



# Evening Star: An Intact Copper-Gold Porphyry System

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# Geology of Evening Star

The Evening Star property comprises multiple Cretaceous intrusions:

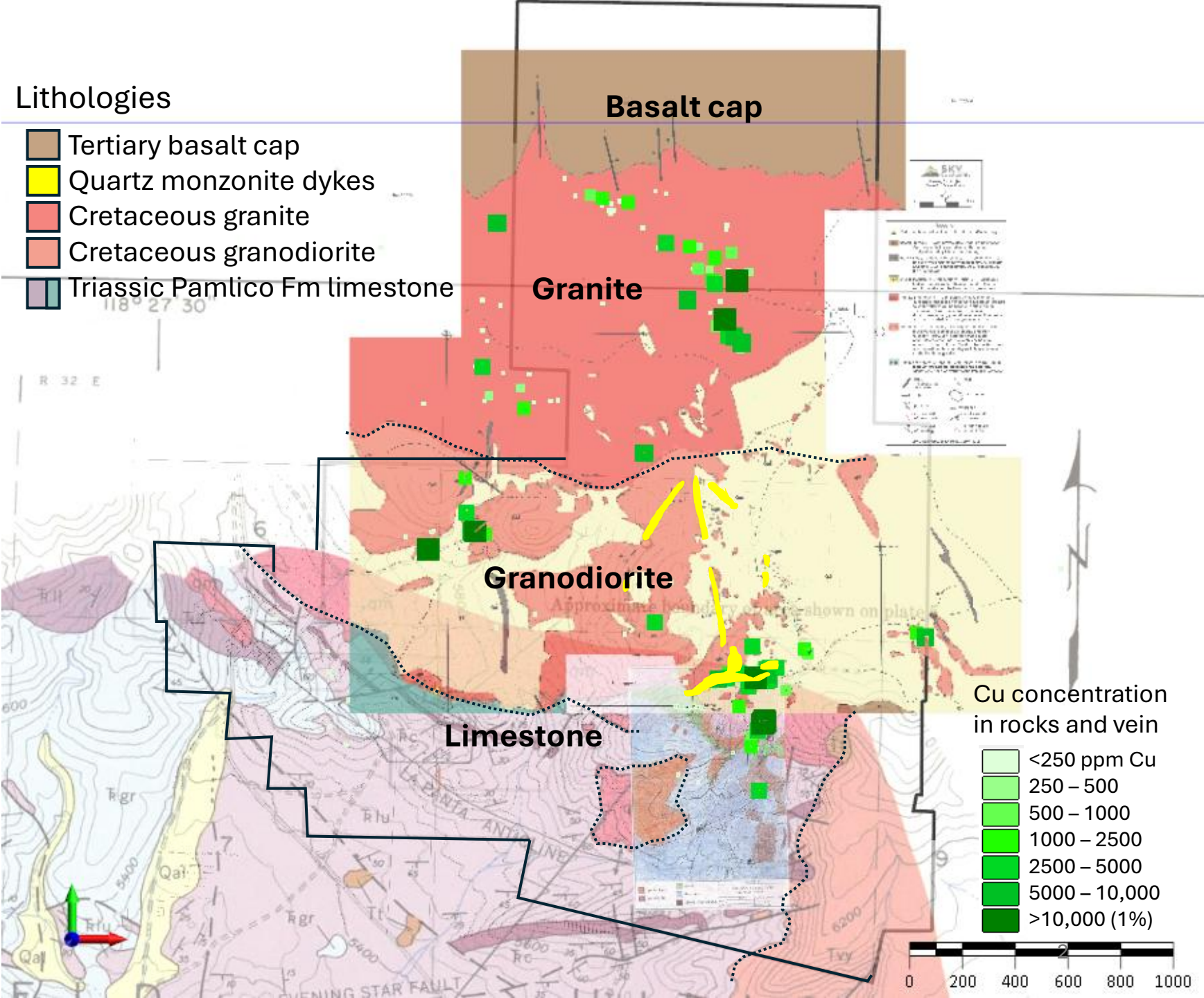
- Granite in the north.
- Granodiorite in the middle.

Quartz monzonite dykes cut the granodiorite (yellow).

To the south are folded limestone rocks.

On the north end are Tertiary basaltic flows capping the hills.

Green squares show copper concentration in rocks.



# Magnetic Survey Data Results

The granite in the north is non-magnetic (blue) compared with the granodiorite in the south (red).

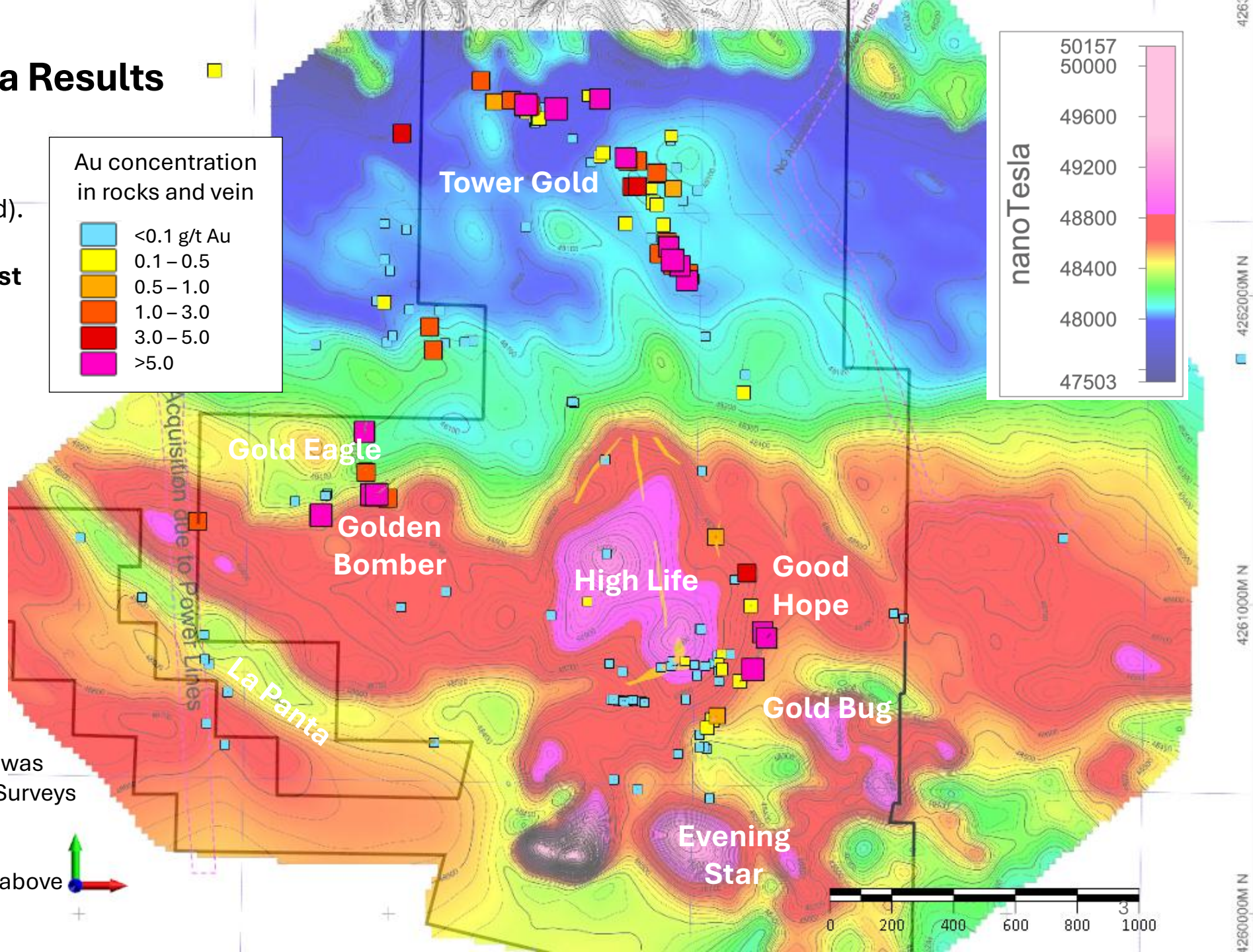
Tower Gold has **strong northwest trending magnetic lows**.

At High Life, a **discrete large positive magnetic anomaly** stands out from background granodiorite.

In the South, within the limestones at the **contact with the granodiorite**, there are **magnetic anomalies** that could be mineralized skarns.

The drone-supported magnetic survey was flown over the property, by MWH Geo-Surveys from Reno, for a total of 195 line kms.

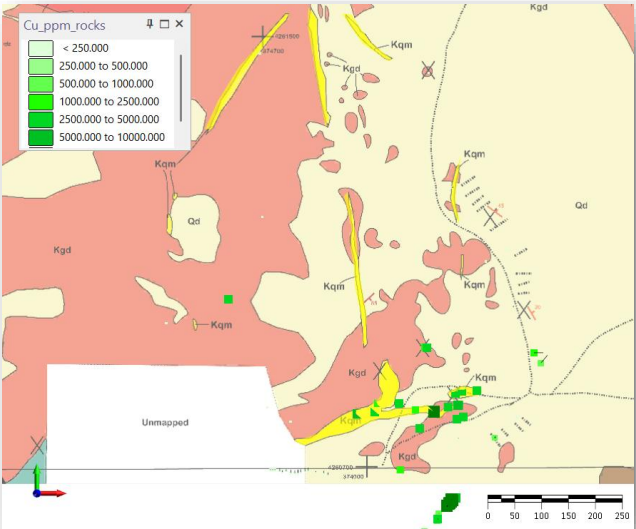
Survey elevation was about 25 meters above ground and line spacing at 50m.



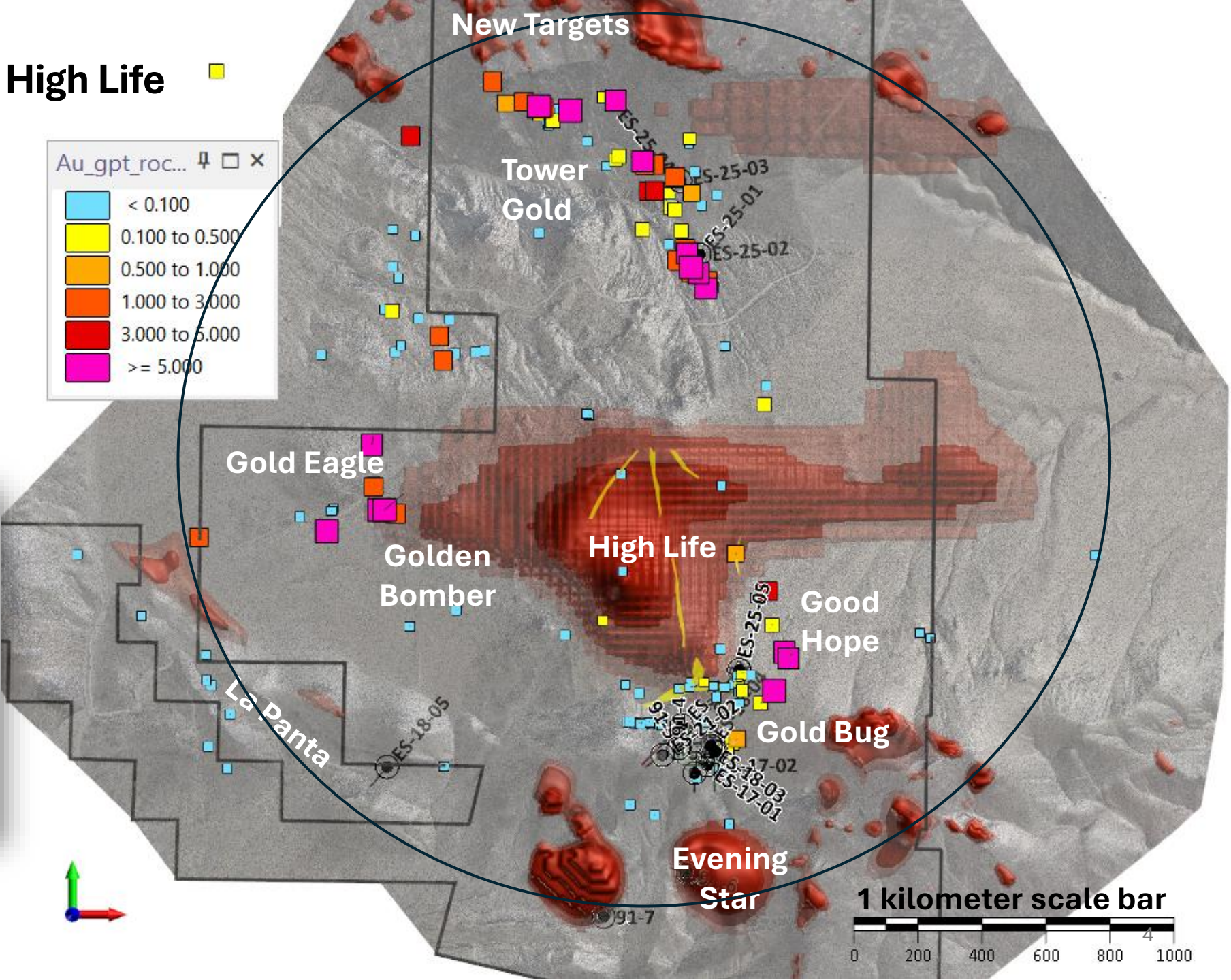
# Magnetic Anomaly at High Life

Following inversion of the magnetic data, the resulting magnetic iso-shells display a **large, strongly-magnetic, single anomaly** at High Life,

Surrounding High Life, in a **3 km ring**, are scattered smaller positive magnetic anomalies.

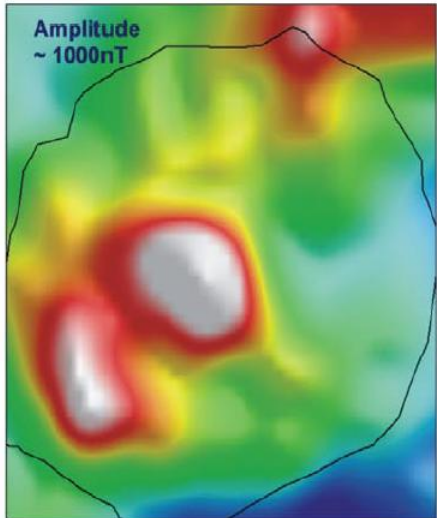


The quartz monzonite dykes (yellow) occur directly over top of the High Life positive magnetic anomaly.

