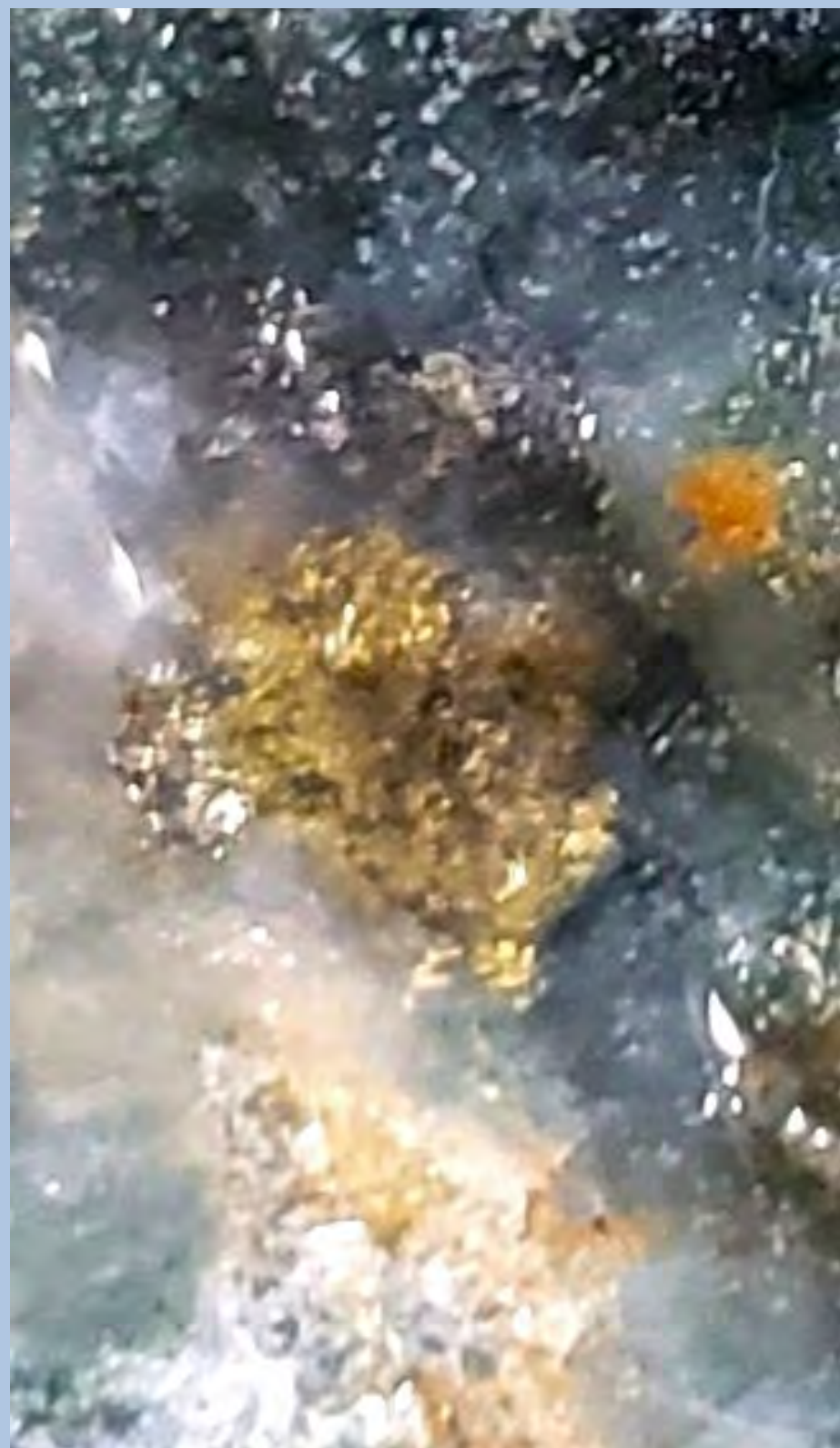
◀ **North trending zone of strongly silicified and pyritized mafic volcanic exposed on drill trail embankment. Pen points 020°. This sub-crop is metres away from the two boulders hosting visible gold.**



