Taranis Resources Inc

TSX.V:TRO, OTCQB: TNREF

+80% YoY, +237.5% (2022)

# Thor Project 2024: Deep Drilling Program

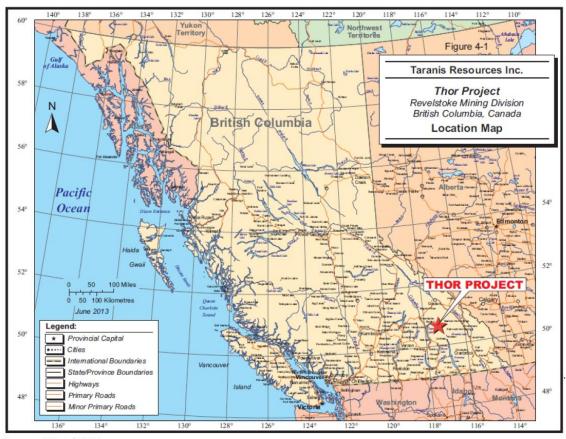
<u>Big Picture</u> Au/Ag/Base + Critical Mineral Exploration

'Revealing the Elephant - When All You Can See Is the Trunk!'



# **Project Location**

- Southeast British Columbia
- ~90 km from Revelstoke, BC (Hwy 1)
- 8 km from Trout Lake, BC



N50"42'36" W117°28'12" W117°25'48" W117°30'36" **Trout Lake** 

Source: Google Earth (February 26, 2024)

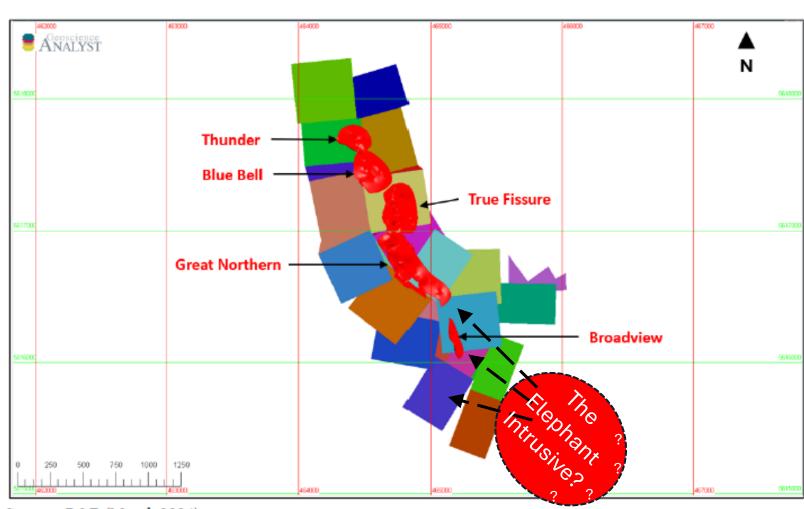
Purple = mineral claims (mineral rights); Yellow (translucent) = crown grants (mineral rights ± surface rights).

Large Land Position (3,500 Ha. And 27 Crown Grants, 100% Ownership and no encumbrances)

Source: RPA (2013)

# **Exploration Thesis**: That Thor Epithermal Deposits Represent a "Limb" of a Deep, Concealed Intrusive Identified by Airborne Geophysics

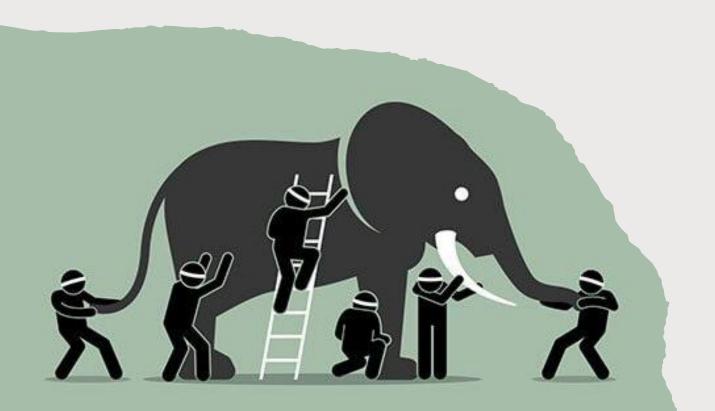
- The epithermal deposit segments are all near-surface, aligned in a NW-trend, and were subject to historical mining activity (5 mines).
- These are referred to as the "Trunk" of the concealed elephant intrusive.
- Consist of 5 main deposits over a 2.2 km strike length.
- All known epithermal deposits occur on Crown Grant mining claims owned 100% by Taranis, in fee-simple.
- Additional Mineral Tenures overly the deposit owned 100% by Taranis.