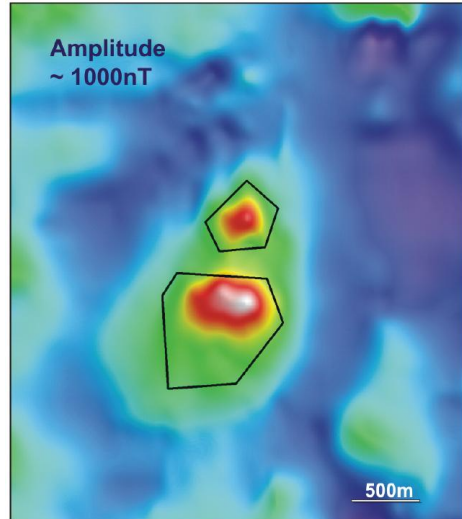


# Examples of Magnetic Survey Results of Cu-Au Porphyry Deposits

A discrete positive magnetic anomaly is associated with the potassic core of a porphyry copper system.



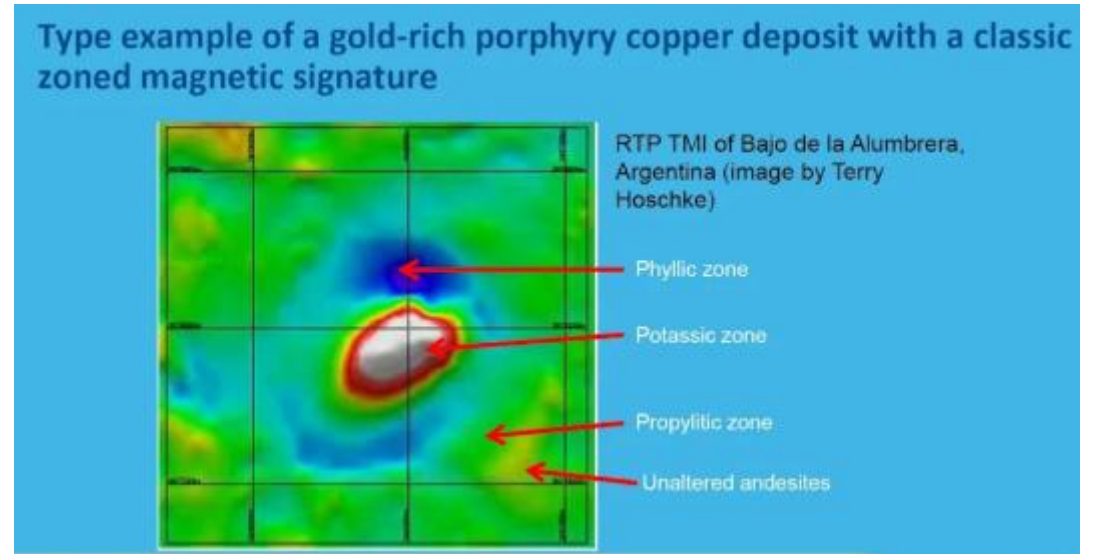
Batu Hijau large porphyry gold copper deposit Indonesia, Newmont in 1993 found discrete magnetic anomaly associated with the potassic core.



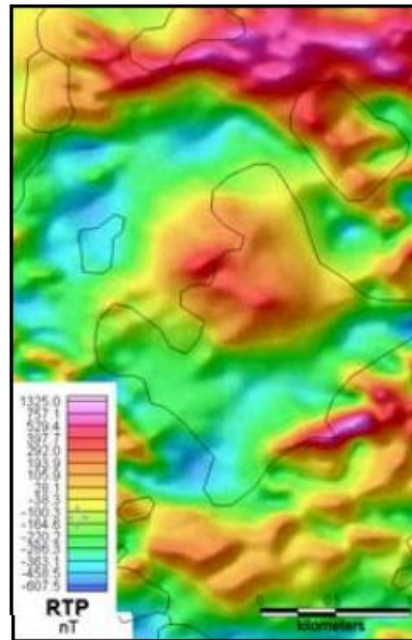
Elang, a large Cu-Au porphyry deposit 70km east of Batu Hijau, Indonesia. Elang shows up as a discrete magnetic high of about 700 nT.

Howe and Kroll (2010): *The Geophysical Response of the Tupinda Cu-Au-Mo Porphyry Prospect, Tabar Islands, Papua New Guinea, ASEG 2010-Sydney, Australia, 5pp.*

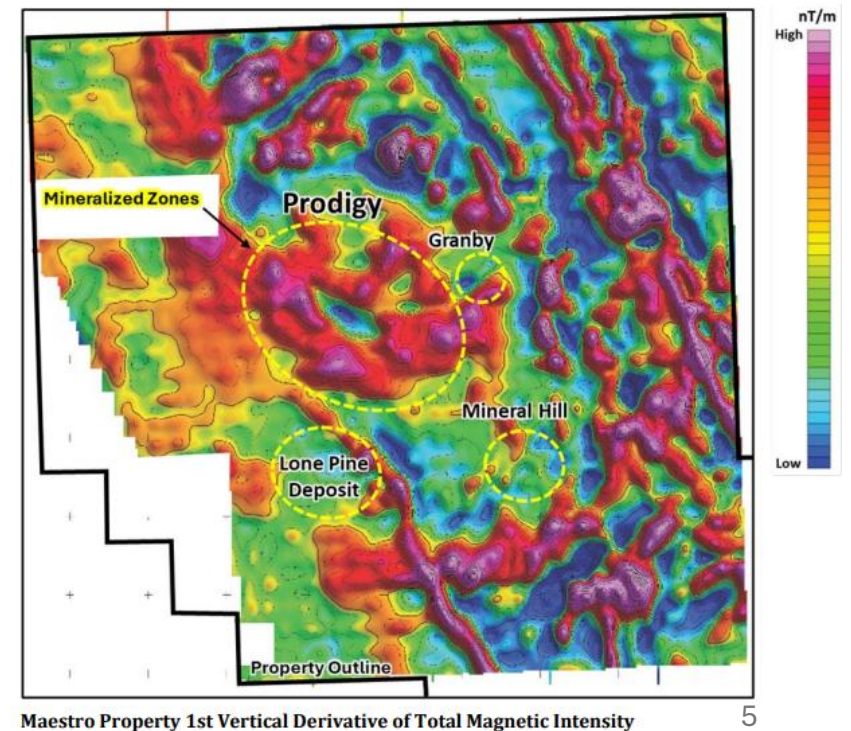
Hoschke (2008): *Geophysical signatures of copper-gold porphyry and epithermal gold deposits, Arizona Geological Society Digest 22, 16pp.*



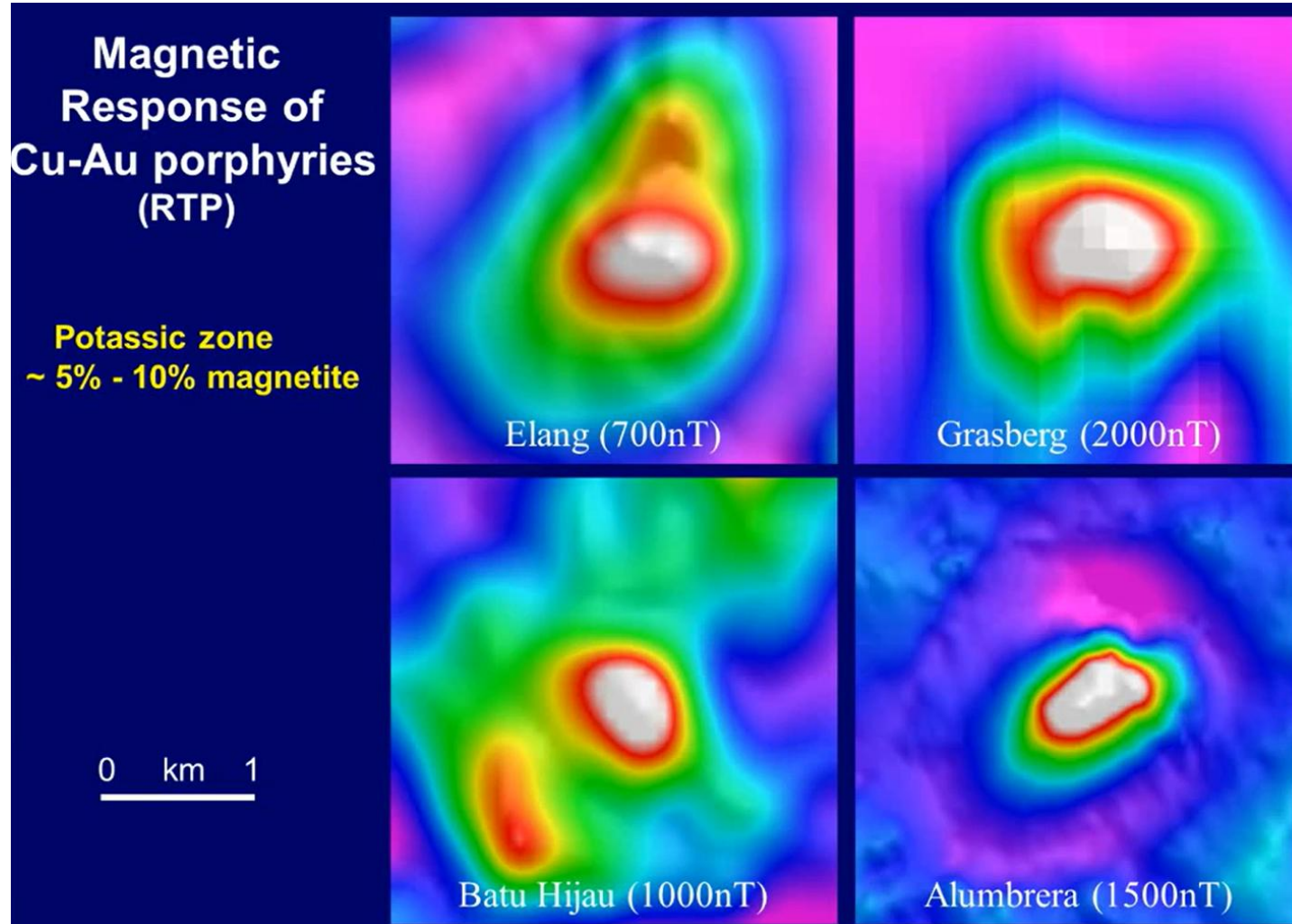
Zoom out to see the ring!



Tupinda Cu-Au-Mo Tabar islands, central sub-circular magnetic low.



# Examples of Magnetic Survey Results of Cu-Au Porphyry Deposits

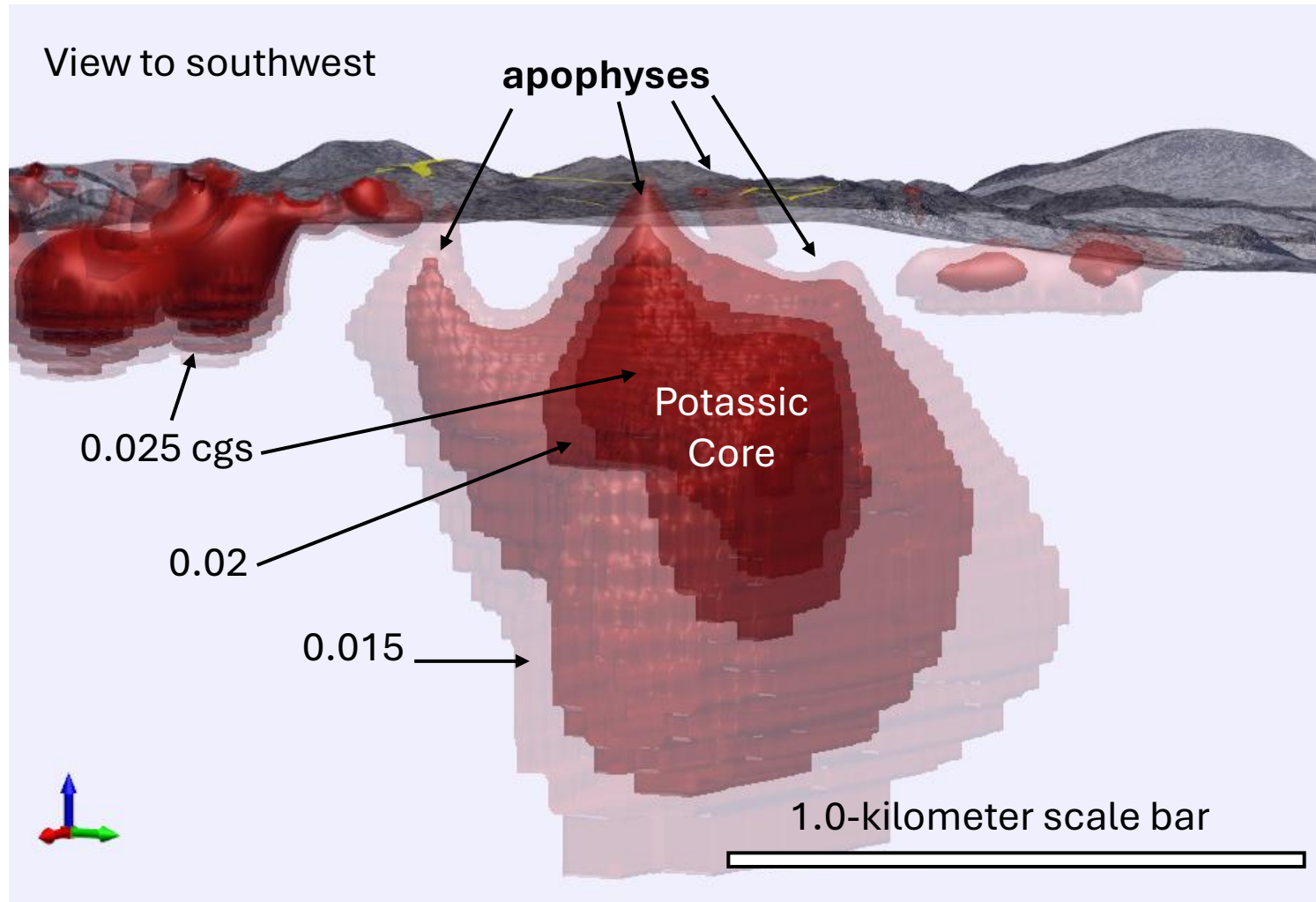


Why is the magnetic anomaly considered to be the potassic core of a Cu-Au porphyry system?

