

O R O G E N

Hot Tip

Epithermal target beneath graben hosted steam-heated alteration cell

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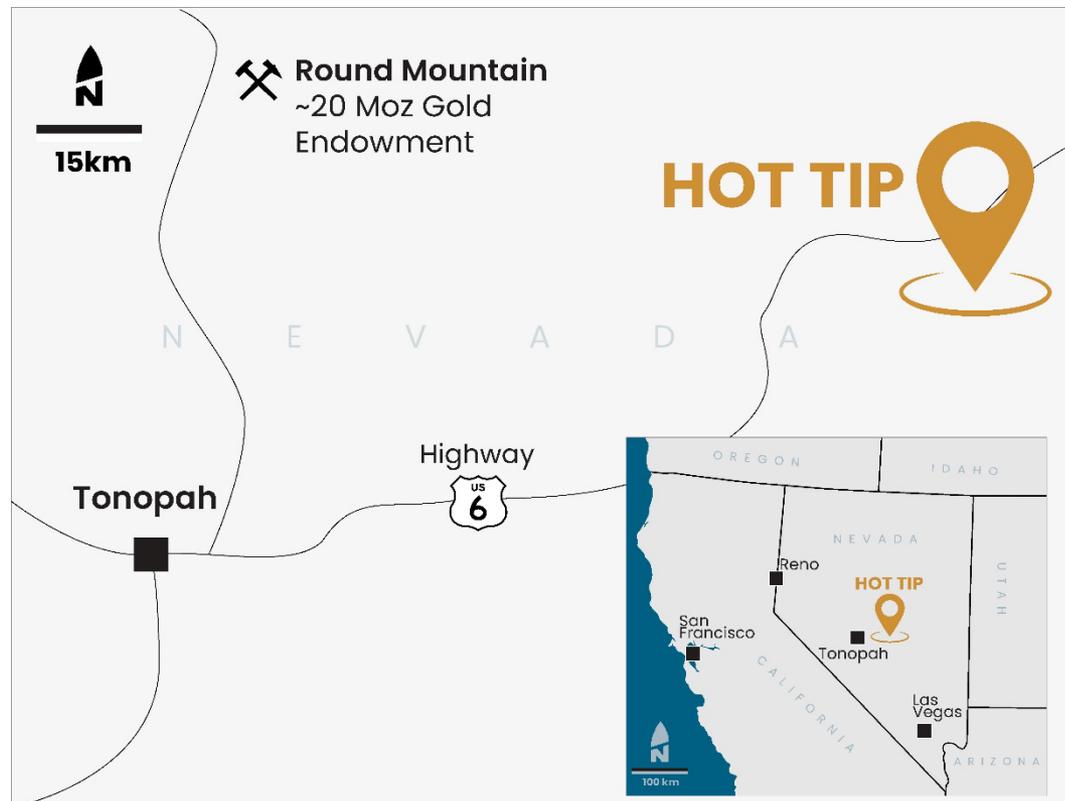
Project Summary

- Large four-kilometre diameter steam heated alteration cell focused on central graben
- Core of alteration cell is untested by historical drilling
- Widespread pathfinder anomalism at surface indicates an extensive metal rich hydrothermal cell proximal to the margins of two calderas
- Gold in historic drilling of up to 0.38 g/t over 24 metres near hydrothermal breccia peripheral to graben margin
- District scale target with similarities to AngloGold Ashanti's Motherlode deposit in the emerging Beatty district