▲ **Location of north trending mineralized structures**

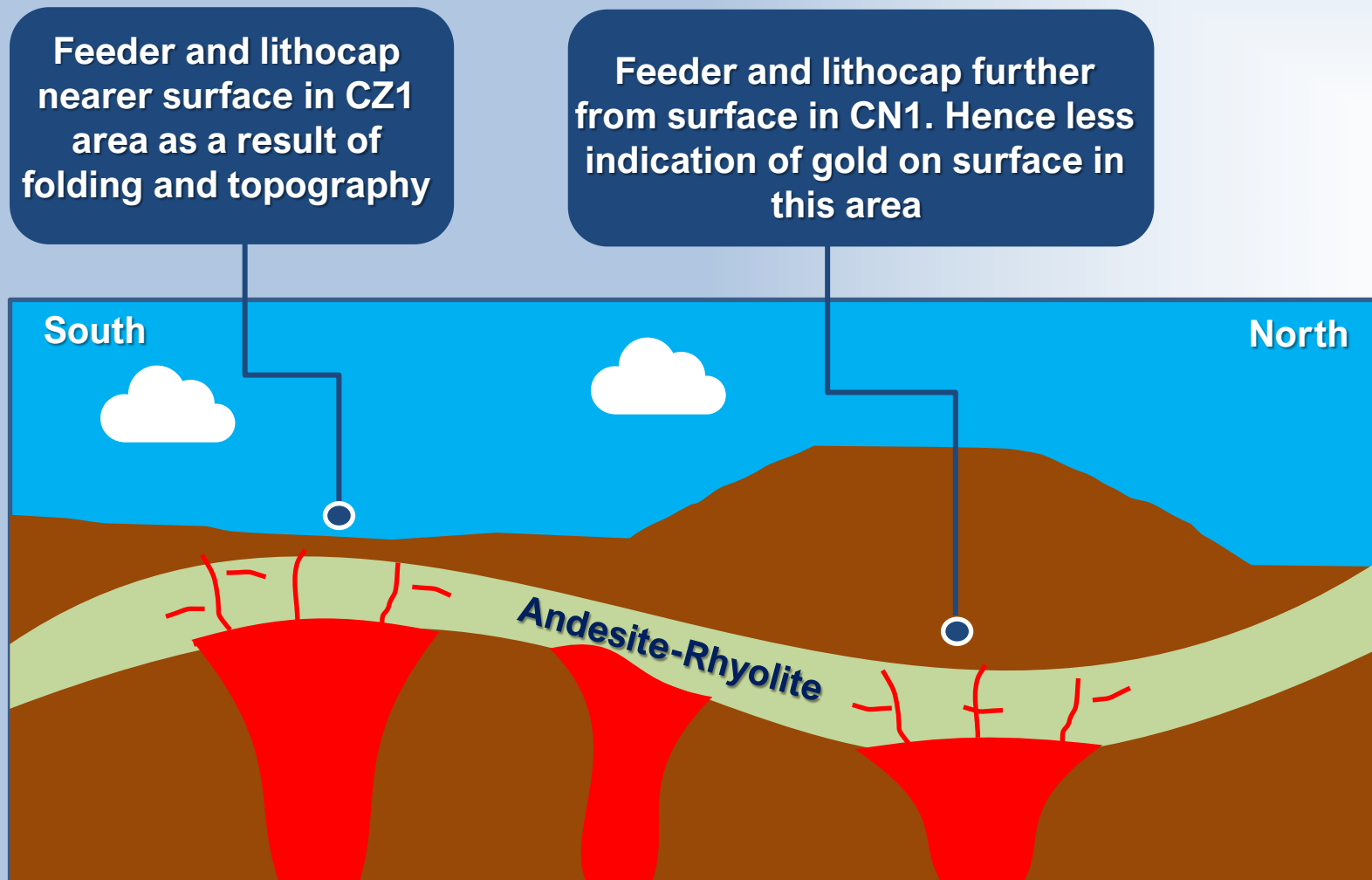


# CONQUEST: MORE VISIBLE GOLD

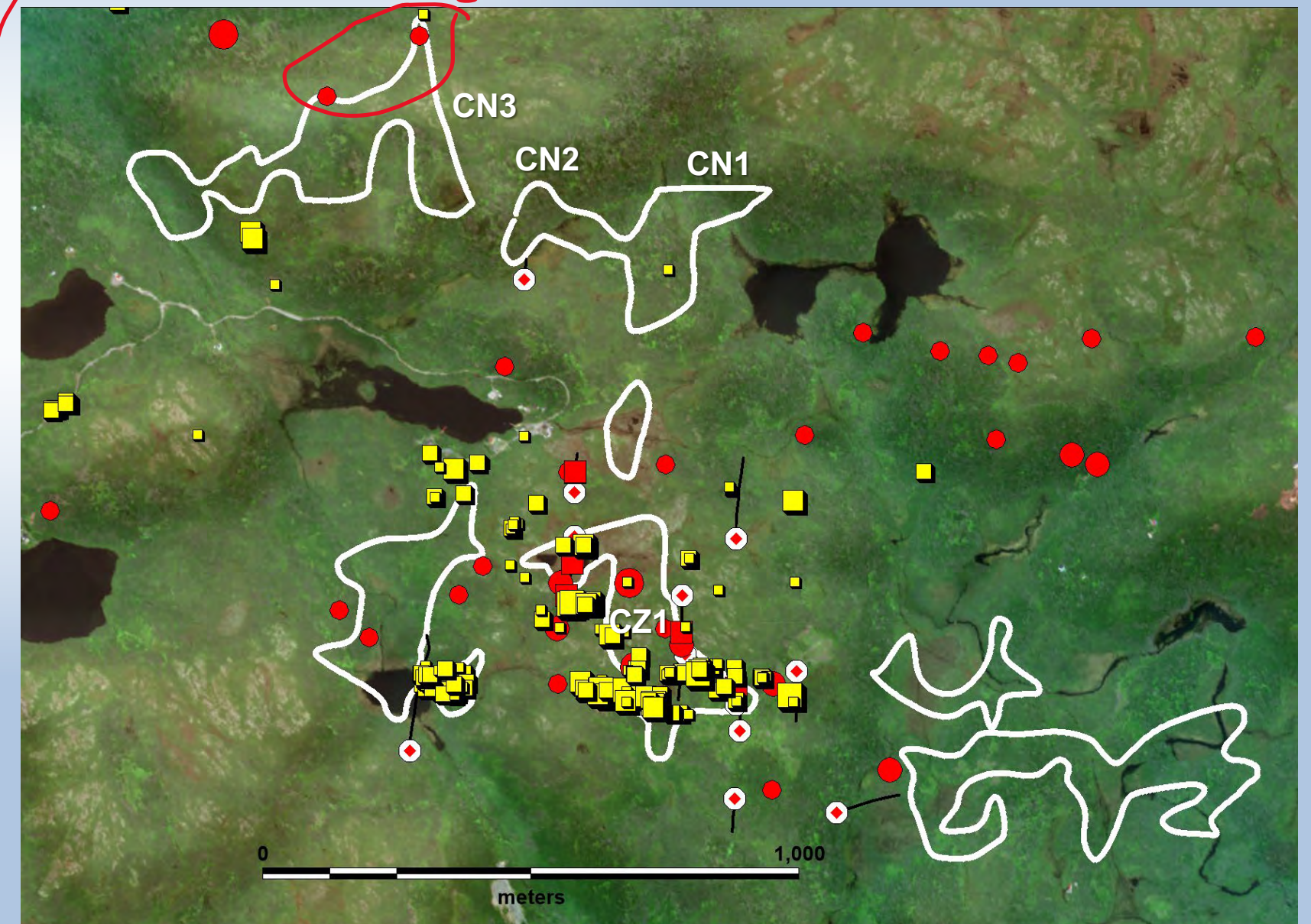


# CONQUEST: LARGE & EXPANDING FOOTPRINT

- Due to erosional levels most of the gold to date has been found above target CZ1 in the central portion of the Conquest Zone
- However, the geophysical targets outlined, all share strong similarities to CZ1.
- The targets cover an area of approximately 1.6 km x 1.6 km