Source: P&E (March 2024)

Notes: Mineralized Zones = red; Crown Grants = coloured polygons.

### "Taranis' Exceptional Familiarity with the Epithermal Deposit is Going to Lead Us Back to the Source – a Deep, Mineralized, Porphyry"



#### The Main Premise at Thor:

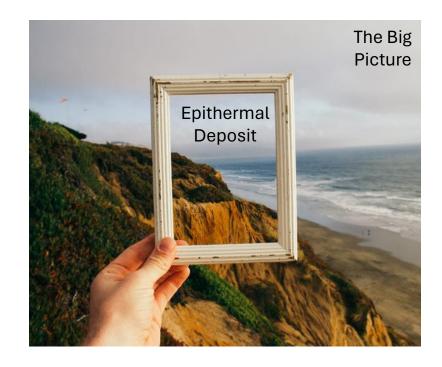
 Thor hosts a sizeable epithermal deposit, but it also has the potential to host an underlying intrusive body that is mineralized. This is a common genetic relationship seen in porphyry deposits in British Columbia, and throughout the world. Epithermal deposits are commonly generated by an underlying magmatic heat source – these are commonly mineralized (Sillitoe).

#### Supporting Evidence

- Composite geophysical anomalies identified from an airborne magneticmagnetotelluric survey (depths of penetration exceeding 1.5 km) that indicate a concealed intrusive body.
- Extensive phyllic alteration around the south end of the Thor epithermal deposit, and magnetite-epidote-chlorite alteration associated with a magnetite cap over the intrusive target.
- Porphyry systems (Max) have been discovered and exploited less than 10 km away.

# **Epithermal Deposit**

The 'Trunk' to the Elephant



Taranis has just recently completed an NI 43-101 Mineral Resource Update of the epithermal bodies.

This portion of the deposit alone contains approximately 20 M. Oz. Silver Equivalent.

P&E Mining Consultants Inc., April 11, 2024.

TABLE 14.9 MINERAL RESOURCE ESTIMATE (1-5)												
Class	Cut-off (NSR CAD\$/t)	Tonnes (k)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (koz)	Ag (koz)	Cu (Mlb)	Pb (Mlb)	Zn (Mlb)
Open Pit												
Indicated	40	1,0373	0.75	160	0.13	2.01	3.03	25.1	5,328	3.0	45.9	69.4
Inferred	40	339	0.80	154	0.16	1.95	2.81	8.8	1,679	1.2	14.6	21.0
Out-Of-Pit												
Indicated	120	102	0.70	76	0.07	0.84	3.79	2.3	248	0.2	1.9	8.5
Inferred	120	260	0.48	70	0.14	1.09	3.92	4.0	584	0.8	6.3	22.5
Total												
Indicated	40 & 120	1,139	0.75	152	0.12	1.90	3.10	27.4	5,575	3.1	47.8	77.9
Inferred	40 & 120	599	0.66	117	0.15	1.58	3.29	12.8	2,263	2.0	20.9	43.5

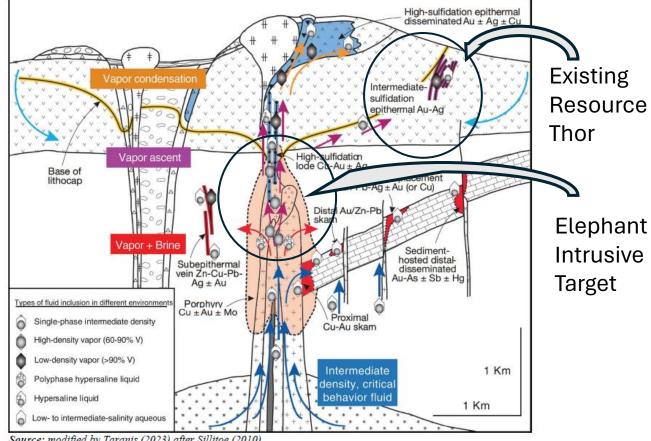
#### Notes:

- 1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration, however there is no certainty an upgrade to the Inferred Mineral Resource would occur or what proportion would be upgraded to an Indicated Mineral Resource.
- The Mineral Resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). CIM
  Standards on Mineral Resources and Reserves, Definitions and Guidelines (2014) prepared by the CIM Standing Committee on Reserve
  Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
- 4. The following parameters were used to derive the NSR block model CAD\$/t cut-off values used to define the Mineral Resource:
  - January 2024 Consensus Economics long term forecast metal prices of Au US\$1900/oz, Ag US\$23/oz, Pb US\$1.00/lb, Zn US\$1.40/lb;
  - Exchange rate of US\$0.75 = CAD\$1.00;
  - Process recoveries of Au 90%, Ag 90%, Cu 85%, Pb 90%, Zn 90%;
  - Open pit CAD\$40/t cut-off derived from CAD\$30/t processing and CAD\$10/t G&A;
  - Out-of-Pit CAD\$120/0/t cut-off derived from CAD\$80/t mining, CAD\$30/t processing and CAD\$10/t G&A; and
  - Pit slopes were 50°.
- 5. Totals may not sum due to rounding.

## Relationship of Epithermal Deposits to Intrusive

- Sillitoe model of porphyry deposits shows that intermediate sulfidation epithermal deposits are above and peripherally related to the underlying source of mineralization in a porphyry (intrusive) body).
- Scales are nearly identical to Thor epithermal bodies and the intrusive target.
- HOWEVER, Thor setting is dominated by sedimentary rocks, and not volcanics.
  - Both Bingham Canyon and Butte Montana are recognized porphyry deposits hosted in sediments.
  - · Surface sedimentary layers can conceal common porphyry structures and alteration patterns typically used to vector to the porphyry mineralization.
- Porphyry intrusives are known to exploit large fault structures. These are numerous at Thor and airborne geophysics has approximated their locations (in addition to the anomalous characteristics of the porphyry target itself). Coeval peripheral fault structures are likely hydrothermal fluid conduits. These may contribute additional exploration potential to the "elephant" porphyry target.

FIGURE 8.1 EPITHERMAL-PORPHYRY MINERALIZATION SYSTEM SCHEMATIC MODEL



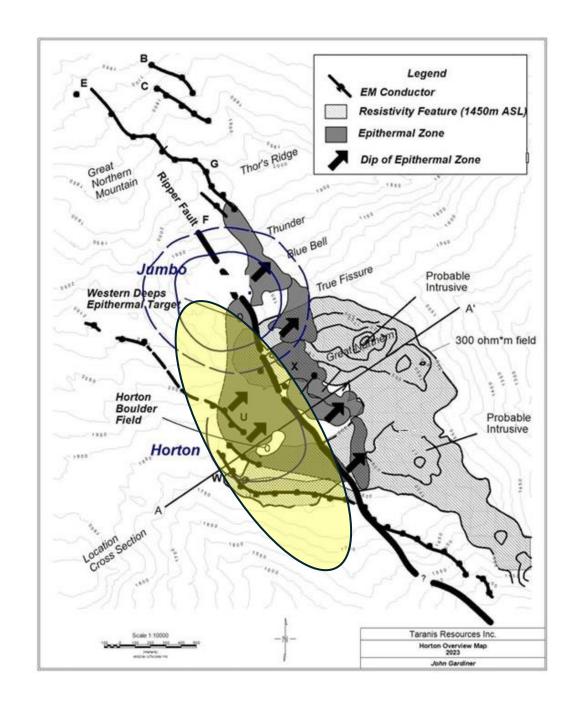
Source: modified by Taranis (2023) after Sillitoe (2010)

## Horton



In 2023, new mineralized material was discovered west of the main Thor epithermal deposit. This coincides with the Western Deeps Epithermal target.

Ground and airborne geophysics show a large fault structure which projects outward from the "elephant" target in this area. It is a prime target for further high-grade epithermal mineralization - or a "second trunk".