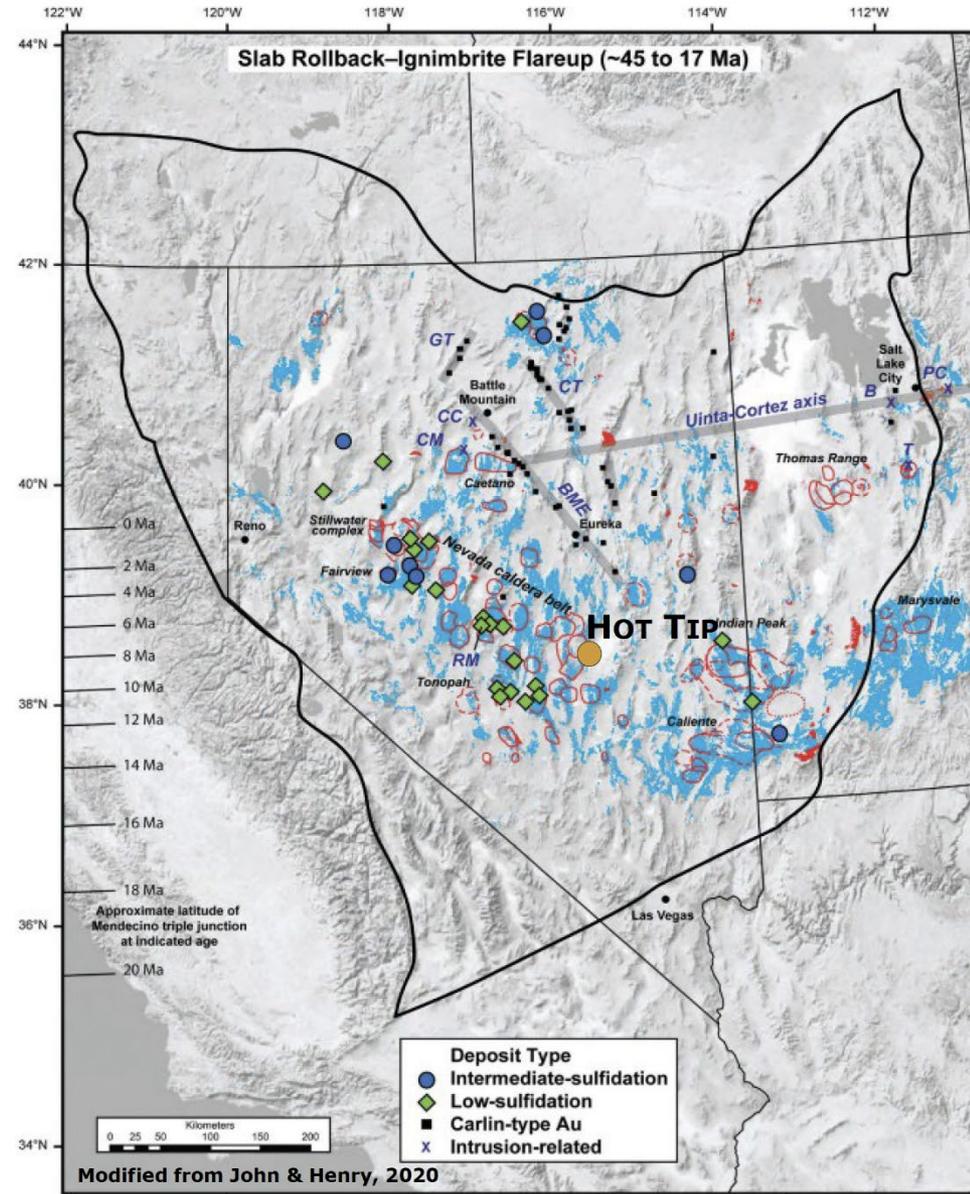
Location

- One hundred six claims located on BLM ground covering approximately nine square-kilometres
- One hundred twenty kilometres northeast of Tonopah, Nevada
- Located along the margins of two Oligocene calderas
- At the southern end of a twenty-kilometre-long zone of hydrothermal alteration extending from historic Ag mines of the Silverton district