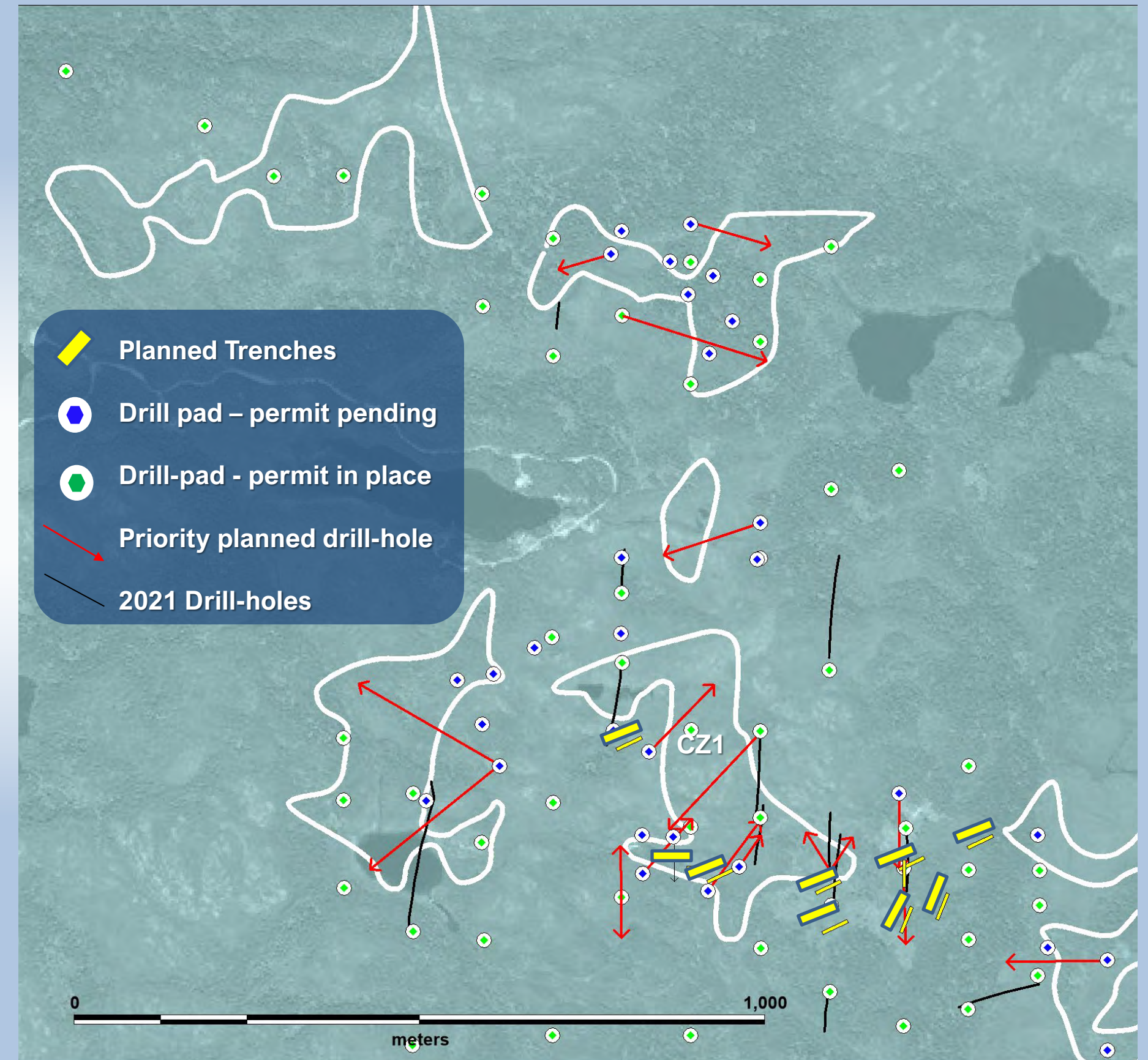


*Note the anomalous soil and rock samples on the periphery to target CN3 where it projects to outcrop on either side of the ridge*



# NEXT PHASES OF EXPLORATION

- **Trenching:**
  - permits pending for 9 trenches in Conquest Zone.
- **Mapping:**
  - Infill mapping in Conquest Area and expand south towards copper
- **Prospecting:**
  - Northern Conquest Zone where mineralization could sub-crop on northside of ridge
  - Near surface IP targets proximal to visible gold sample
  - Copper targets
- **Drilling:**
  - 3000 m diamond drill program with a series of shallow (50-100M) drill-holes along the Conquest Fault Zone leading into deeper (up to 300m) drill-holes into CZ1 Target