# Intrusive Target

The 'Elephant'

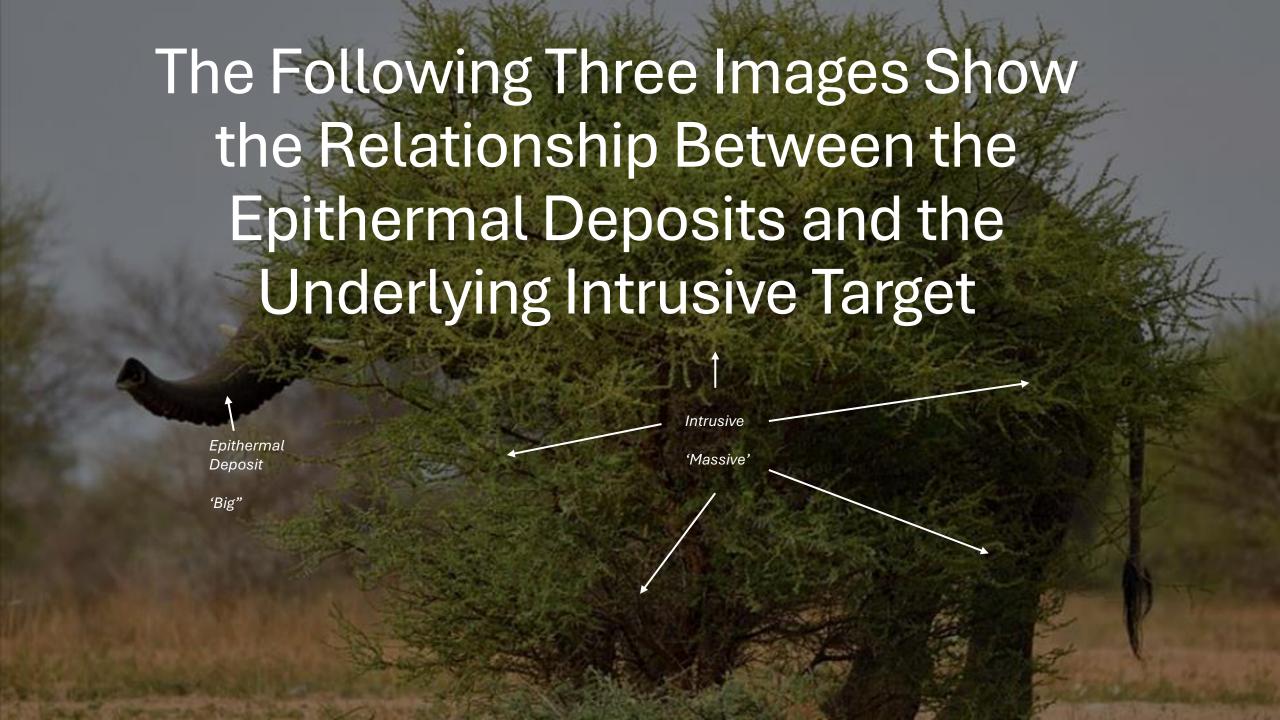


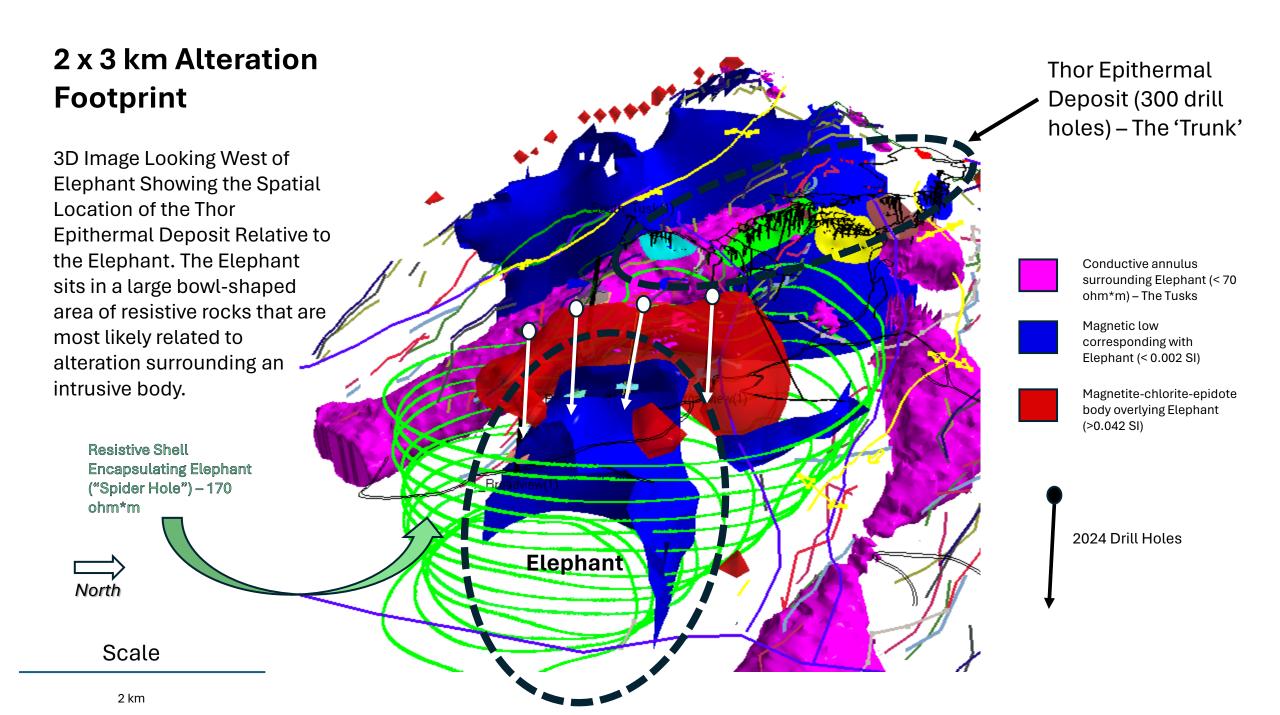
# The Big Picture at Thor!

- British Columbia is a mature exploration environment and Taranis recognizes the <u>only</u> way of discovering new major deposits is through use of systematic exploration in areas that have large hydrothermal systems. These prospective world-class deposits are going to be concealed.
- The Elephant target has been explored and developed over a 5-year period since its initial identification.
- Defining its presence involved sophisticated geophysical methods available for the imaging of the subsurface in mountainous terrains.
- These surveys were validated through other exploration methods such as field spectrometry, magnetic susceptibility, conductivity measurements, petrology, geochemistry and mapping.

# Highlights of 'Elephant' Intrusive Target

- Elephant does not outcrop at surface (identical to the Cretaceous-age Max Porphyry Moly intrusive located just 8 km SW of Thor). This area of B.C. is known to have porphyry deposits, and they appear to lie along the northeast edge of the Jurassicage Kuskanax Batholith.
- Elephant defined by a circular magnetic low (<= 0.003 SI) commonly associated with porphyry deposits.
- Magnetic low surrounded by a conductive 'annulus', which is now known to be related to thermal alteration of the sedimentary rocks around the intrusive. These are referred to as the Tusks and could themselves be mineralized.
- Both the Thor epithermal deposit and Elephant are associated with non-conductive rocks related to silicification of metasedimentary rocks. This is a massive feature measuring 2 x 2 km on the MT survey.
- Elephant is capped by a magnetite-bearing body that is also known to have K-enrichment. Epidote, chlorite and mafic minerals are suspected to be alteration product directly related to an intrusive body.