The **potassic alteration zone** associated with oxidized, magnetic felsic intrusions is **often magnetite rich**. This is **commonly observed for Au-rich porphyry copper systems** (Sillitoe, 1979)

The **magnetic high** is the **thermal magmatic core-not necessarily the place** of Cu-Au mineralization.

# Magnetic Inversion Anomaly at High Life



The shape of the magnetic isoshell at High Life suggests a **deeply-rooted intrusion with apophyses reaching to surface.**

In Cu-Au porphyry systems, volatiles and **metals are concentrated at the cooler apophysis** or finger.

*“Explorationists should seek to identify buried intrusion apophyses as the most favoured targets.”*

Corbett, 2009 Anatomy of Porphyry

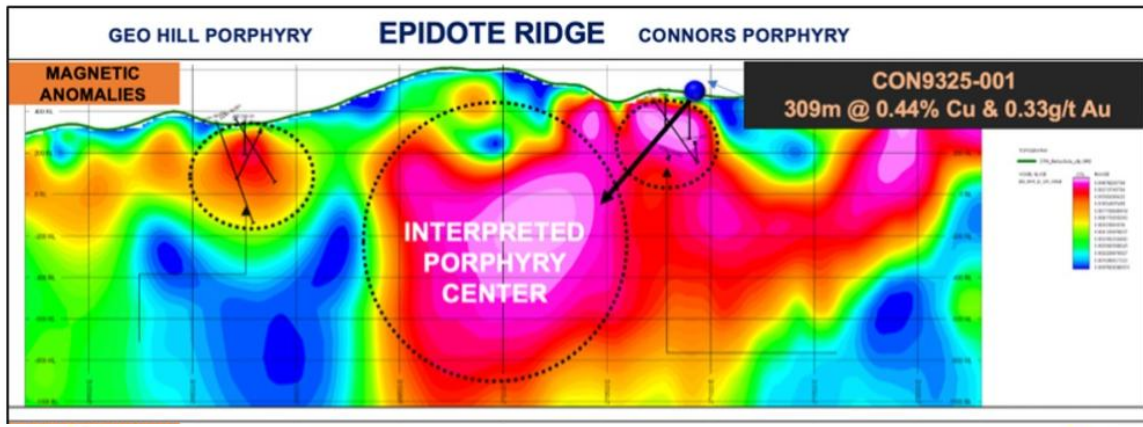
The High Life magnetic inversion isoshells have **significant values ranging from 0.015 to 0.025 cgs.**

For comparison:

- Isoshell values of Mt Milligan (BC) potassic core are 0.02 to 0.05 cgs

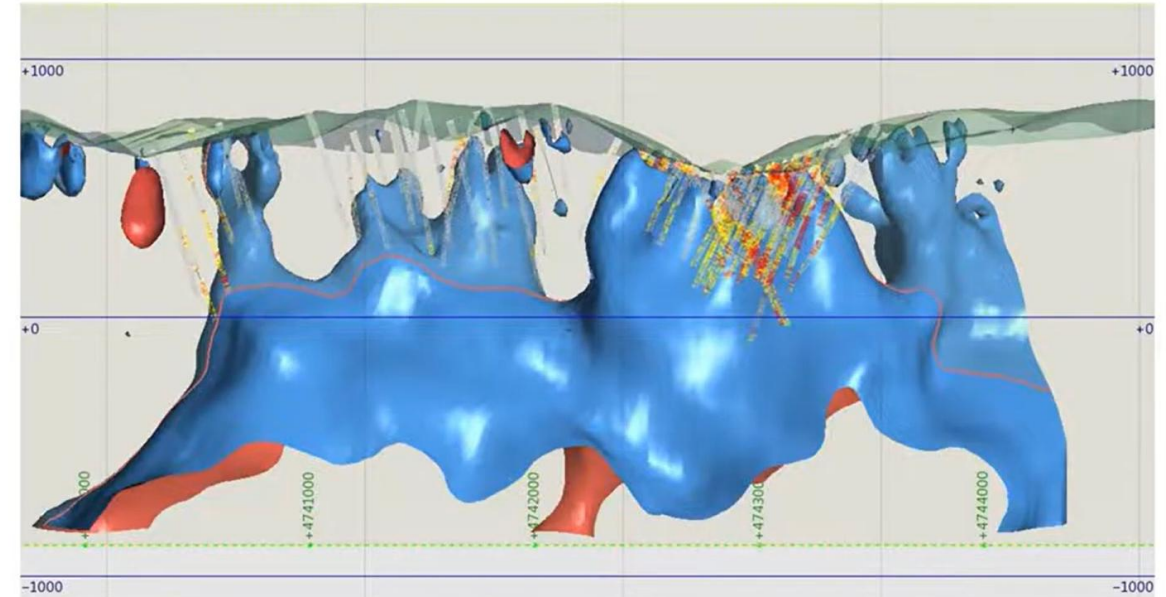
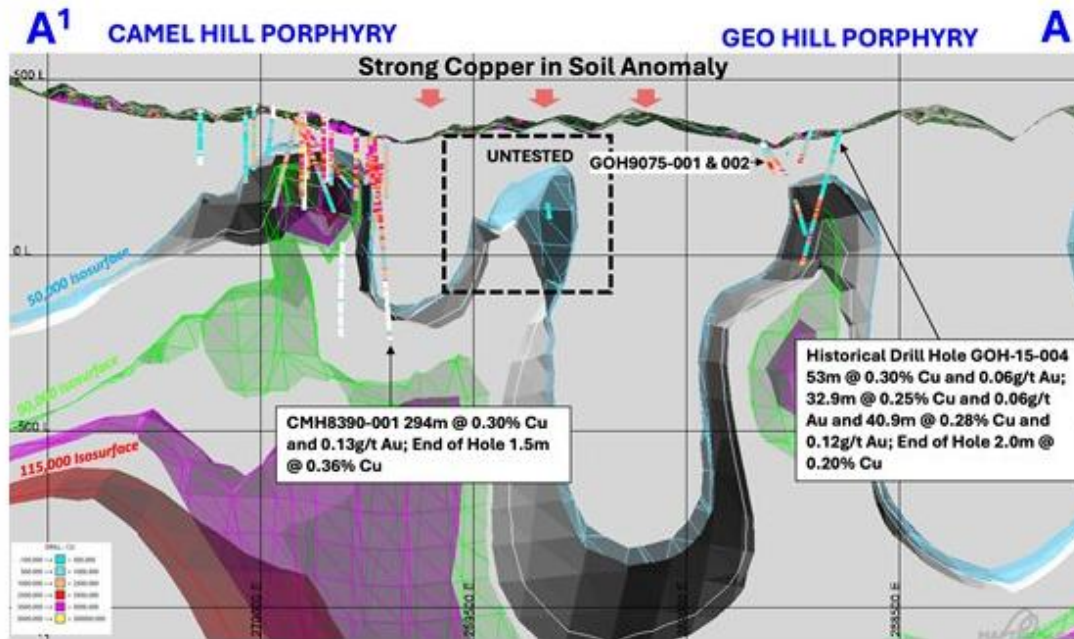
*From Li and Oldenburg, 1996, Inversion of geophysical data over a copper-gold porphyry deposit: a case history for Mt Milligan, Geophysics, Vol. 62, No 5, pp 1419-1431.*

# Examples Magnetic Inversion – Cu-Au Porphyry Centers with Apophyses



Cu-Au Mineralization is in the apophyses, not in the main magnetic body.

Magnetic inversion images the subsurface batholith to the porphyry Cu centers

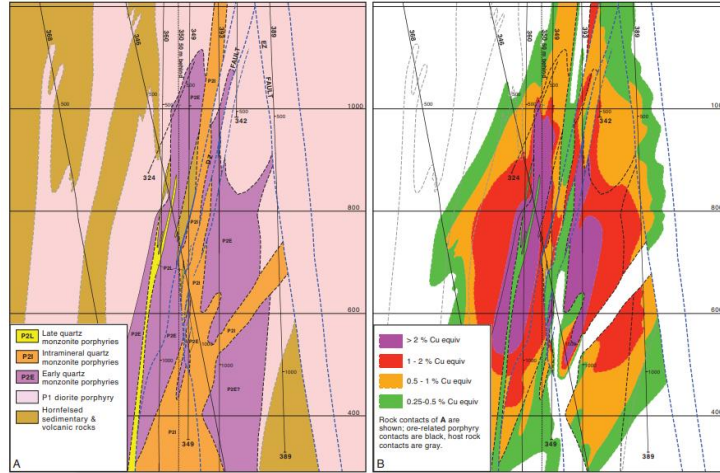
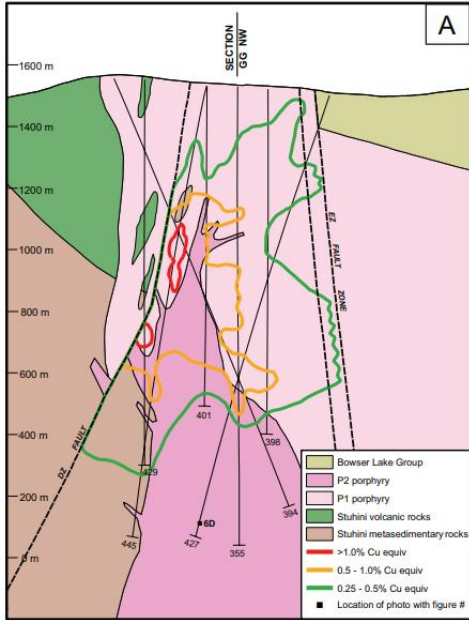


- Three porphyry centers associated with dike swarms emanating from underlying diorite, Tulare district, southern Serbia-image of 3D magnetic inversion model-isosurface not defined.

Image courtesy of Dunav Resources, 2013

From Dick Tosdal Economic Geology & Geophysics Conference Videos 2018 presentation on porphyry copper systems.

C3 Metals (TSX-V: CCCM) **drilling apophyses** at Bellas Gate. In 2025-entered into an earn-in agreement with Freeport-McMoran.



Red Christ looking east-northeast. CuEq grade zones.  
The highest Cu grades sit at the apex of the porphyry intrusion (left).  
Note the late quartz monzonite pophyries in yellow (right).

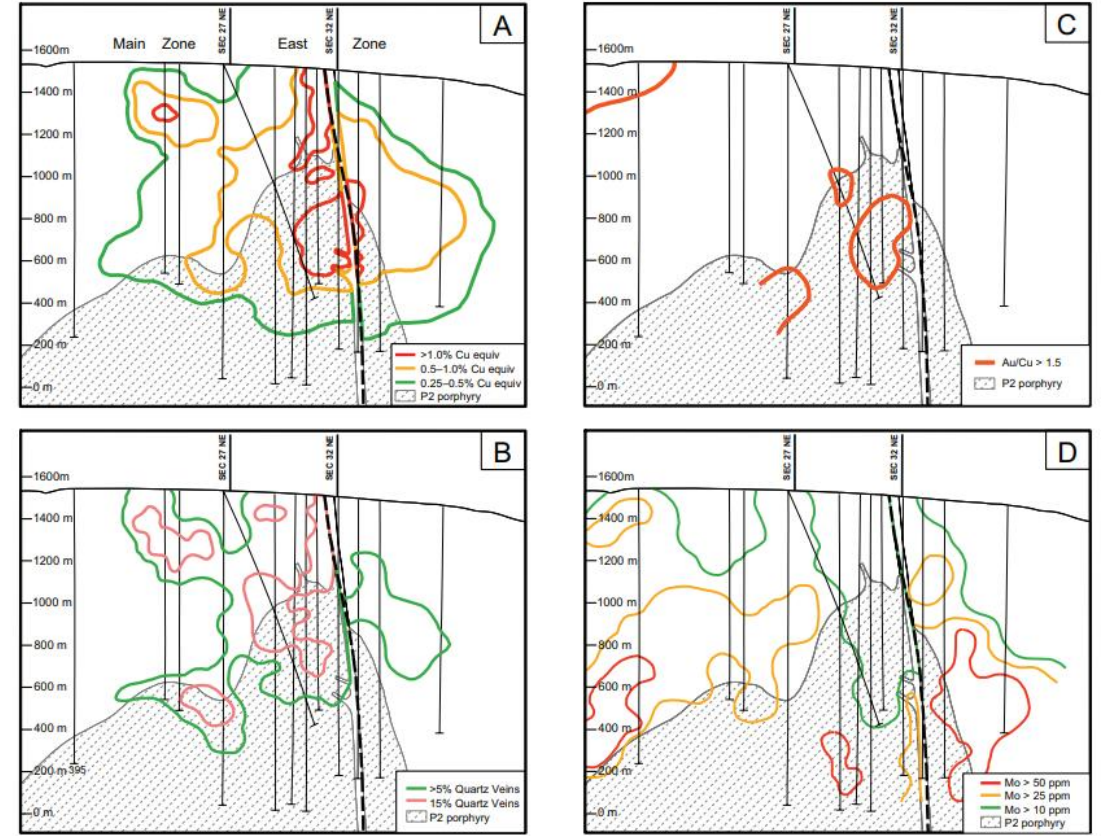


FIG. 16. West-southwest-east-northeast longitudinal section GG NW, looking north-northwest (location shown in Fig. 5). Bold dashed line on all four panels is the DZ fault zone. A. Cu equiv-grade zones (for comparison with (B), (C), and (D)). B. Abundance of quartz and/or sulfide veins of all types. C. Areas of Au/Cu ratios >1.5. D. Mo distribution.