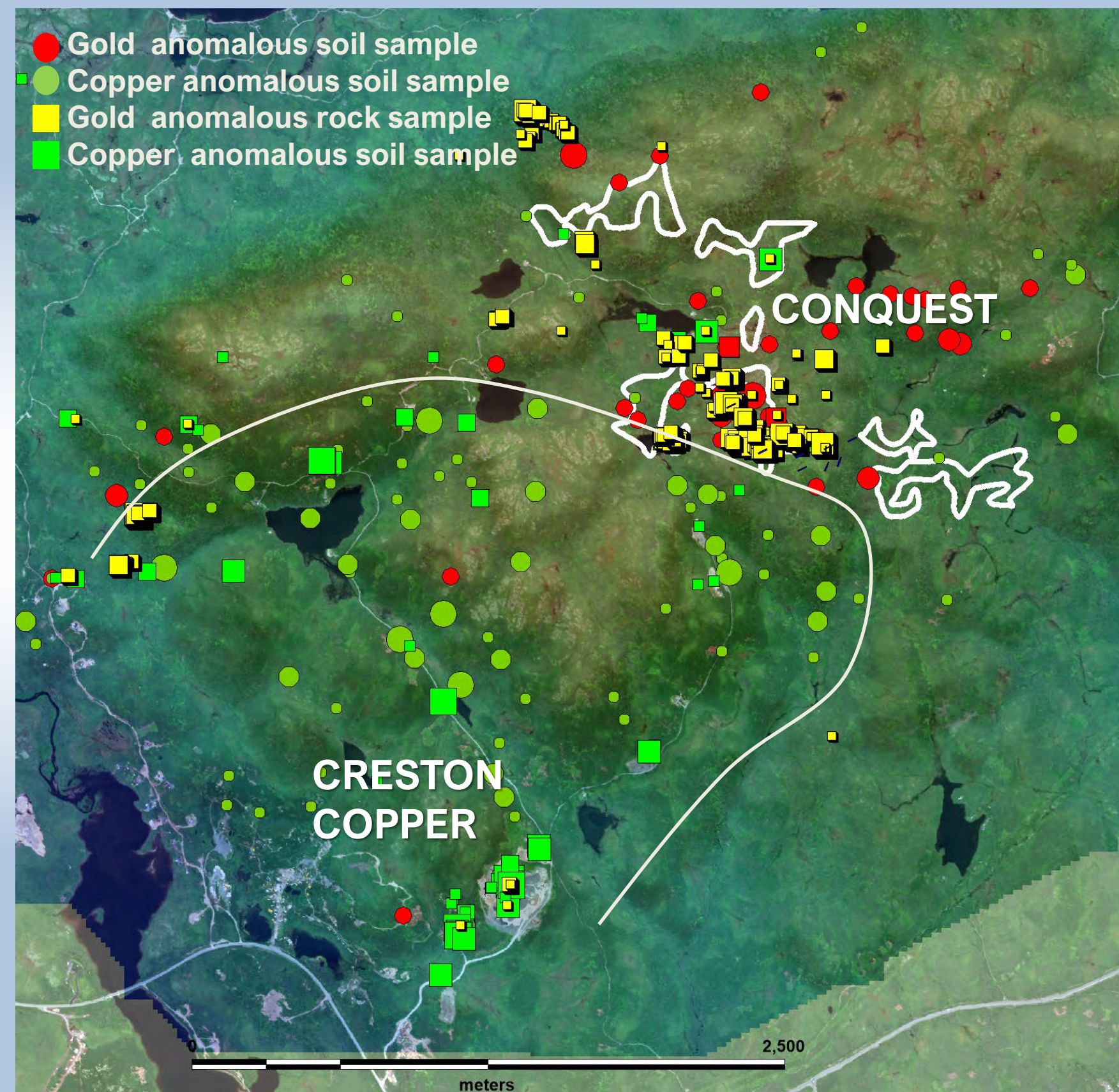
# ROOT & CELLAR COPPER



**“Although much of the exploration at Root & Cellar has focused on the gold, the copper porphyry potential is very real.”**

- 72 samples collected from Root & Cellar assay > 0.1% Cu with 13 > 1% and, a high of 10.5% Cu
- The best copper mineralization has been found at Creston, 2 km southwest of Conquest
- Hosted in a vast phreatomagmatic/vent breccia complex with associated hydrothermal alteration
- Mineralogy and setting is indicative of the upper levels of a copper porphyry system
- Optionality to advance the copper potential ourselves or with a partner in due course

*Note the distinct zonation of the gold and copper...almost no overlap*



# ROOT & CELLAR COPPER DEPOSIT MODEL

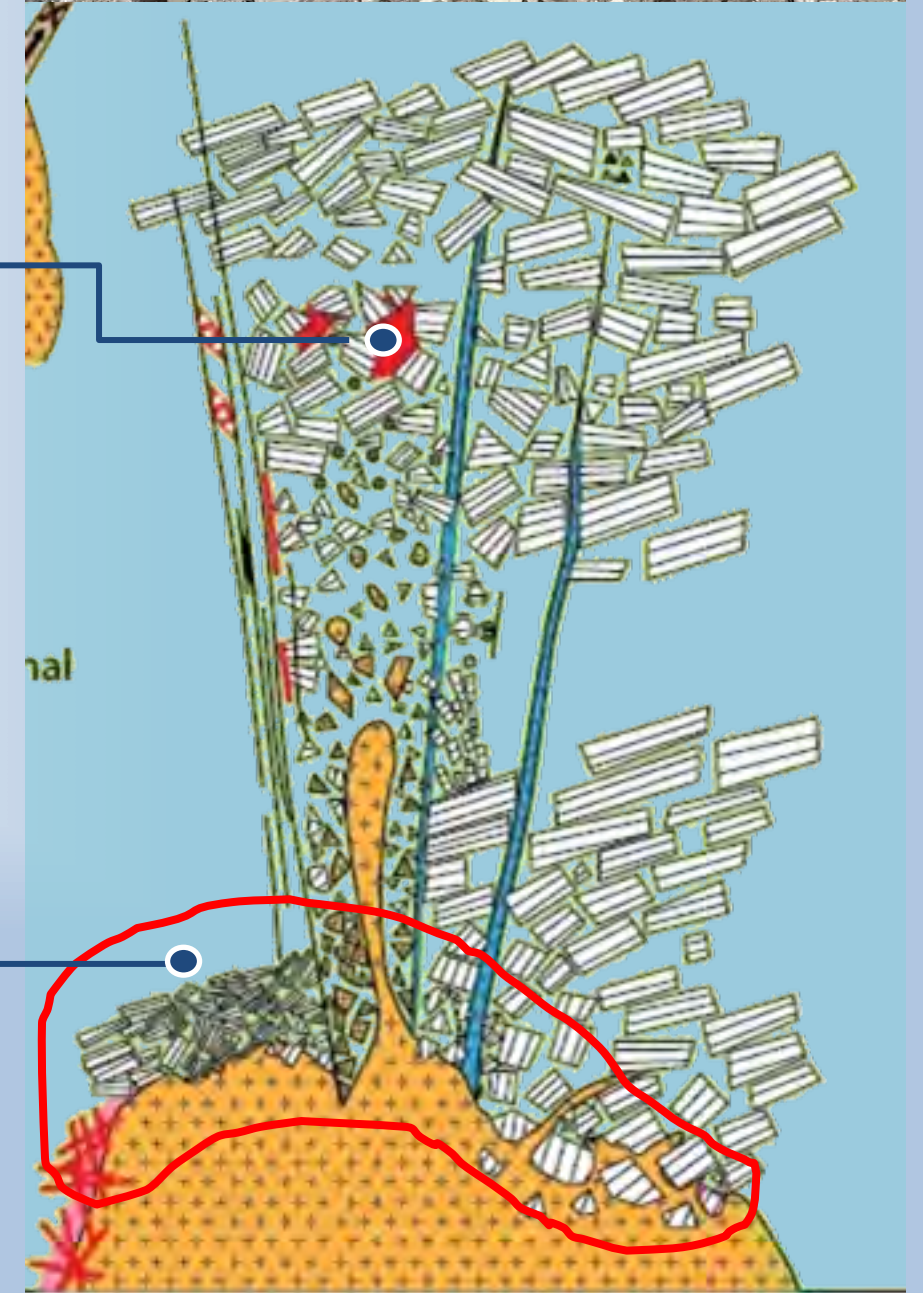
Outcrops of vent breccias and magmatic hydrothermal breccias exposed in a series of quarries

*These types of breccias typically form from the explosive interaction of groundwater and the hot magma that formed the intrusion.*