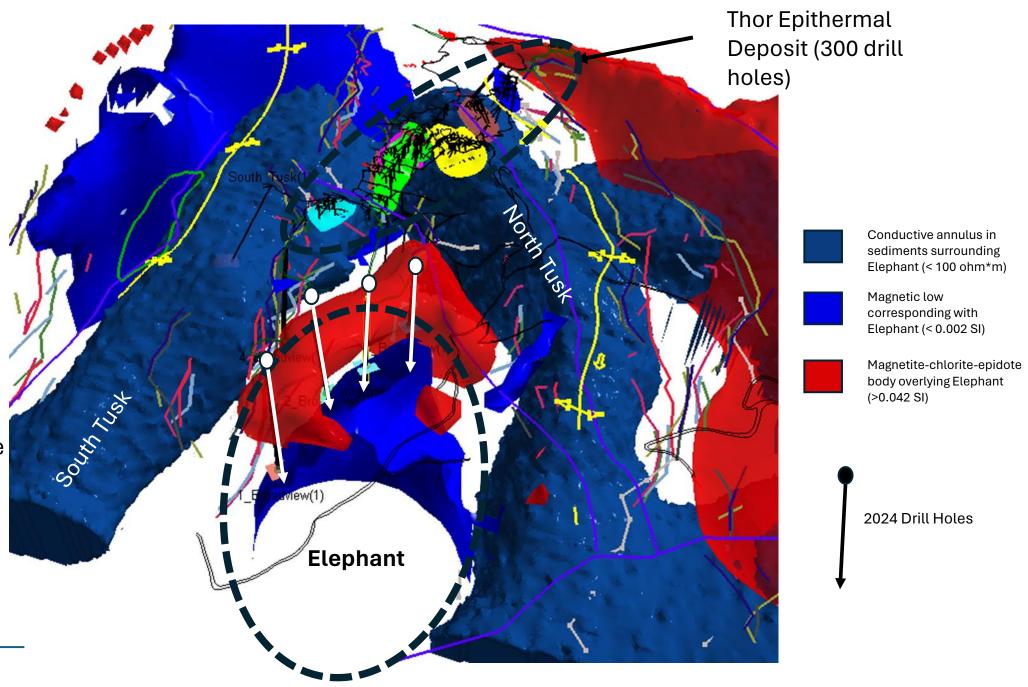
North & South
Tusks Map Out
a Massive
Alteration Zone
Around the
Elephant That
Could also be
Mineralized

3D Image Looking
North West of
Elephant Showing the
Spatial Location of the
Thor Epithermal
Deposit.



Scale

2 km

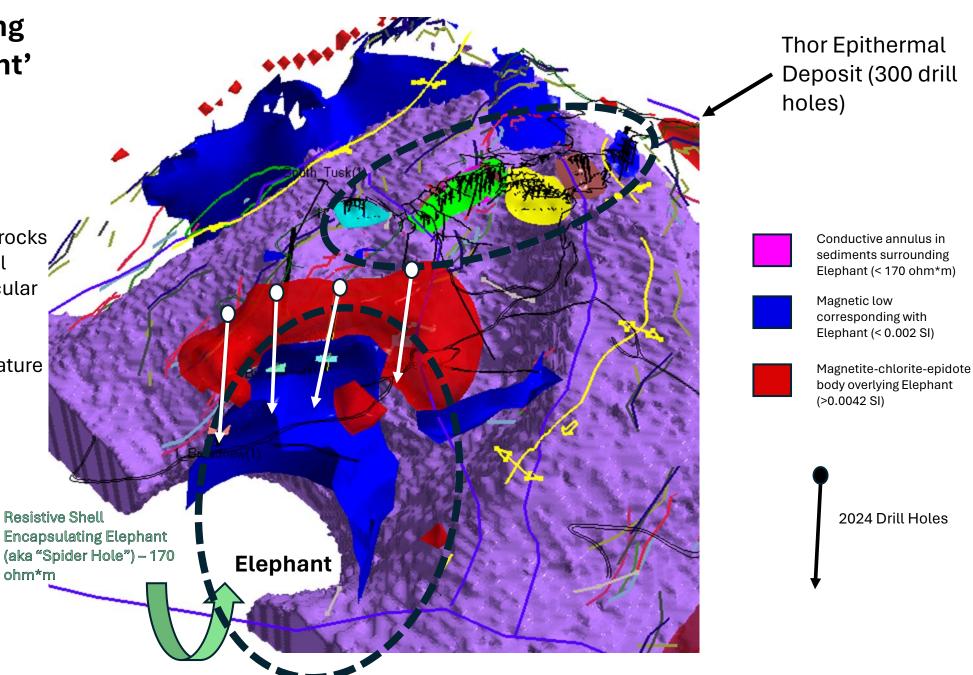


3D Image Looking West at 'Elephant' Showing the Resistivity

An intrusive has punched through the sedimentary rocks under the Thor epithermal deposit and formed a circular feature called the 'Spider Hole' seen on inverted resistivity images. This feature extends upwards into the epithermal deposit.