# High Life IP Results - Resistivity

A strong resistivity high overlies the potassic core of High Life

Large (>1km diameter) resistivity high anomaly

Conductive outer ring

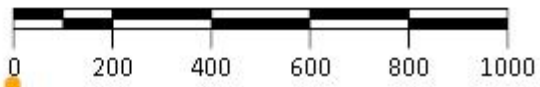
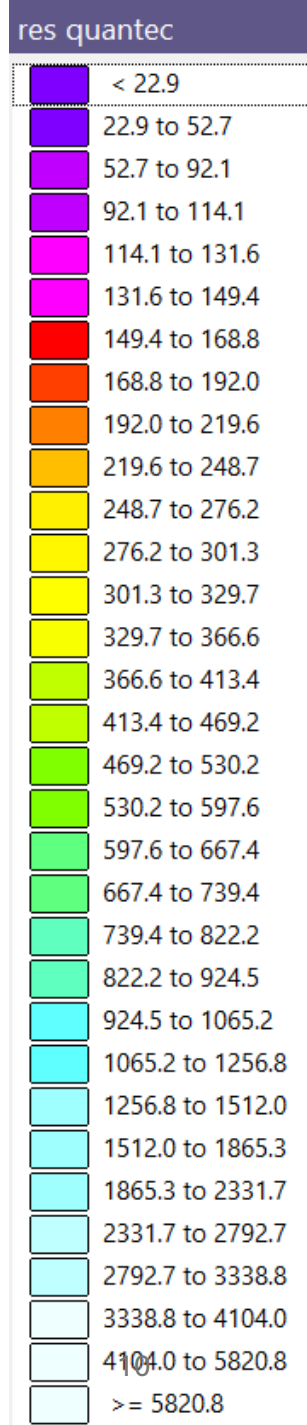
Potassic core

Phyllic

Phyllic

Phyllic

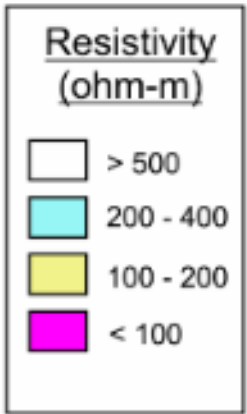
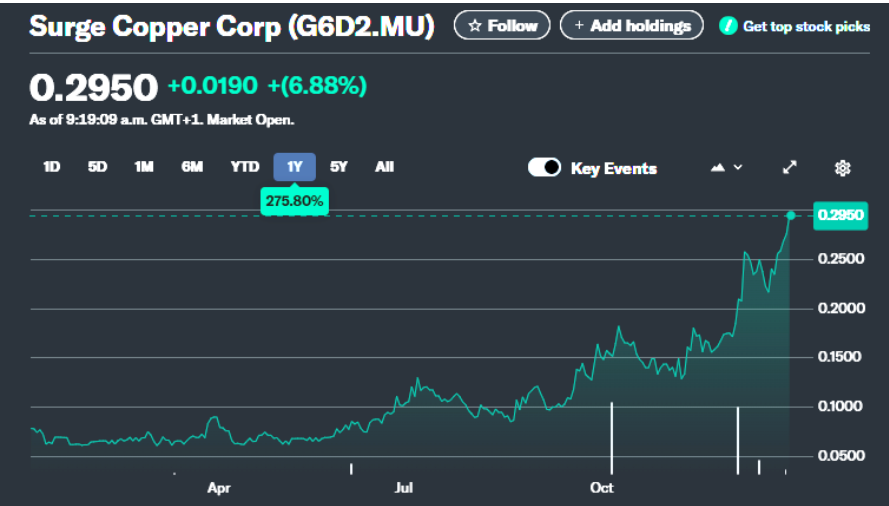
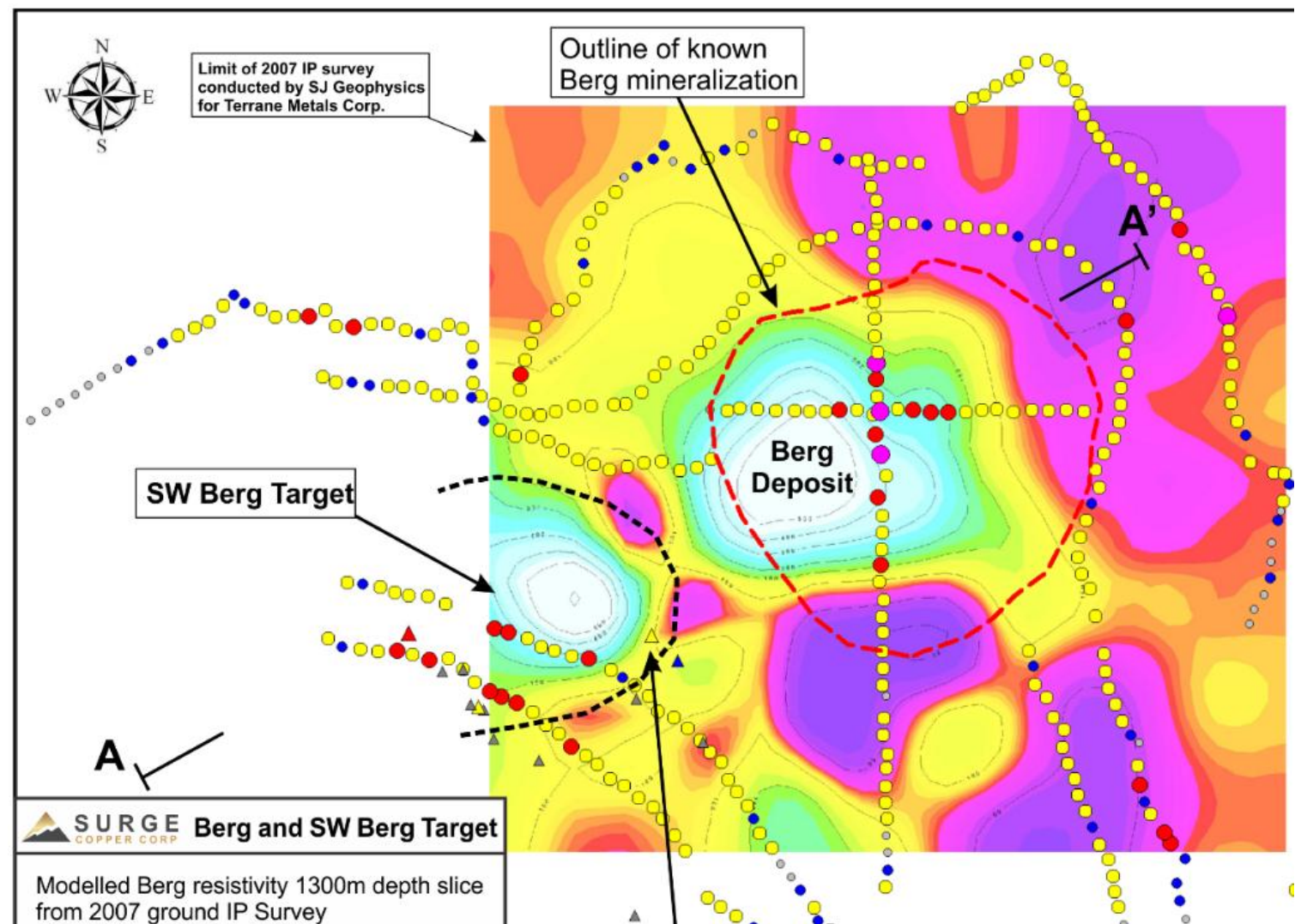
Resistivity  
in ohm-m



# Cu-Au Porphyry deposits IP Results

## - Resistivity

Example of Cu-Mo +/- Au porphyry system in British Columbia showing **large distinct resistivity high** overlying the deposit.

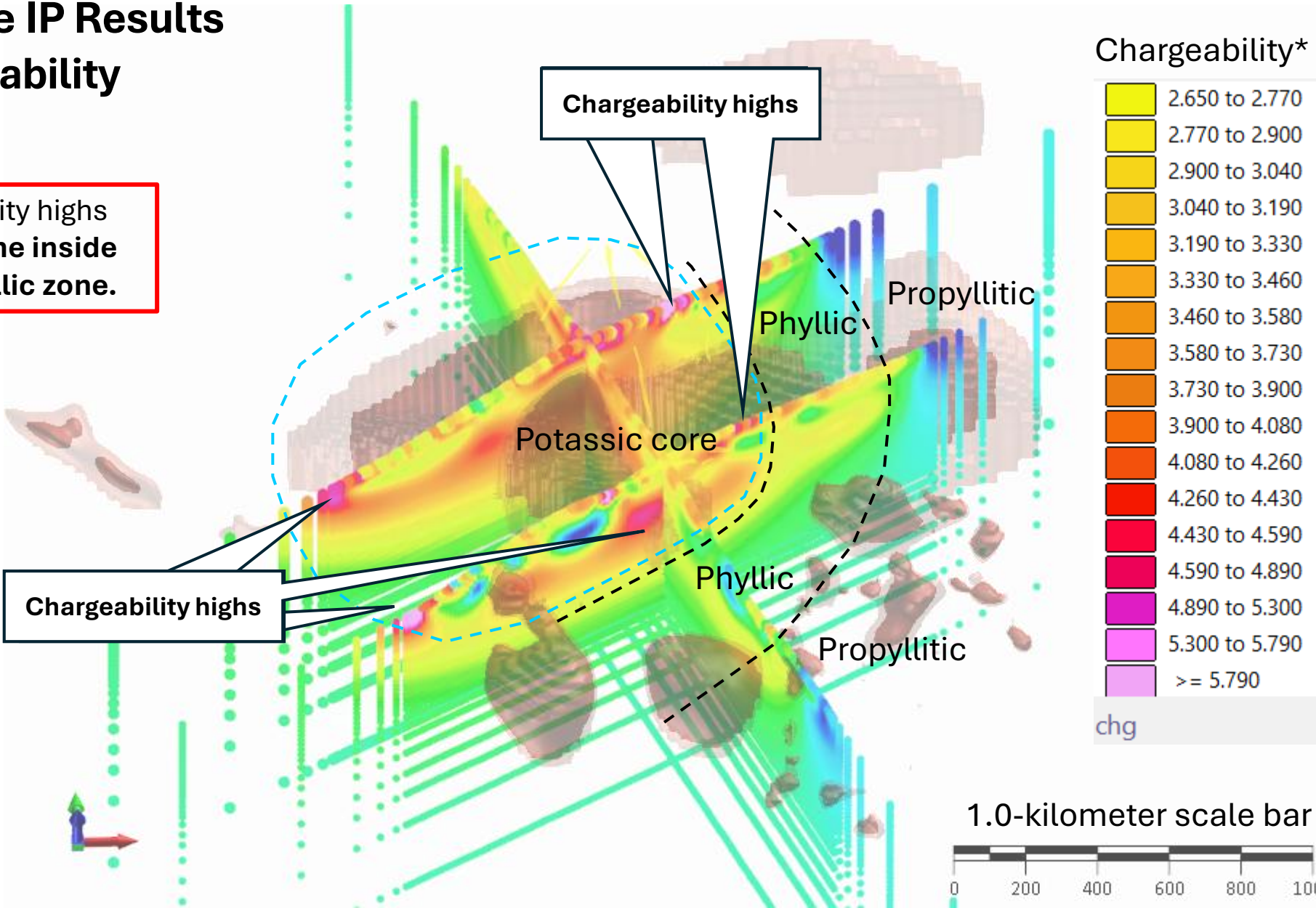


Surge Copper Corp in SW British Columbia has a copper porphyry at Berg that is now in PFS.

Note the distinct resistivity high is **surrounded by a ring of conductive high** (phyllic zone).

# High Life IP Results - Chargeability

Chargeability highs occur **on the inside of the Phyllic zone.**



\*The IP survey was run by Geophysique TMC from Quebec, and they use a different standard than the Newmont standard for electric current, as such these chargeability values are very likely underestimates of actual values.  
Personal communication with Jim Wright, senior geophysicist.

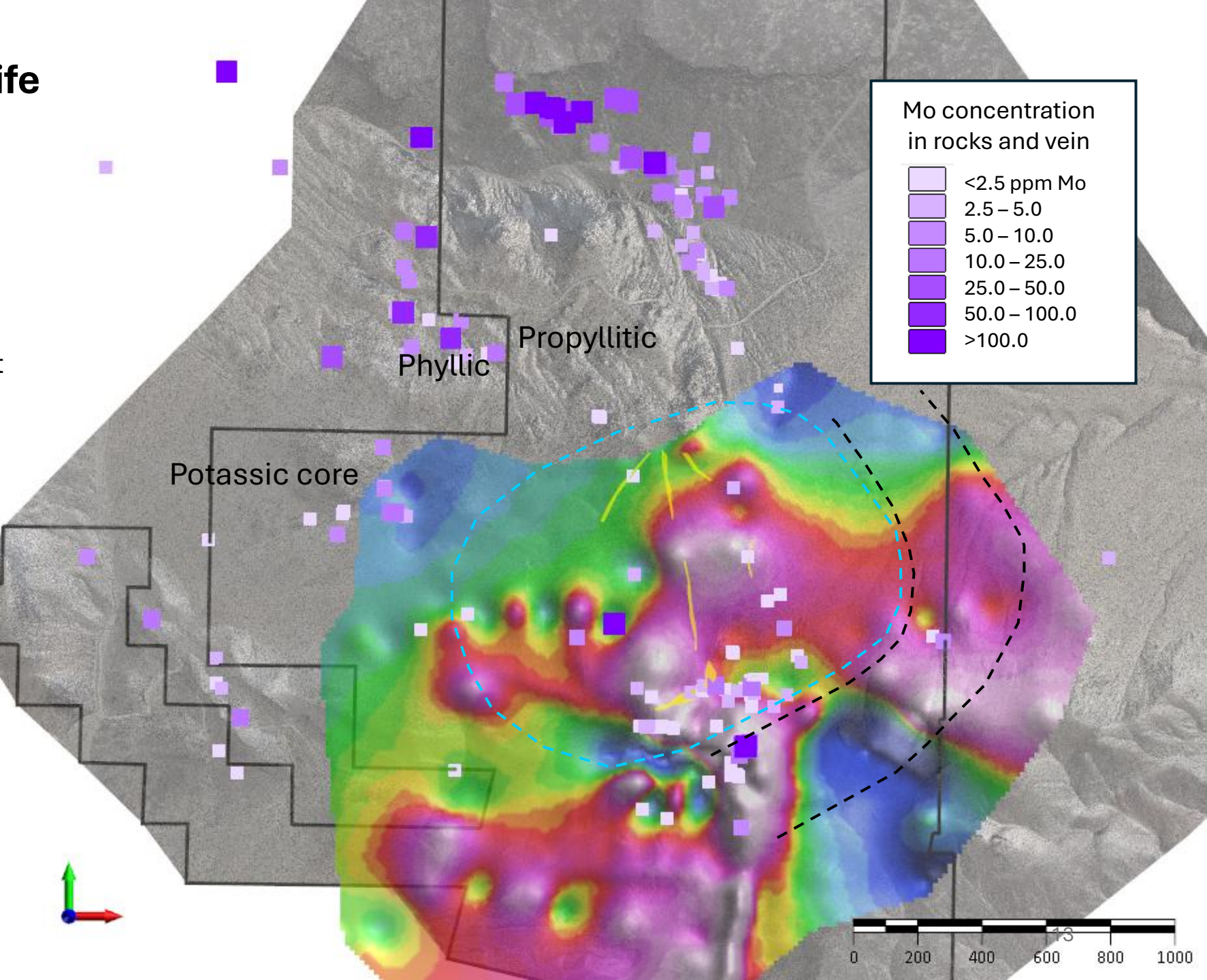
# Gravity Results for High Life

Evening Star property map shows Gravity Vertical Derivative (VD) and Molybdenum in rocks and veins sampled on the property.