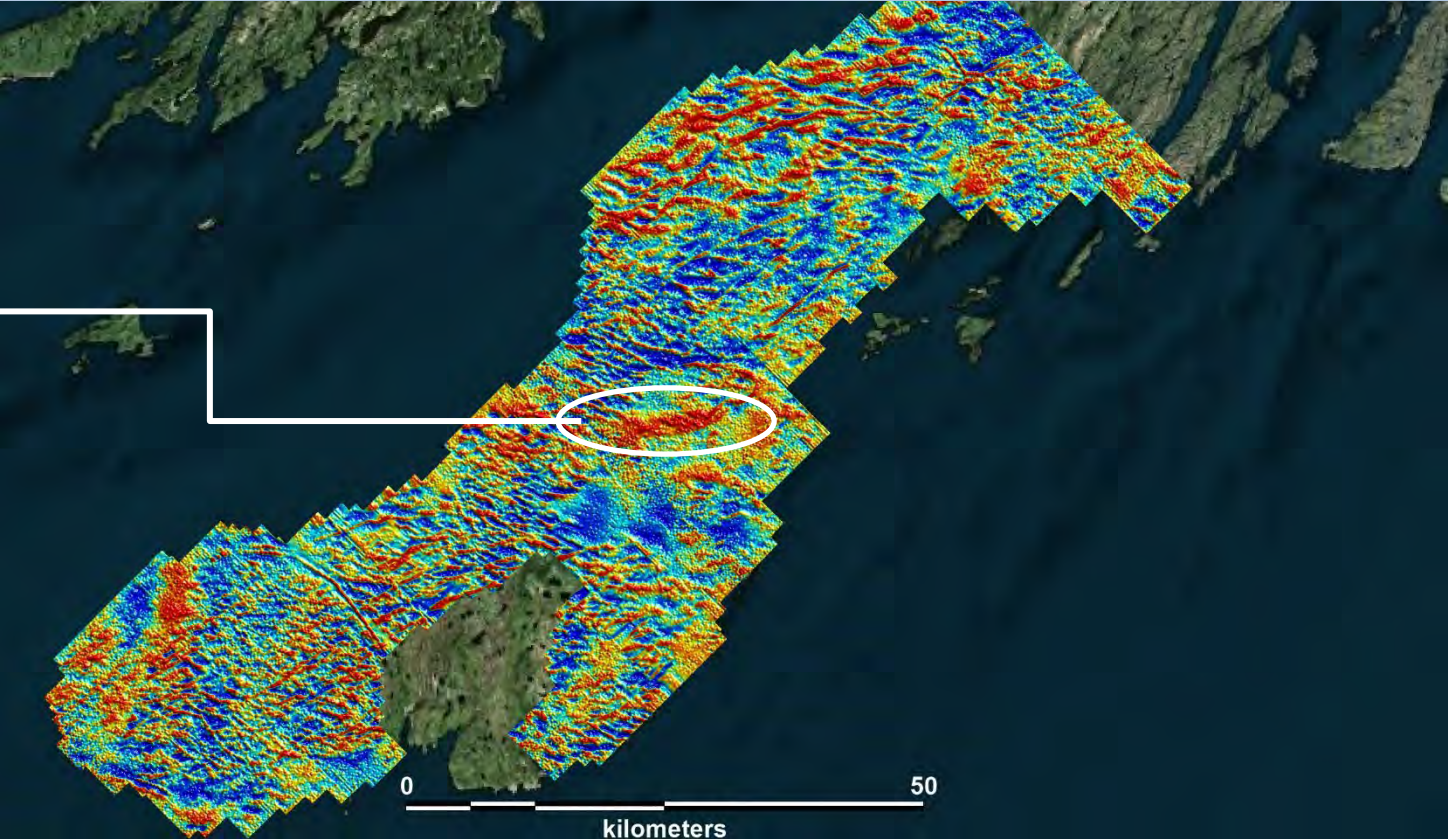
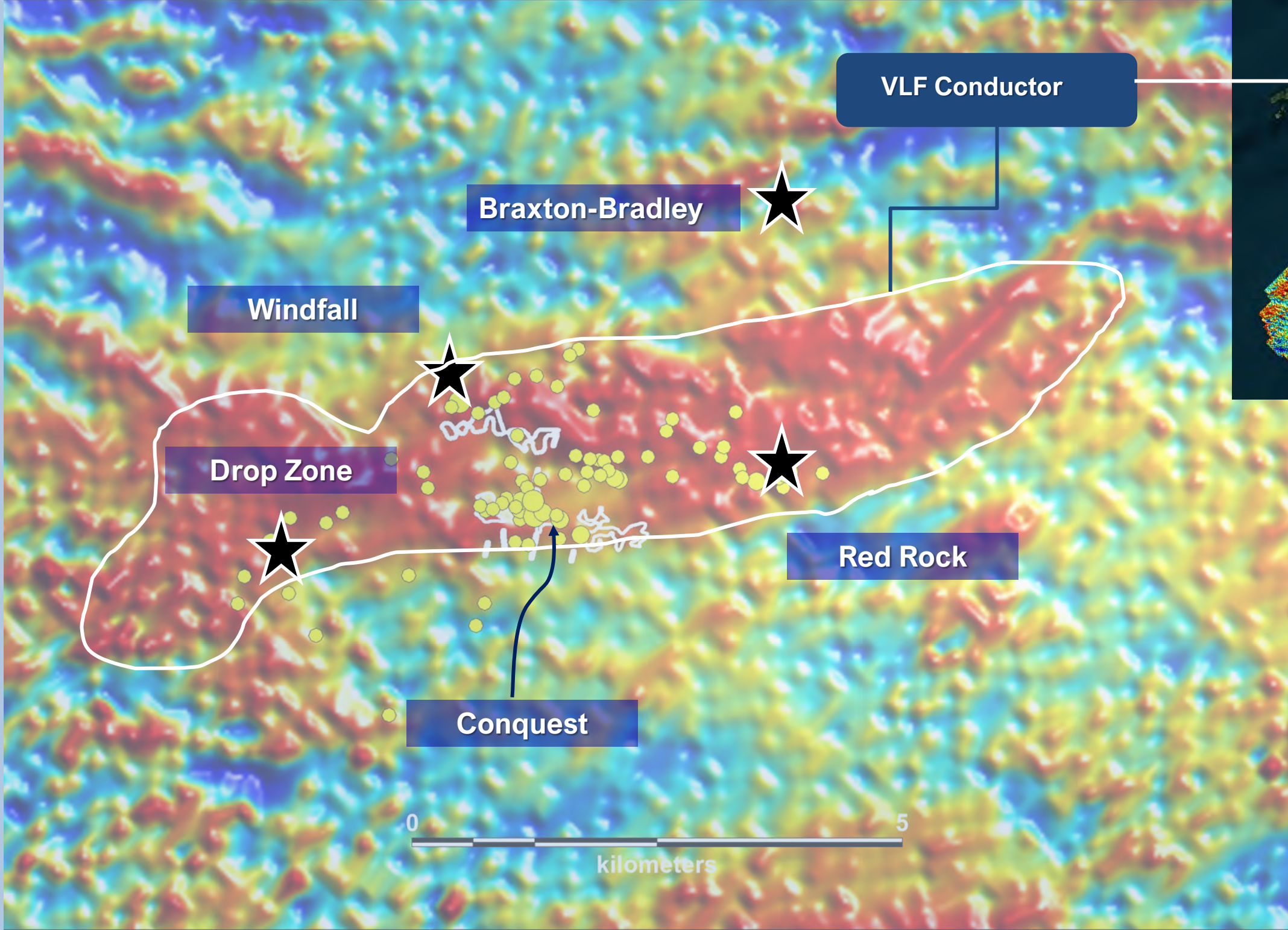
The high-grade copper found to date in the breccias exposed in the quarry quarries are likely the result of mineralized fluids filtering up through voids in the breccias.