Scale



# Conductive Annulus Found around the Elephant – Ancillary 'Tusk' Targets

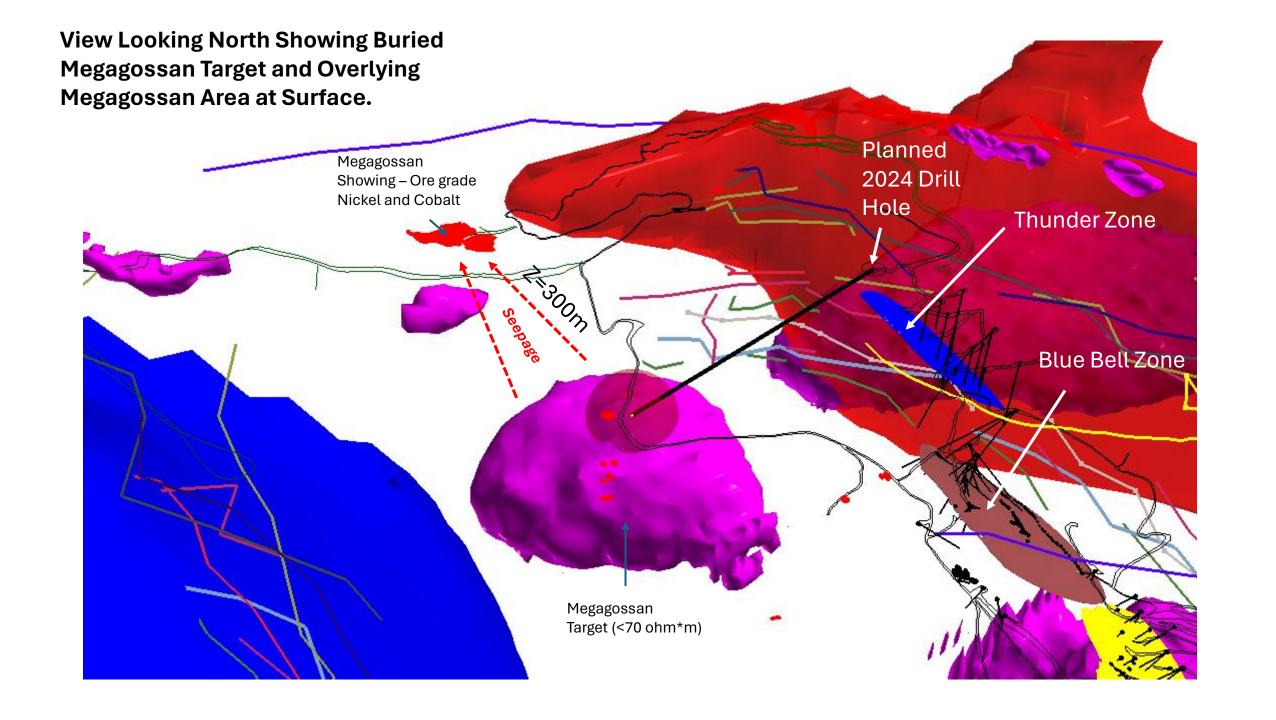
- Large conductive annulus identified around Intrusive body, called the North and South Tusks
  - Likely sulfide mineralization based on geochemistry of Megagossan, and Tusks always found peripheral to intrusive body. Possible carbonate bodies (siderite and ankerite) derived from intrusive body and a common accessory mineral in the epithermal deposit along with quartz. Siderite is a known conductive mineral in the Thor epithermal deposit based on physical testing of drill cores and outcrops in 2023.
  - Two targets planned for drill testing in 2024 have anomalous pathfinder and other metals associated with them, again indicating the Tusks are likely mineralized.
  - Tusks do not outcrop at surface.

# North Tusk (Megagossan)

- Megagossan (North Tusk)
  - 200x300m spectacular gossan overlying the Megagossan Target, with a conductive body (<70 ohm\*m) lying at a depth of 300m below the gossan at surface. All the known epithermal deposits at Thor were discovered by prospectors exploring gossans.
  - Ore-grade nickel and cobalt are found in the gossan at surface, and anomalous silver, lead, zinc, copper and antimony.
  - Interpreted to be a distal hydrothermal expression of the Elephant, and probably related to hornfelsing of the sediments that host the Thor epithermal deposit.