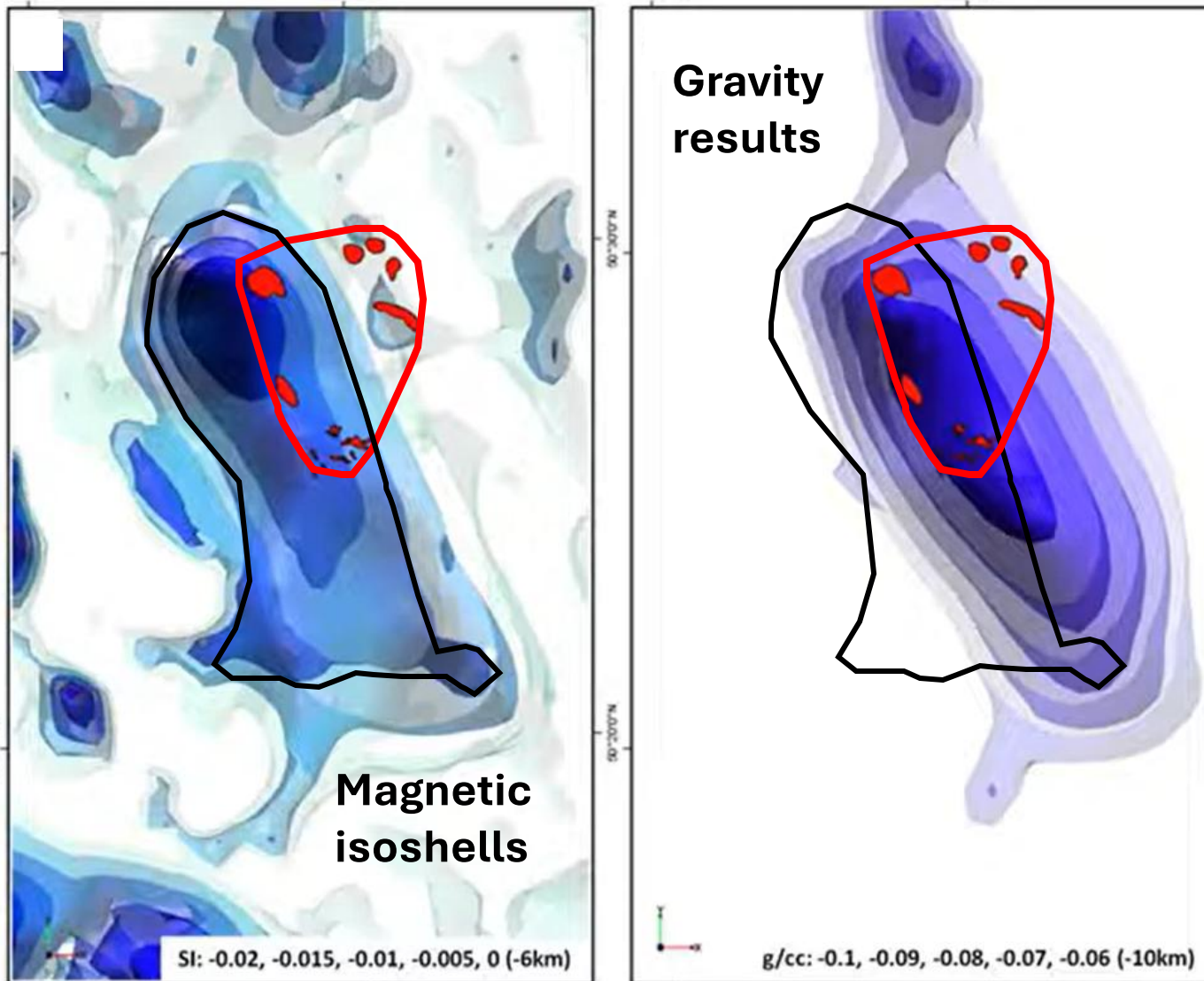
Strong gravity high anomalies occur at High Life, Gold Bug and Evening Star.

A gravity high indicates high density material, suggesting large volumes of metallic sulfides.

The 2020 Gravity survey by Magee geophysics covered large parts of High Life, Gold Bug and Evening Star.



# Gravity Results for Highland Valley Copper in BC

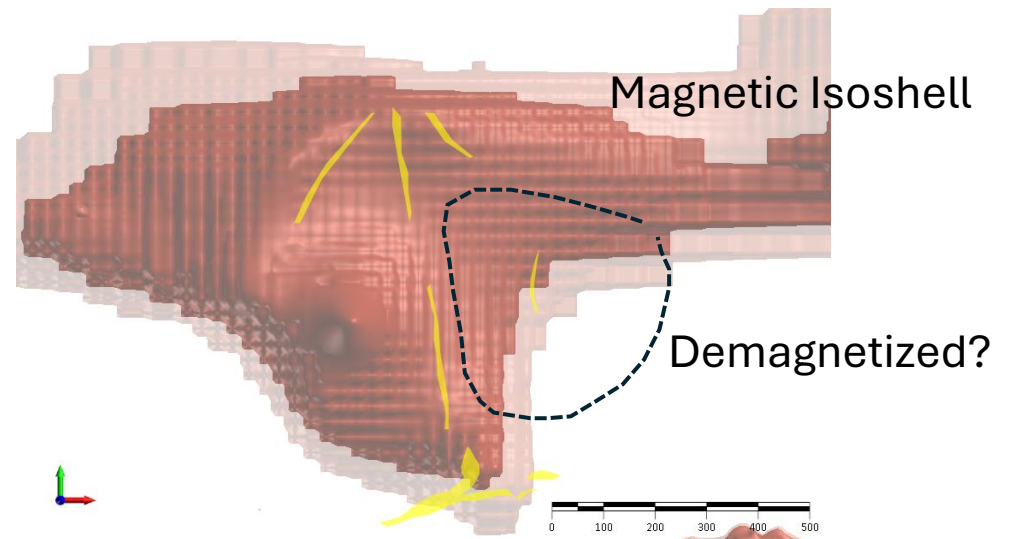
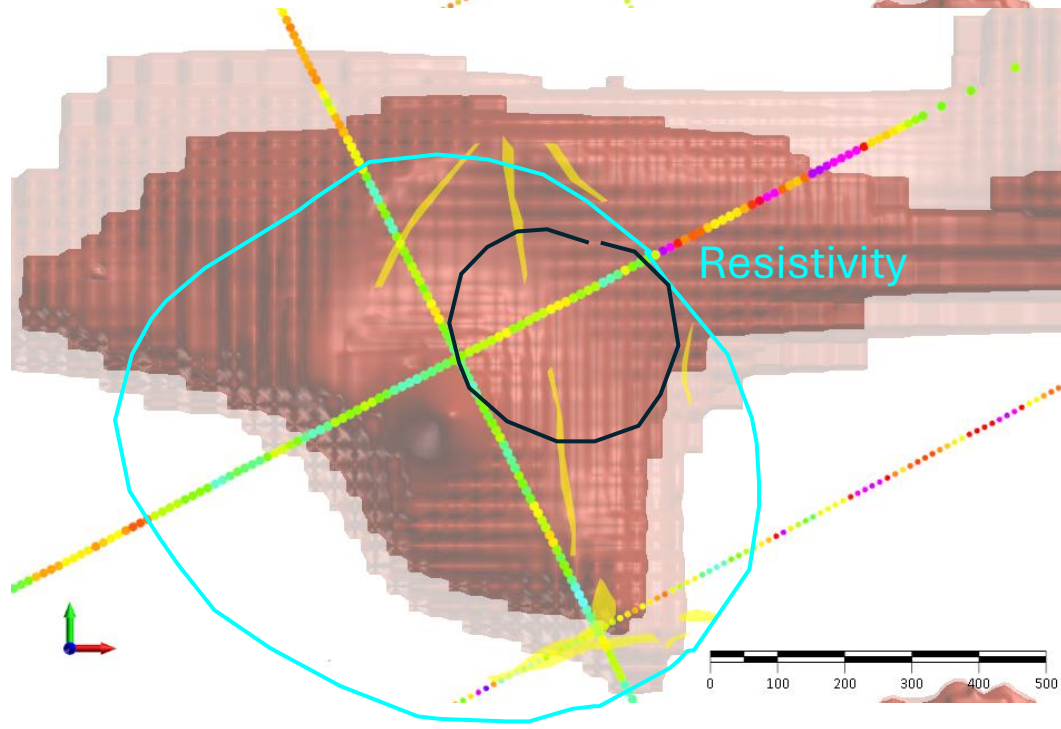
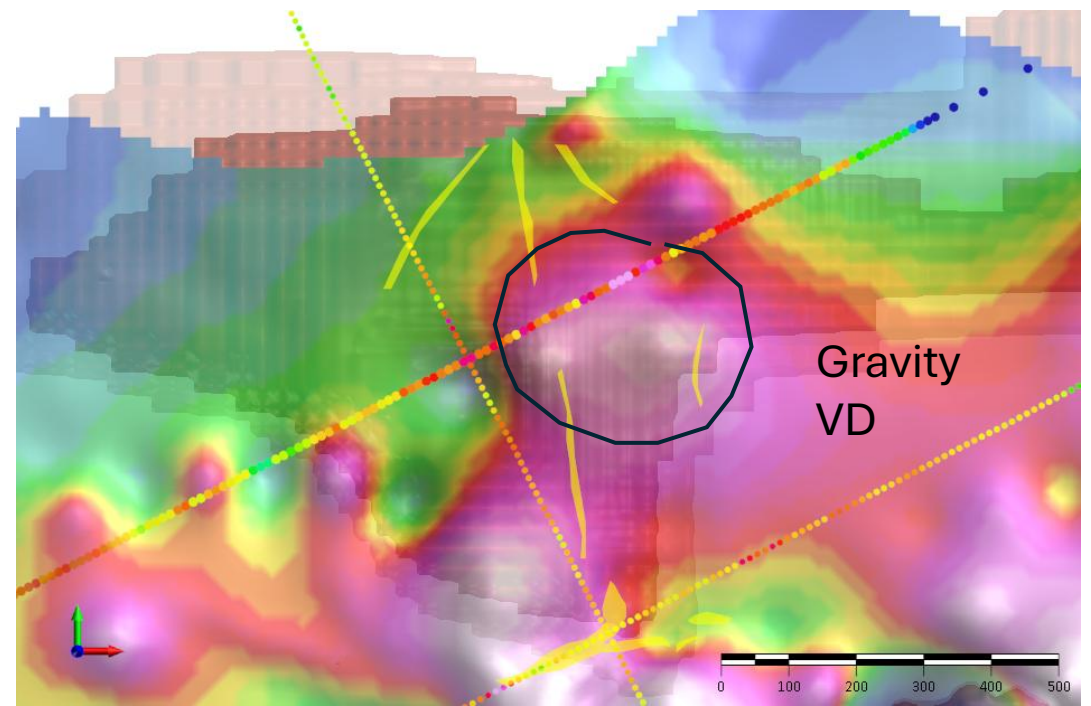
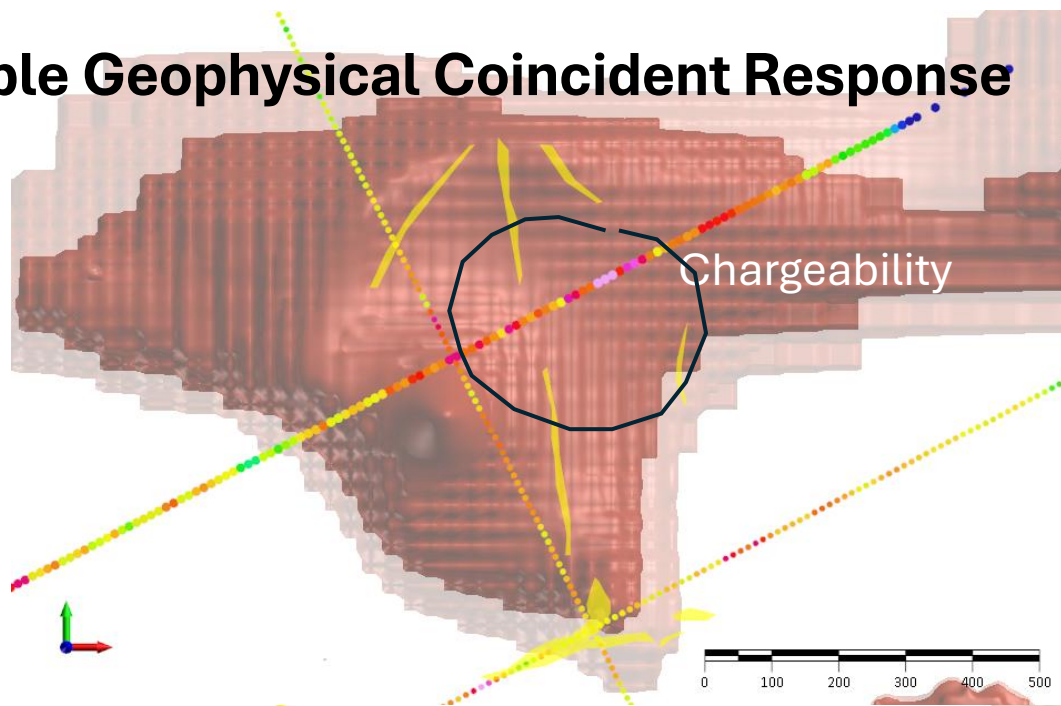


A large elongate intrusive body is defined by magnetic isoshells. A gravity high anomaly coincides with the location of the porphyry copper deposits (red).