It is at the top of such an intrusion where the primary copper mineralization would be expected



# THE BIG PICTURE



◀ ▲ Map showing Fraser filtered VLF data

The Government of Newfoundland and Labrador released a geophysical dataset covering the Burin Peninsula in September 2022

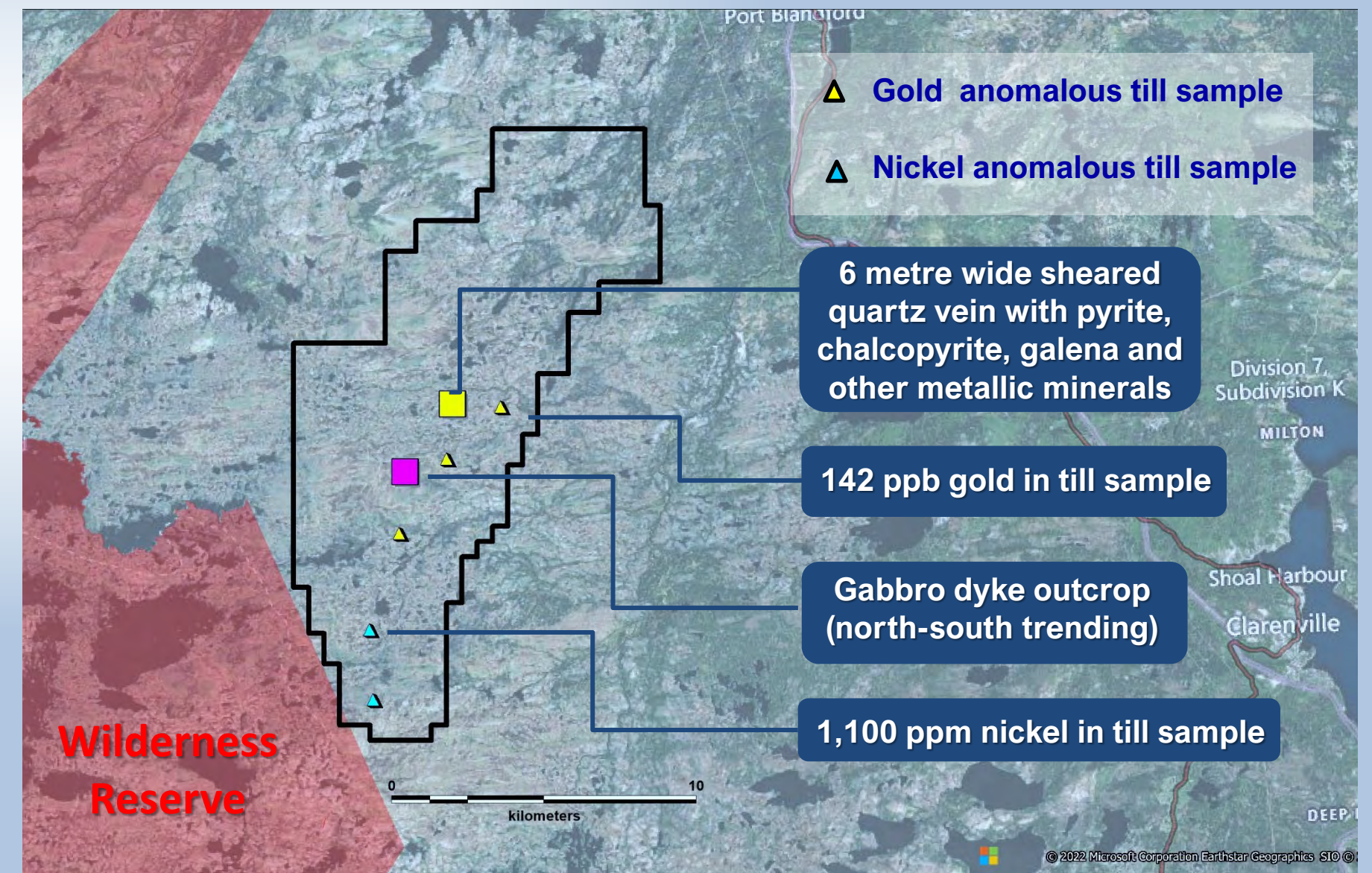
It shows a large swath of conductive rock underlying Root & Cellar which stands out quite uniquely in the survey

This is new data that is validating our belief that Root & Cellar is underlain by a very large epithermal system

# OTHER PROJECTS - ZULEIKA

## ZULEIKA PROPERTY – 100% Option

- Regional, crustal-scale fault zones throughout central Newfoundland are proving to be significant gold-mineralized structures:
- Zuleika is located adjacent to the Dover-Hermitage Bay Fault (DHB) which has similarities to the Dog Bay Line (DBL) on which New Found Gold's Queensway project is located.
- Targeted for epithermal and orogenic gold