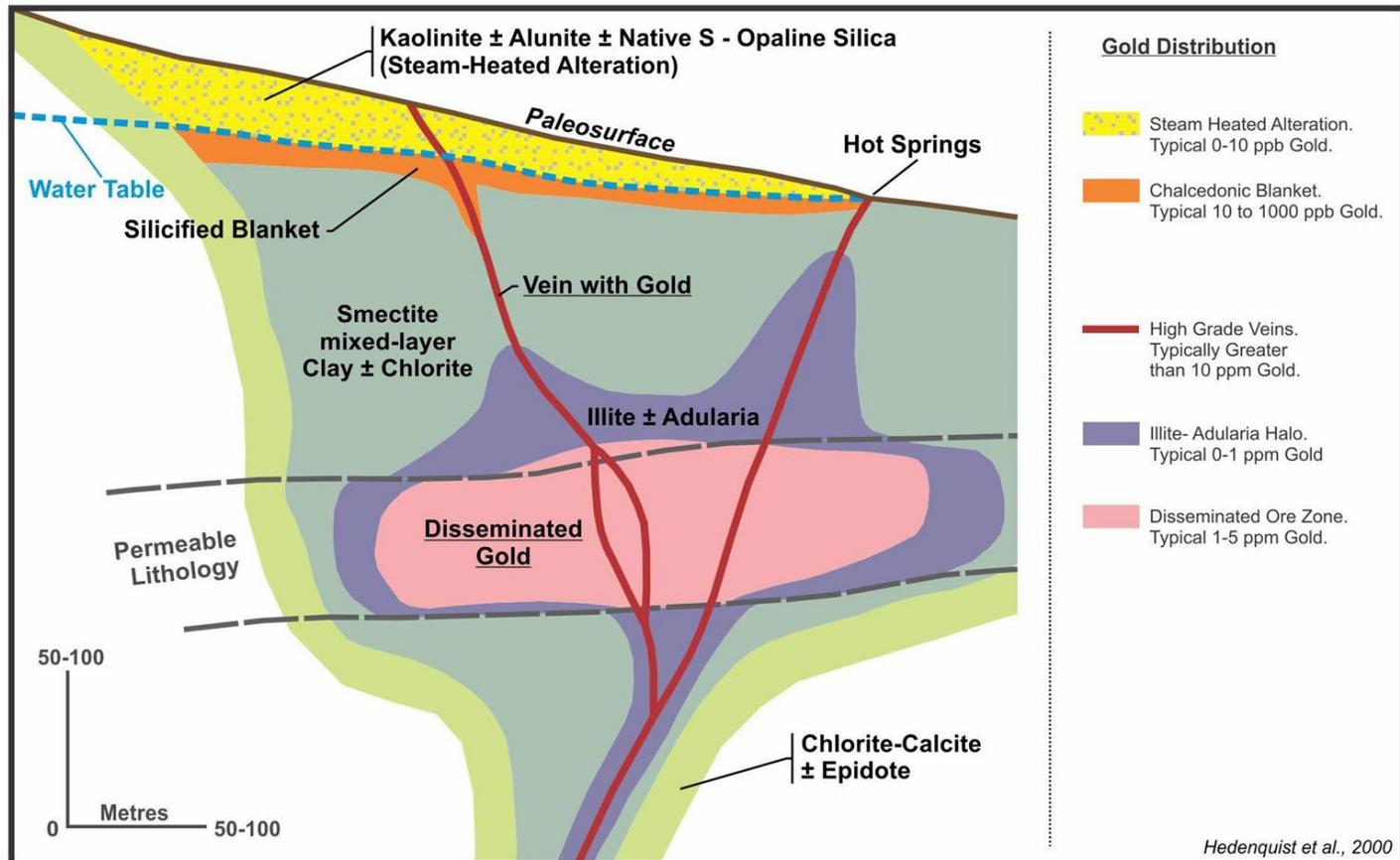
Regional Geology

- Located in eastern Nevada within a province of calderas related to slab rollback magmatism
- World class, ~26.4 Ma (15Moz+) Round Mountain epithermal gold-silver deposit also related to this magmatic episode
- Calderas of eastern Nevada underexplored relative to magmatic and hydrothermal centers in the Walker Lane