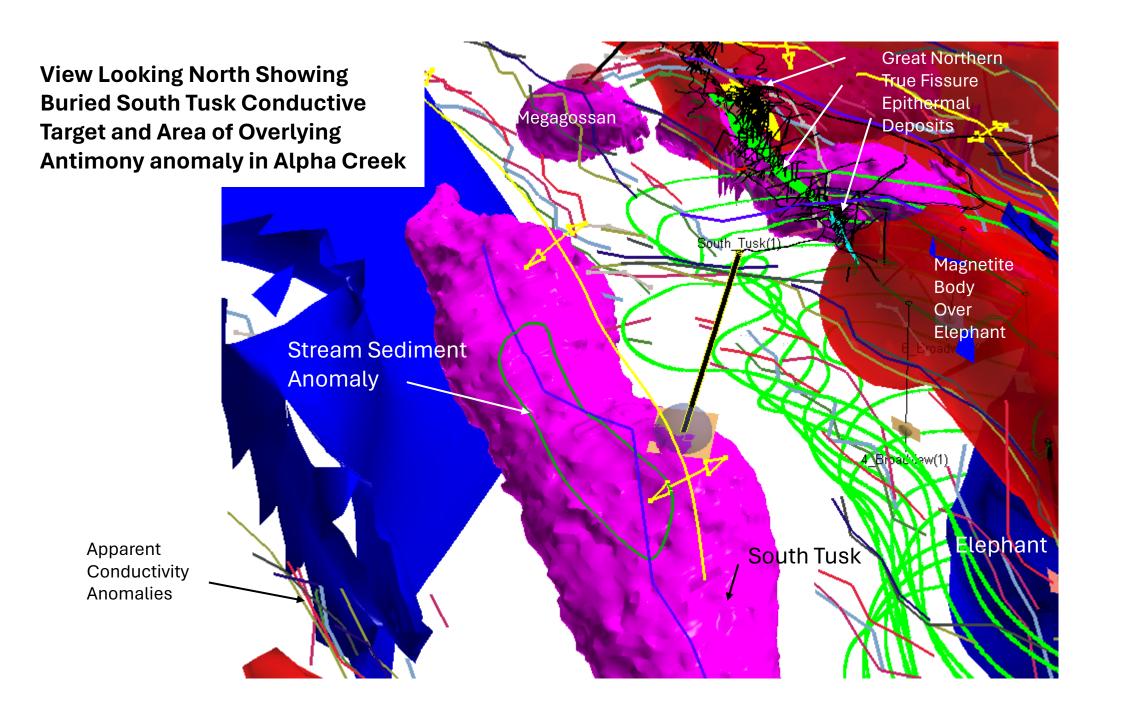
Spectrometer Scan of Gossan Found at Megagossan



## South Tusk

#### South Tusk

- 3 km long conductive body that wraps around the west side of the Elephant.
- Interpreted to be a sulfide/carbonate body that occurs within metasedimentary rock and could have appreciable contents of gold, silver and other metals.
- Known antimony stream sediment anomalies overly the South Tusk in Alpha Creek that is probably geochemical seepage from the target.
- Occurs under an anticline structure that would serve as the trap rock for hydrothermal fluids emanating from the Elephant.
- Top of target occurs at a depth of 200 m below the surface.



# 2024 Planned Deep Drill Holes

Drill Hole No.	Target	Depth (m)		
Broadview 1	Elephant	729		
Broadview 2	Elephant	375		
Broadview 3	Elephant	alternate		
Broadview 4	Elephant	584		
Broadview 5	Elephant	457		
Broadview 6	Elephant	500		
Megagossan 1	Conductivity Anomaly under Megagossan	776		
Alpha	Conductivity anomaly within south Tusk under antimony anomaly	750		
Total meters		4,171		

## Conclusions

- Epithermal Deposit is being used as an indication for much larger, concealed ore deposits at Thor.
- Near-surface epithermal deposit itself is large enough to be mined, and Taranis is also pursuing final engineering work to undertake a Bulk Sample (permitted).
- 2024 exploration targeting is based on many methods, namely MT and magnetics, and requires a completely different approach to drilling that has not been conducted at Thor.
- If drilling is successful, it will transform Thor into a world-class deposit with both an epithermal Mineral Resource and an underlying porphyry deposit.