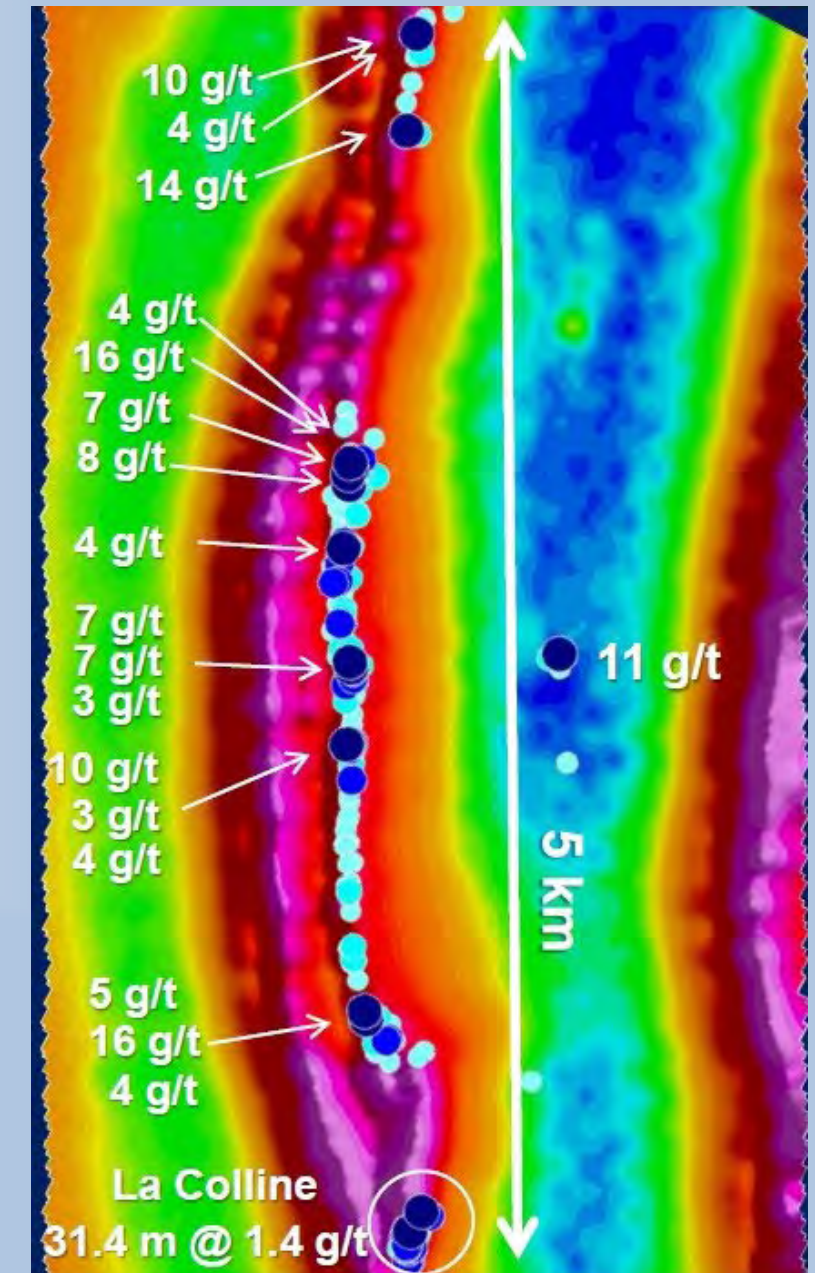
# OTHER PROJECTS - IDEFIX

- Located on at the northern end of the Labrador Trough which marks the craton margin, an ideal setting for Ni-Cu-PGE deposits
- 10,000 sq km of mafic-ultramafic sills have been mapped within the Labrador Trough.
- These sills representing a massive amount of magma from which Ni, Cu and PGEs can be scavenged and concentrated



**The Idefix Sill, at 5 kilometers long and 50 meters thick, is one of the largest underexplored PGE targets in Canada**

- Reef and disseminated mineralization defined over 5 km through surface sampling and drilling grading ~0.2 g/t PGE+Au over 50 metres true thickness
- Surface samples including channel samples up to 16 g/t PGE+Au indicate numerous pockets of higher grade
- Mineralization intercepted in drilling is associated with only 0.3% sulphide;
- An increase in sulphide to 3% could result in a 10x increase in PGE and copper grades as seen at the La Colline Showing.



Bfield from VTEM survey at Idefix with PGE+Au values ▶



# THE INVESTMENT OPPORTUNITY

- 100% Option on very large epithermal gold system as outlined by thorough modeling of integrated geoscience datasets
- Data suggests the system is “alkalic related.” Due to their associated size and high-grades, these systems are highly prized yet rarely found in Canada.
- Alkalic related systems are often associated with Tellurium, which is now deemed a critical metal. Tellurium is only produced as a by-product of mining other commodities. (Grades of up to 700 g/t Te have been found at Root & Cellar)
- Early indication of near surface gold potential
- Second phase of drilling planned for the new year to expand near surface gold mineralization and to test deeper IP targets believed to be the main gold feeders.
- Visible gold now being found on surface
- Copper-porphyry potential



# CORPORATE

## MANAGEMENT

Ian C. Bliss



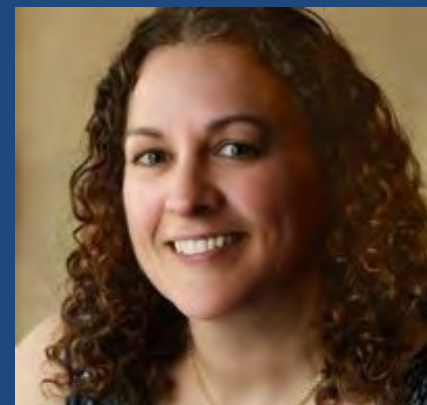
President, CEO

Samuel Legg



CFO

Christine Vaillancourt



Chief Geologist

## Capital Structure

Common Shares O/S	67.4M
Fully Diluted	76.3M
Stock Price	C\$0.04
Market Capitalization	C\$3M
Treasury	C\$580,000
Debt	Nil



## DIRECTORS

Ian Bliss

Northern Shield  
Founder

Russ Richards

Private wealth manager  
in Atlanta, Georgia

Don Bubar

CEO of Avalon  
Advanced  
Materials Inc.

Dr. Scott Jobin -Bevans

Past President of PDAC;  
founder and director  
of CCIC.