Notice how **the HV deposits and the gravity anomaly sit on the flank of the magnetic high.**

*Byrne et al, 2019: Variability of outcrop magnetic susceptibility and its relationship to the porphyry Cu centers in the Highland Valley Copper district, Ore Geology Reviews, Vol 107, pp. 201-217.*

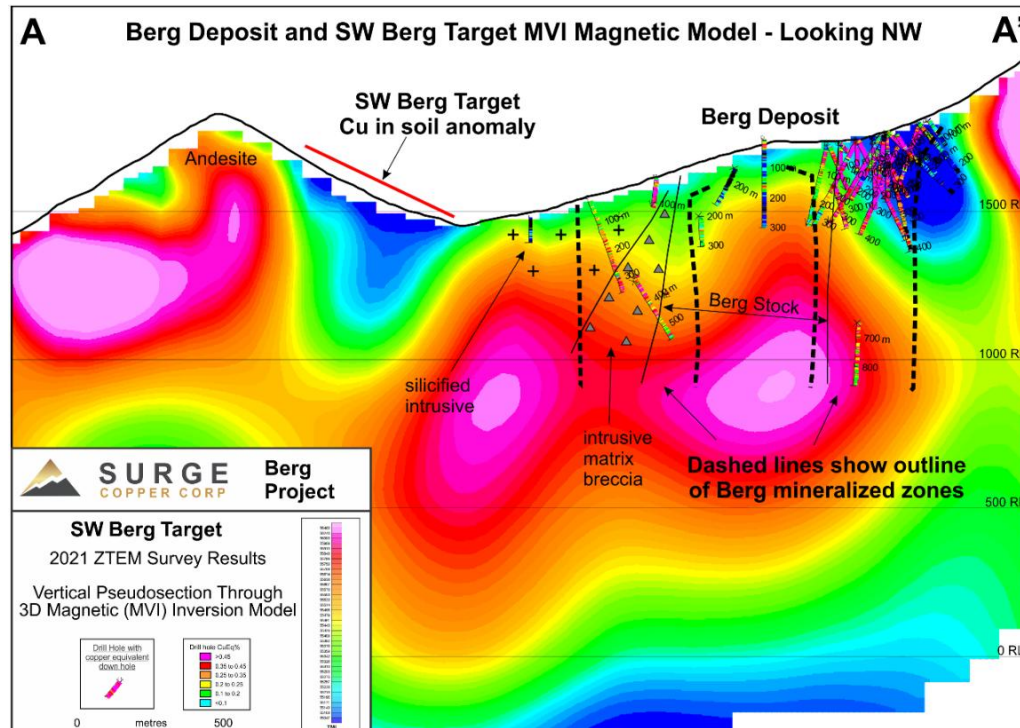
# Triple Geophysical Coincident Response



# Examples of Potassic Core Demagnetized by Mineralization

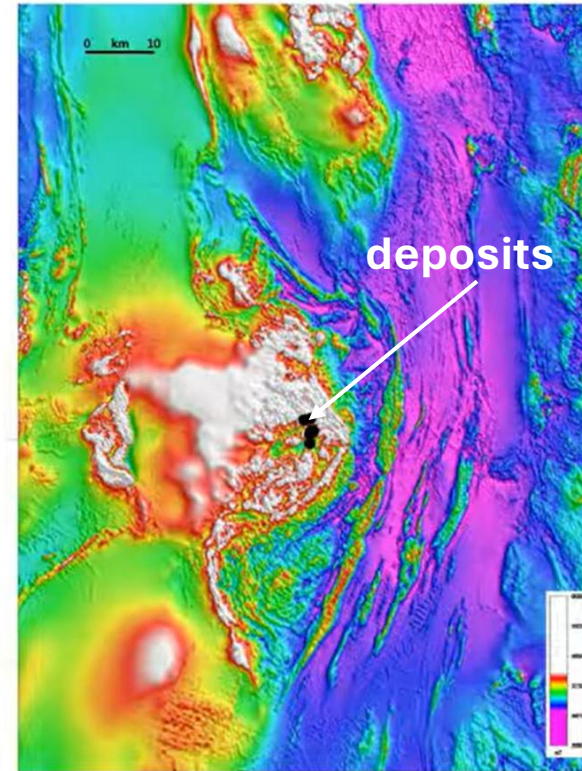
First the potassic core is formed, which is magnetite rich and gives a strong magnetic anomaly.

**Later**, hydrothermal fluids bearing Cu and Au **destroy the magnetite, creating a magnetic low.**



Drilling at Berg deposit is focused on the **magnetic destructive parts of the potassic core.**

## Northparkes, Australia-deposits associated with large magnetic (mafic body)



Large sub-circular high in the regional total magnetic intensity – RTP image correlates with a large plutonic complex.

Major pluton emplaced into deformed Ordovician volcanic sequence has deformed the north striking stratigraphy.

Multiple PCDs occur on flank in general area of magnetic lows.

Northparkes is a porphyry Cu-Au system.

## Examples of Potassic Core Demagnetized by Cu Mineralization

Highland Valley deposits fall within the magnetic low, directly west of the magnetic high of the potassic core.

Notice how the potassic core is not strongly altered but the mineralized zones are highly altered with white mica, sulphides and quartz.

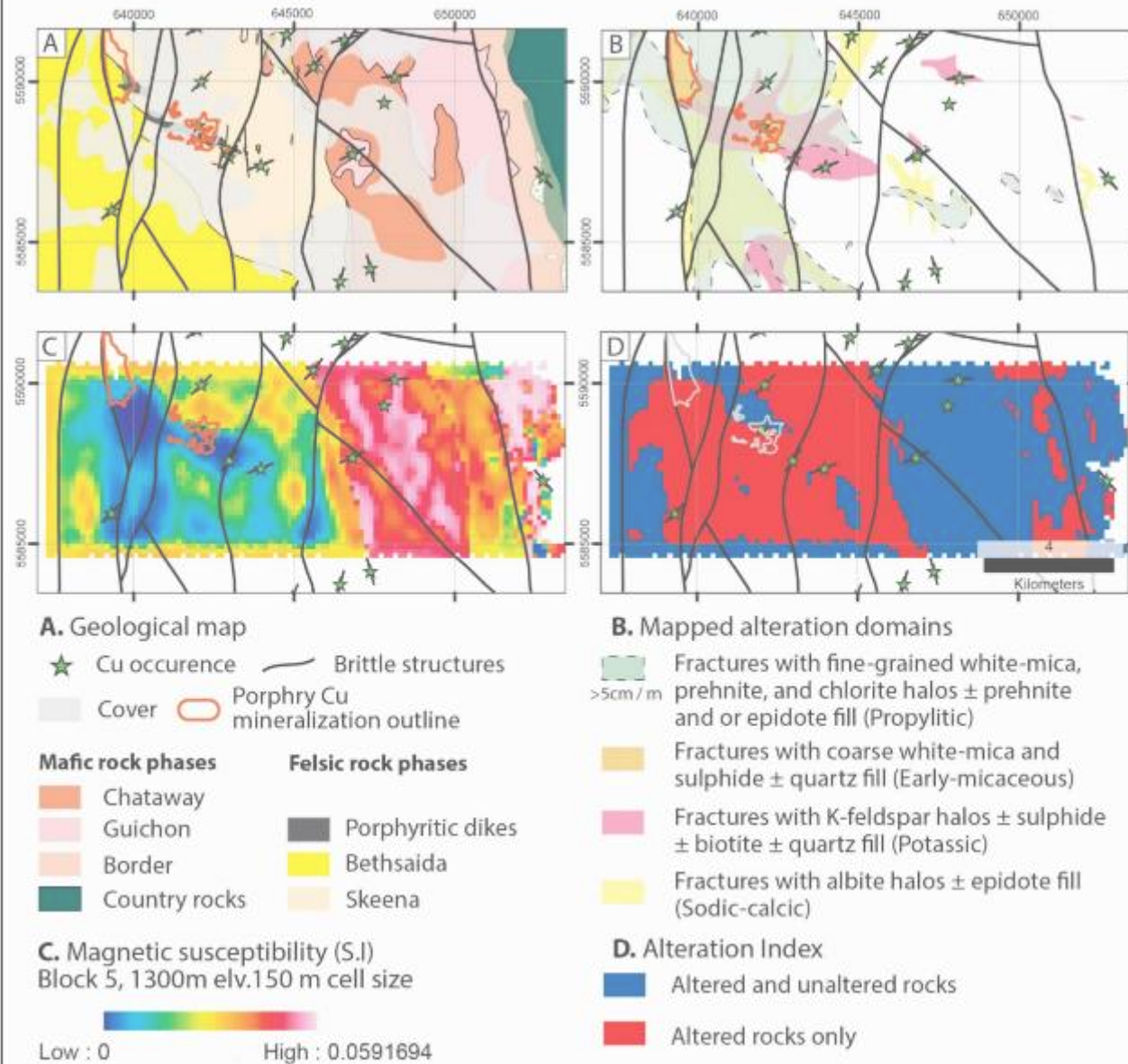


Figure 4: Block 5 area in the Guichon batholith. A. Lithology, structure, and cover in the block 5 area. Note in general rocks young from the eastern margin towards the center of the batholith. B. Mapped vein and alteration facies around the Lornex and Highmont porphyry Cu centers (assemblages are in parenthesis). C. Magnetic susceptibility response. D. Calculated alteration index.

Vallee et al, 2017: *Porphyry copper alteration imaging with aeromagnetic data at Highland Valley Copper, British Columbia, Canada, Extended abstract, Society of Exploration Geologists, Houston, TX, 5p.*

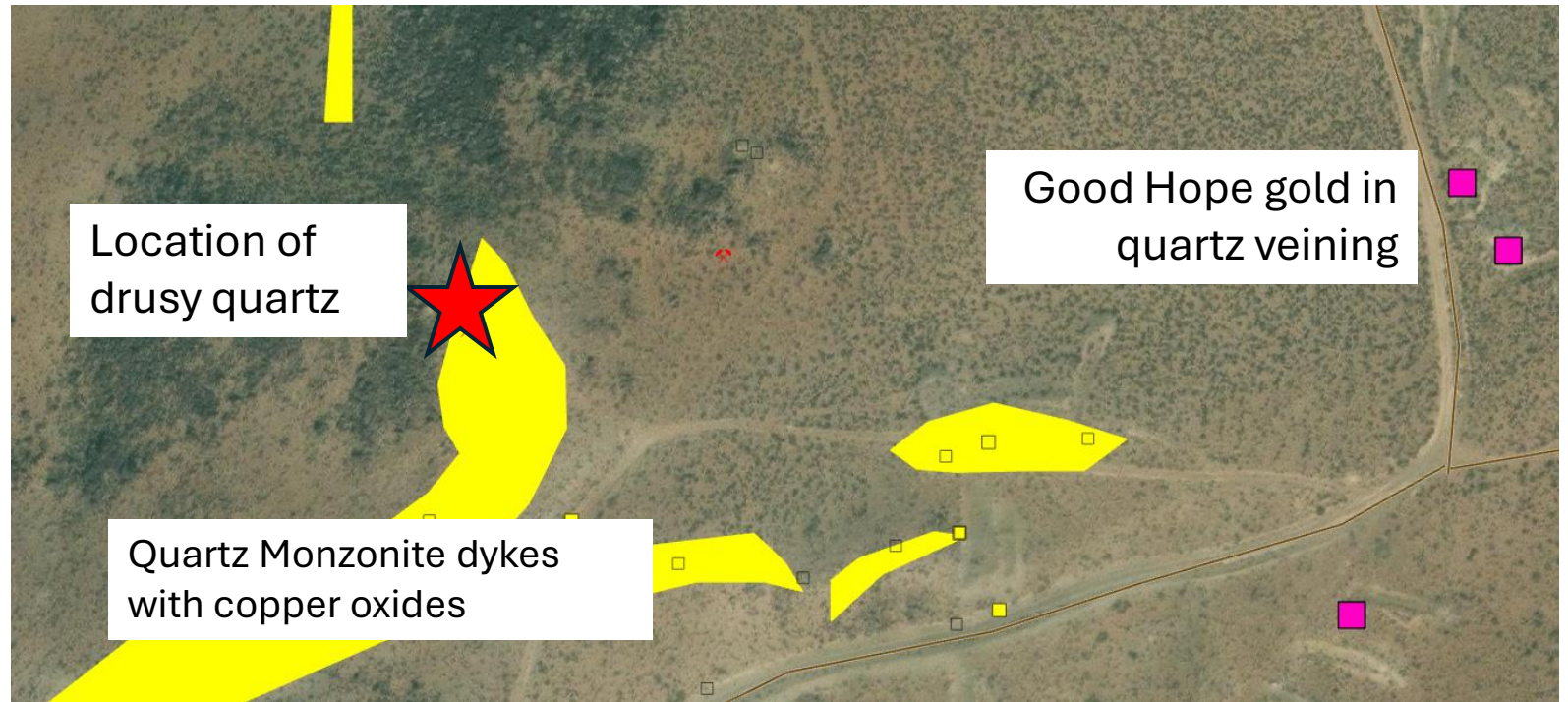
# High Life Boiling Zone

Drusy quartz veins with large quartz crystals-open space-brecciation, chalcedonic quartz strongly suggests a **boiling zone epithermal vein system above the Cu-Au porphyry cupula.**



Drusy quartz veins with feox.