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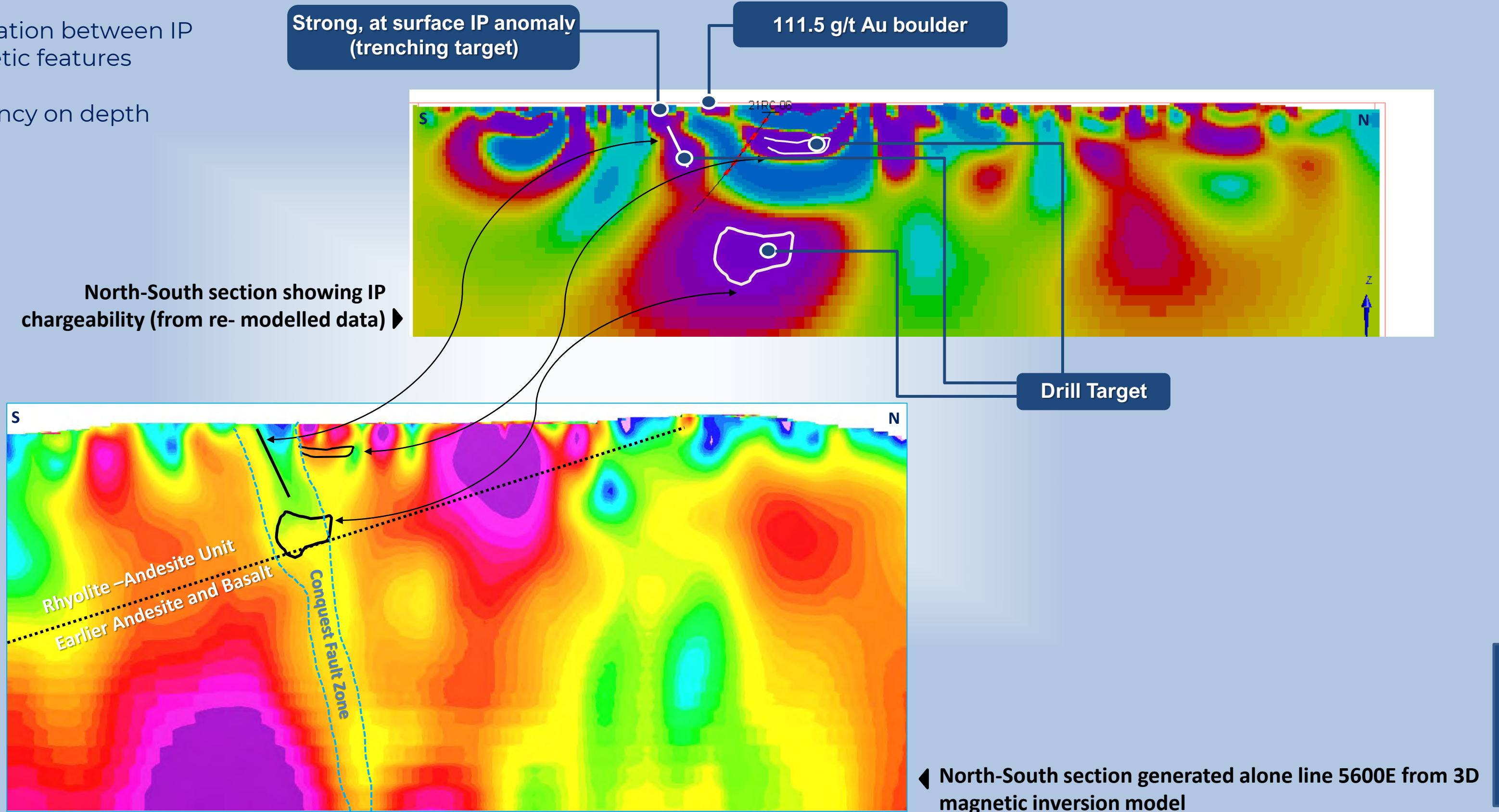
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 [@NorthernShield](https://twitter.com/NorthernShield)

# APPENDICES

# IP - MAGNETICS CORRELATION

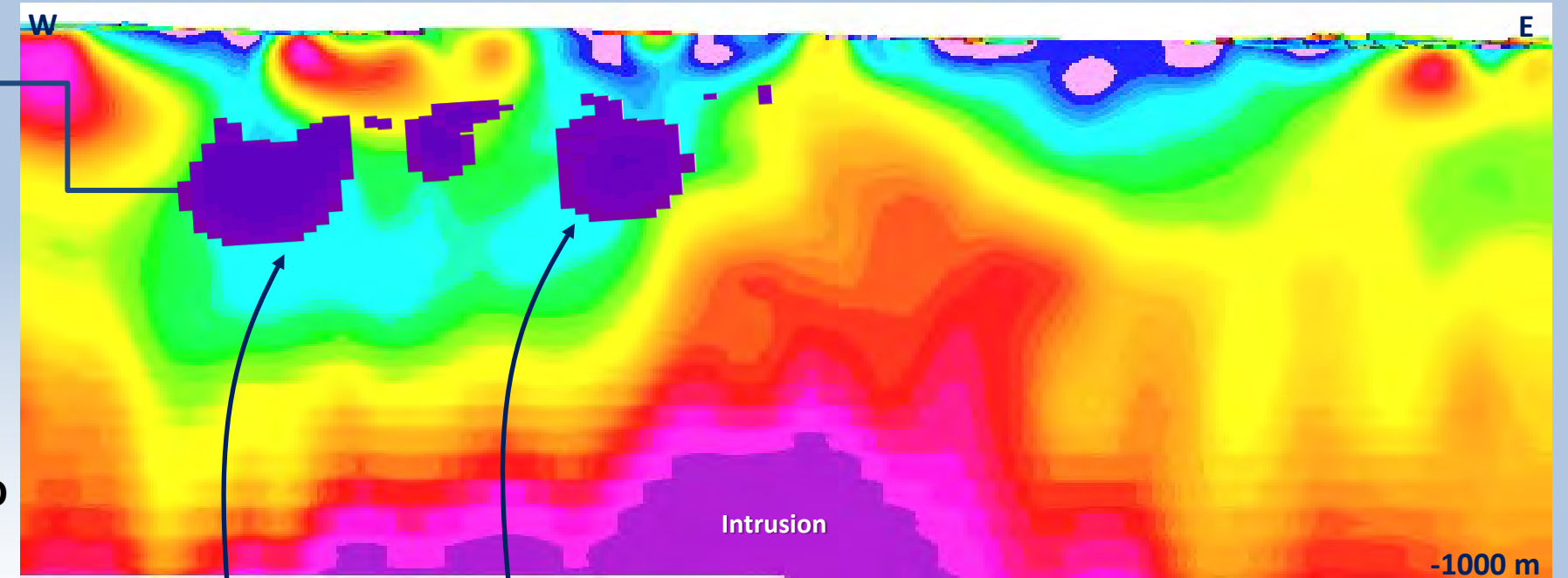
- Good spatial correlation between IP targets and magnetic features
- But slight discrepancy on depth



# IP - MAGNETICS CORRELATION

IP targets from 3D inversion

East-West section generated along line 5,226,950N from 3D magnetic inversion model



Conquest Fault Zone

1<sup>st</sup> Vertical derivative of total magnetic intensity