374931E 4260880N at High Life



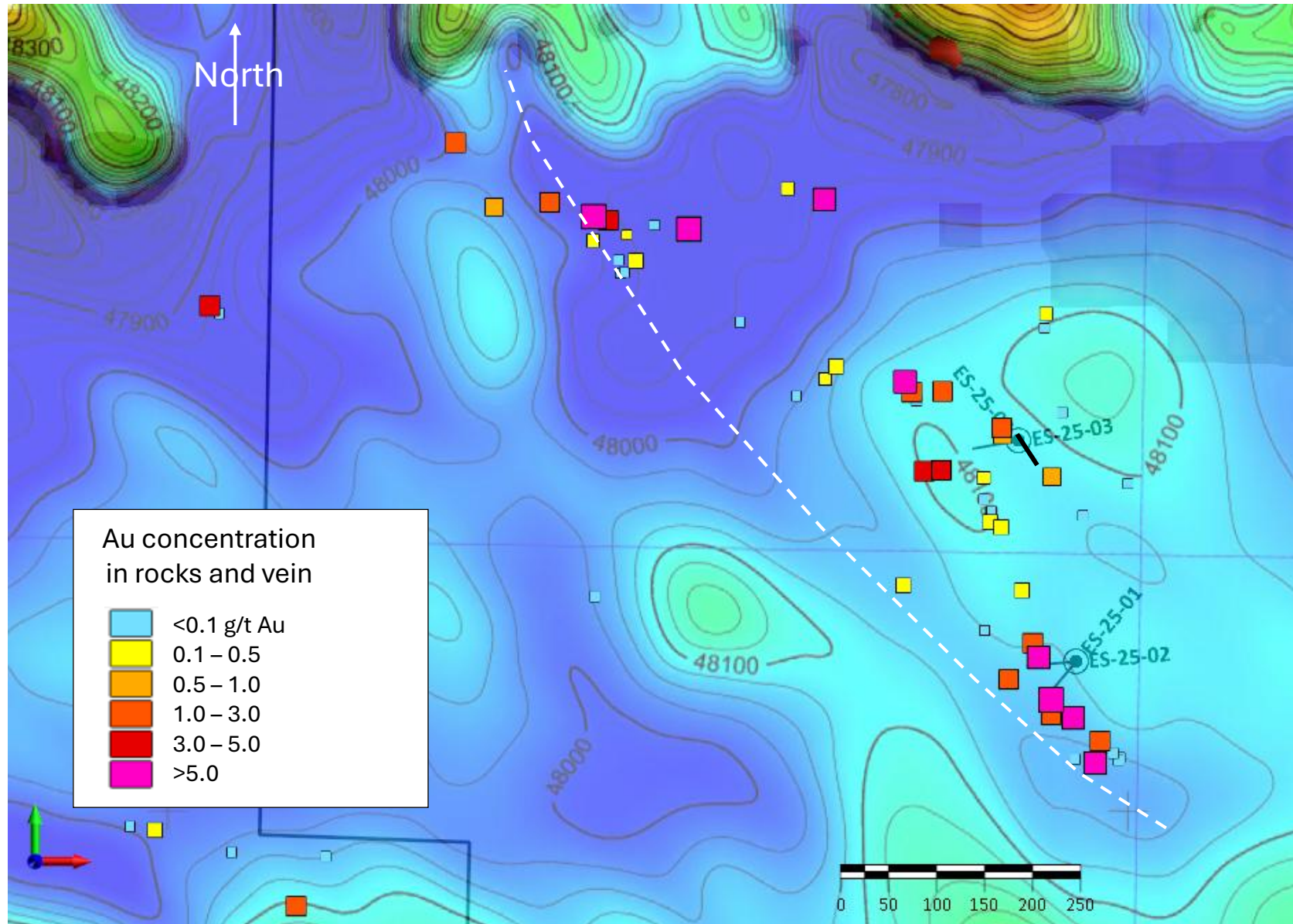
Drusy quartz veins with feox.



Chalcedonic quartz veins with feox.



# Tower Gold Prospective NW Trend



Results from magnetic survey show a **strong, linear, North-northwest-trending magnetic low** (dark blue) associated with the Tower Gold vein system.

Drill holes 1, 2, 3 and 4 did not intersect much gold, but they were distal to this promising structure.

Magnetic low NW structural corridor is a phyllic-altered, mag destructive, fluid pathway connecting Tower Gold to High Life Cu-Au porphyry.

This NW plumbing system is a worthy drill target. Propose mapping and sampling to investigate this 1.2 km linear magnetic low trend prior to drilling.

# Golden Bomber

## Gold Assay Results and 2025 Trench Location

*Claim boundary*

Golden Bomber comprises **multiple** high-grade narrow chalcedonic quartz veins with high copper values.

A **strong magnetic-destructive NW trend** is worthy of follow up by mapping and sampling prior to drilling.

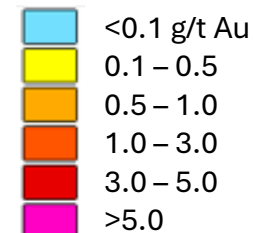
### 2025 trench location:

4.0 m of high-grade gold vein 15-20 cm strikes 320 and dips shallow.

Distinct magnetic low feature follows the strike of Golden Bomber quartz veins

Subparallel quartz vein 15cm wide, strike 320 and dip 46, sampled in 2018: **25.9 g/t Au**, 102 ppm Ag and 1.0% Cu

Au concentration  
in rocks and vein



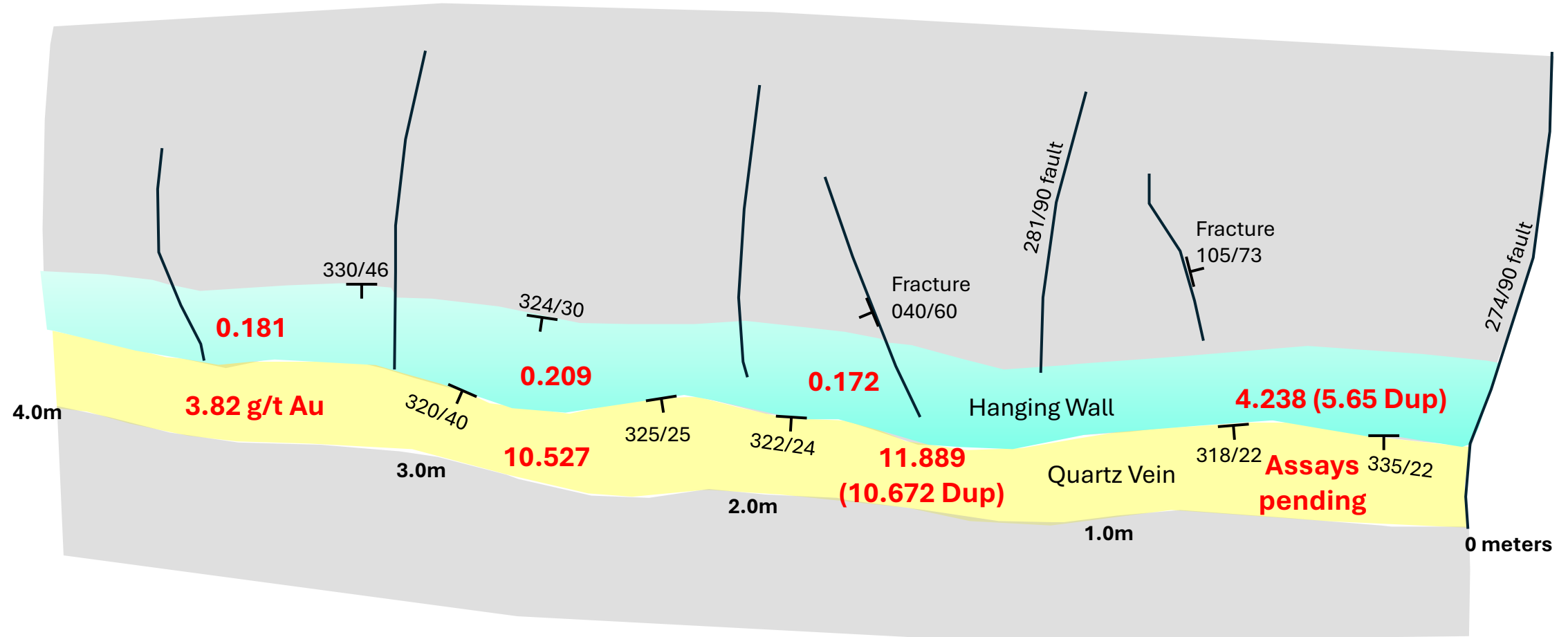
N

Magnetic survey  
map TMI RTP



FACING NORTH

## 4.0-meter-long trench map at Golden Bomber



**Quartz vein** is 8 to 12 cm wide, brecciated, mostly chalcedonic, some small quartz vugs, with sugary textures, there are copper carbonates of malachite and locally the vein contains glassy limonite. Vein strikes northwest and dips shallow to northeast.

**Hanging wall** is 5 to 9 cm wide, silicified with Cu carbonates and sericite.

**Host rock** is a biotite-magnetite-rich granodiorite.

**Footwall** is thin, sheared and faulted with slickensides

**10.527** Gold assay results (g/t Au) by Photon Assay

# GOLD BUG



Bonanza-grade gold in quartz veins from Gold Bug.



View To West multiple adits are visible. This hill was drilled previously in 2017 and ES-17-02 returned 7.5m at 3.6% Cu and 75 ppm Ag from surface.

# GOLD BUG – Historic drilling

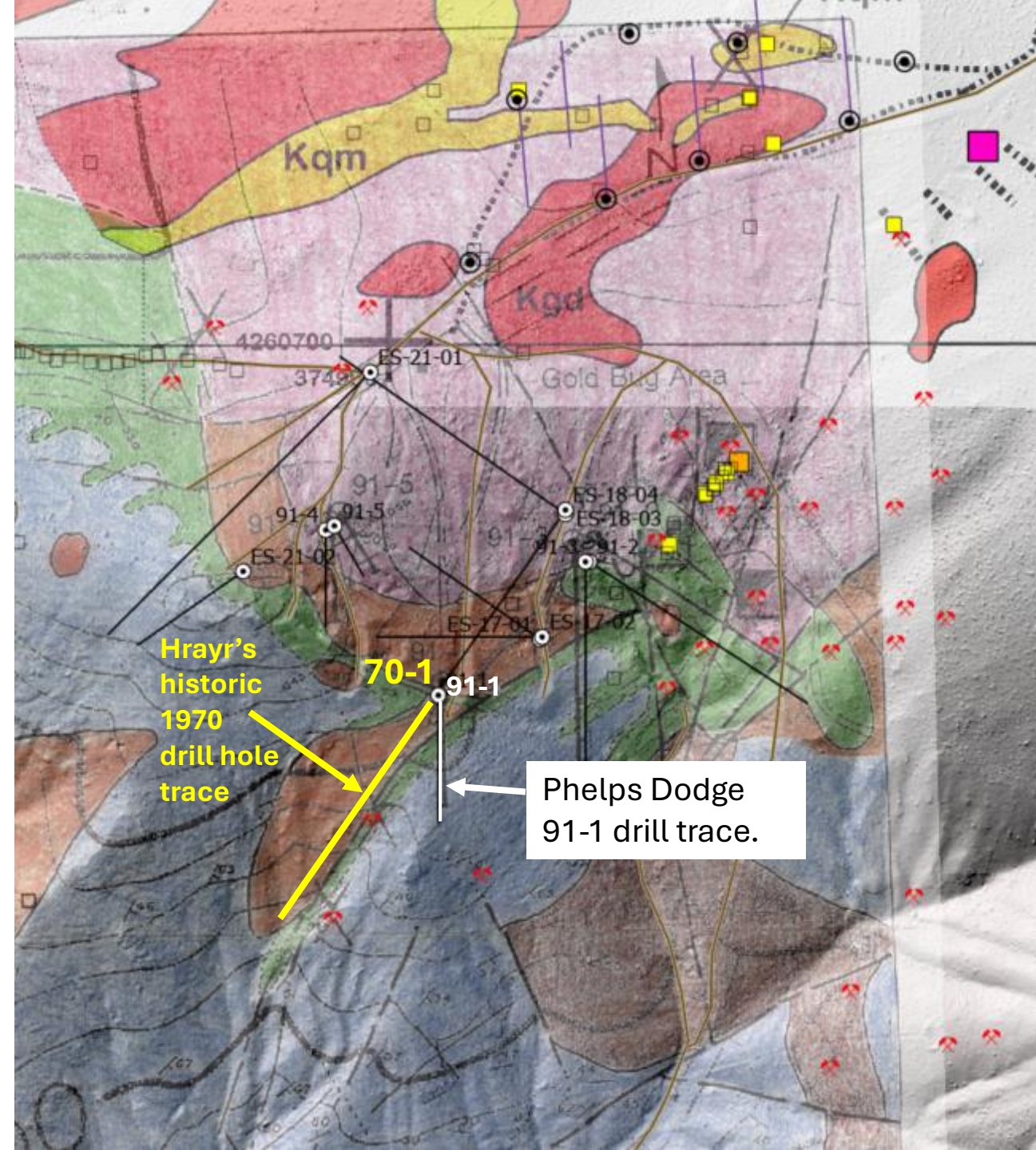
In 1970 a deep hole was drilled to a depth of 169m at -45 dip southwest from Gold Bug and intersected:

0.22% Cu, 3.241% Pb, 1.41% Zn, and 2.46oz/t Ag  
from 3.4m to 153.6m.

“The collar of the old Rose Pass Mines hole (my hole: 70-1) is very close to the Phelps Dodge Hole 91-1, except that PD91-1 drilled due south and my hole was drilled due southwest (Az. 215) from what we agreed during my site visit last week.” By Hrayr Agnerian in 2018

Mineralization of this good hole was a galena-sphalerite assemblage in carbonate rock rather than a skarn.

In yellow is the approximate location of the 1970 drill trace



## EVENING STAR - ALTERATION MINERALS



Distal epidote (green mineral) and vesuvianite (reddish-brown crystals) alteration south of Gold Bug.



Proximal garnet + Cu alteration at Gold Bug

# Evening Star

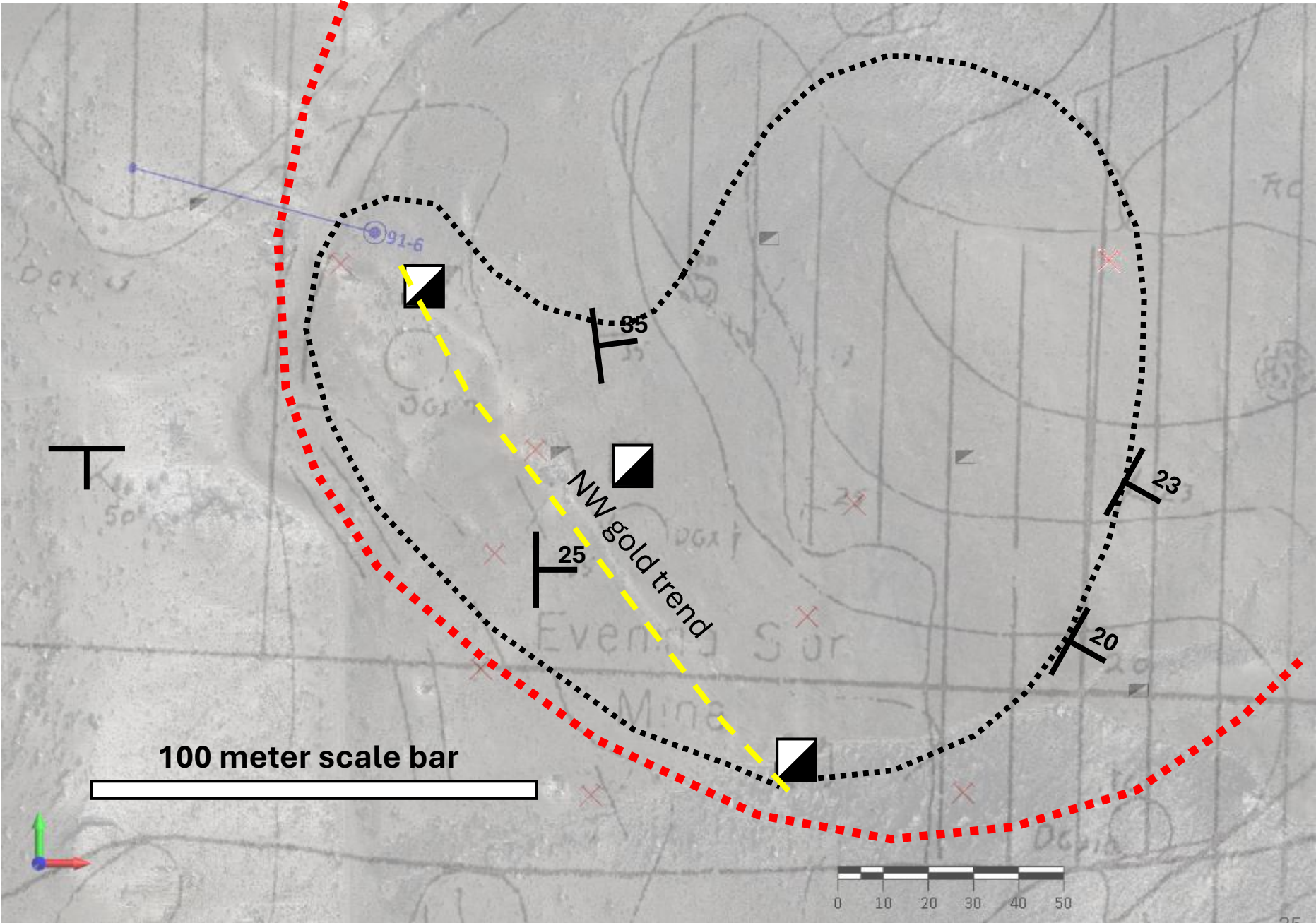
A Gravity VD **strong positive anomaly** (black dashed line) is 200 meters across.

The gravity high area **coincides with multiple old mine shafts**. Historic mine workings in NW trend.

Historic Phelps Dodge drill hole 91-6 drilled away from this target.

Gravity anomaly overlaps with the strong positive magnetic anomaly (red dashed line).

Investigate and drill.



# Proposed Programs for 2026

## Proposed Programs for early 2026 to Advance Evening Star:

- 2500 meters of proposed drilling at High Life with 3 holes targeting the **triple geophysical anomaly** of resistivity high + chargeability high + gravity high, which coincides with **apophyses and demagnetized potassic core**.

## De-risk other targets for future drilling:

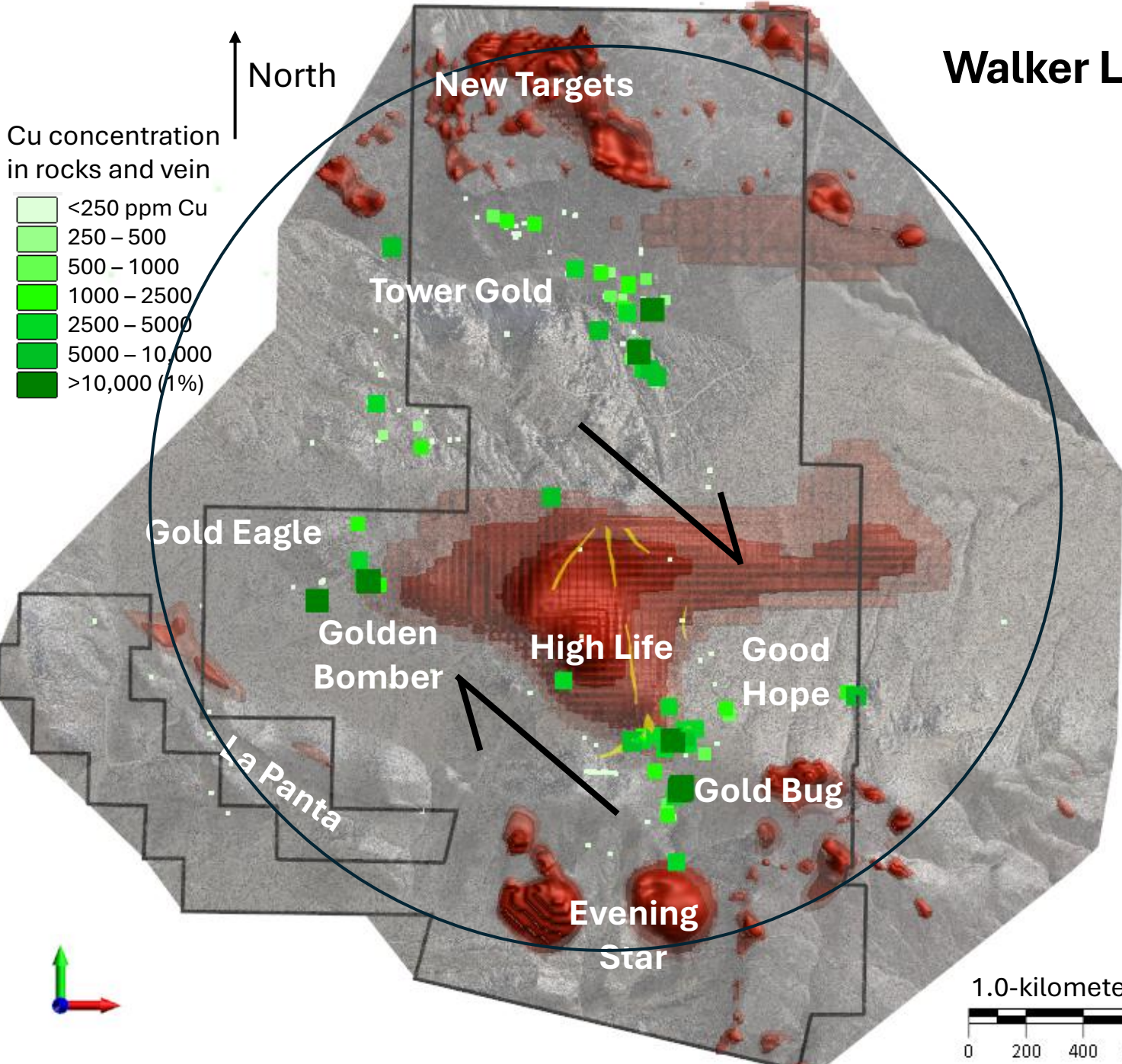
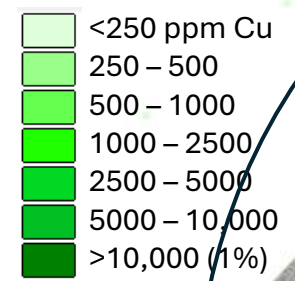
- Property scale (1) **mineral alteration mapping** and rock and vein sampling on the surface of High Life.
- Property-scale **structural map from field data and new high-resolution DEM**.
- Mapping and sampling of the **northwest fluid pathway at Tower Gold** to derisk future drilling.
- Mapping and sampling and research of Evening Star to prepare for drilling.
- **Resubmit Golden Bomber samples with appropriate CRMs**. –Trench, map and sample additional veins at Golden Bomber to expand target.
- Design QAQC procedures for 500 gram Photon Assay procedure.
- **3DIP survey to cover more of the porphyry system to search for additional Cu-Au targets (300m dipole)**.
- Gravity survey over other magnetic anomalies-additional targets?



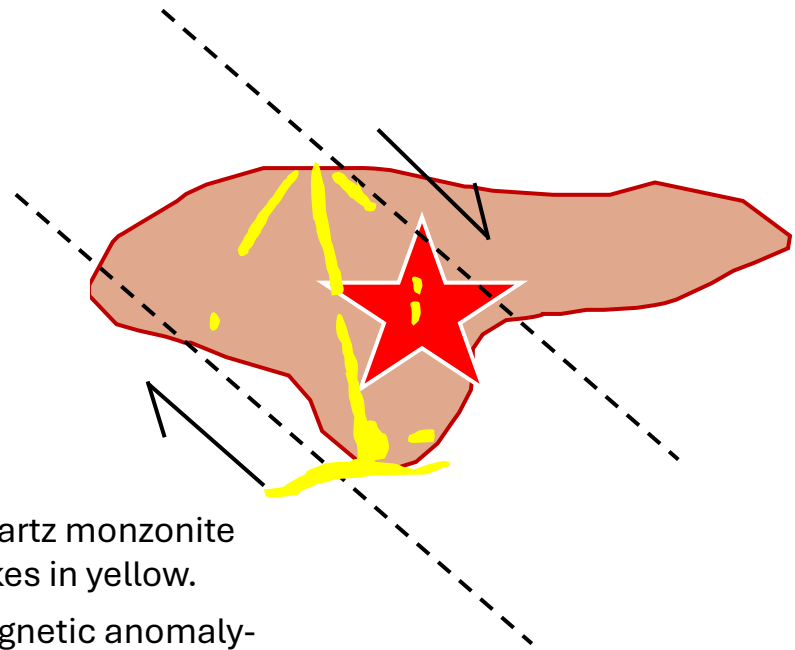
Copper mineralization at Tower Gold

# Walker Lane Structural Trend is Northwest

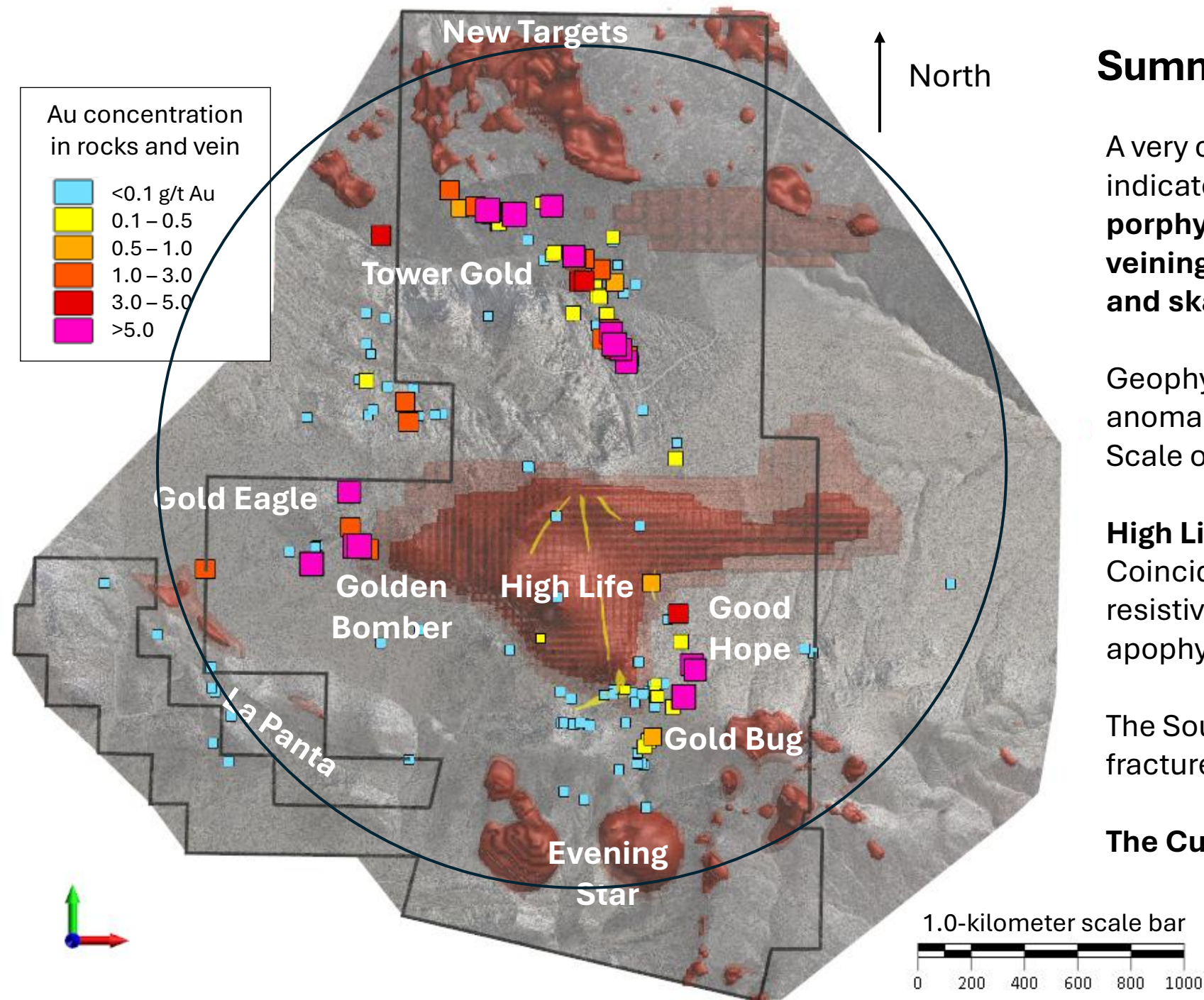
Cu concentration  
in rocks and vein



With the Walker Lane structural trend being northwest-southeast, the position of the north-south trending quartz monzonite dyke makes geological sense and explains the **dilation and strong permeability on the southeast** side of the potassic core (red star).



Quartz monzonite  
dykes in yellow.  
Magnetic anomaly-  
potassic core- in brown.



## Summary

A very compelling story for Evening Star that indicates a **deeply rooted, intact, fertile Cu-Au porphyry** system complete **with epithermal veining** on the shoulders of the porphyry system **and skarn and CRD** mineralization.

Geophysical responses show large circular anomalies with High Life at the core.  
Scale of system is 3 kilometers.

### High Life:

Coincident (a) gravity + (b) chargeability + (c) resistivity high on demagnetized part and apophyses of potassic core.

The Southeast side of the potassic core is fractured, reactive and structurally prepared.

**The Cu-Au porphyry system is drill ready.**