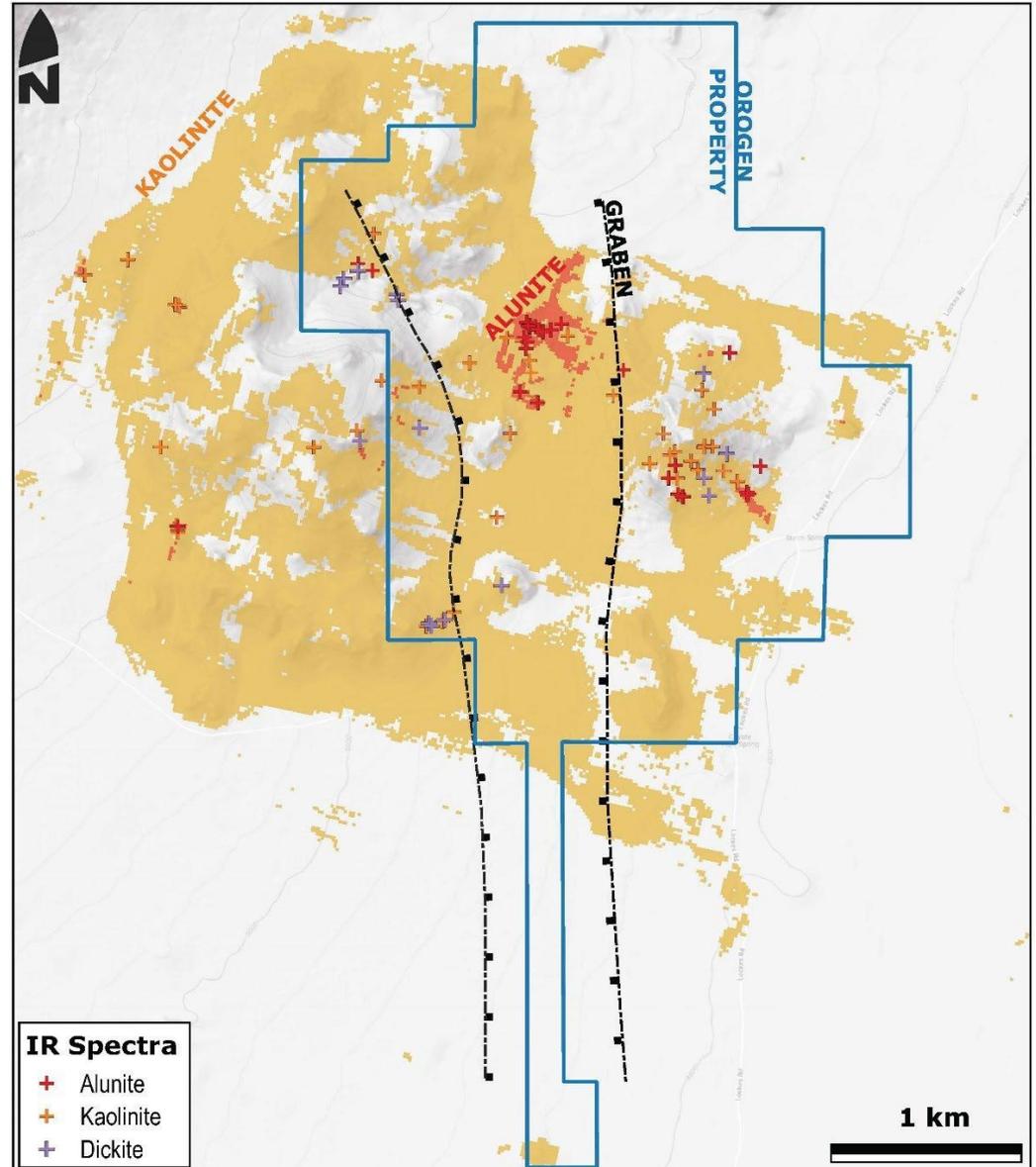
Exploration Methodology

- Advanced argillic alteration forms in multiple environments, some prospective for gold and some not
- Orogen has spent the last 8 years working on strategies to rapidly distinguish the environment of formation based on mineral assemblage, texture, morphology and associated geochemistry



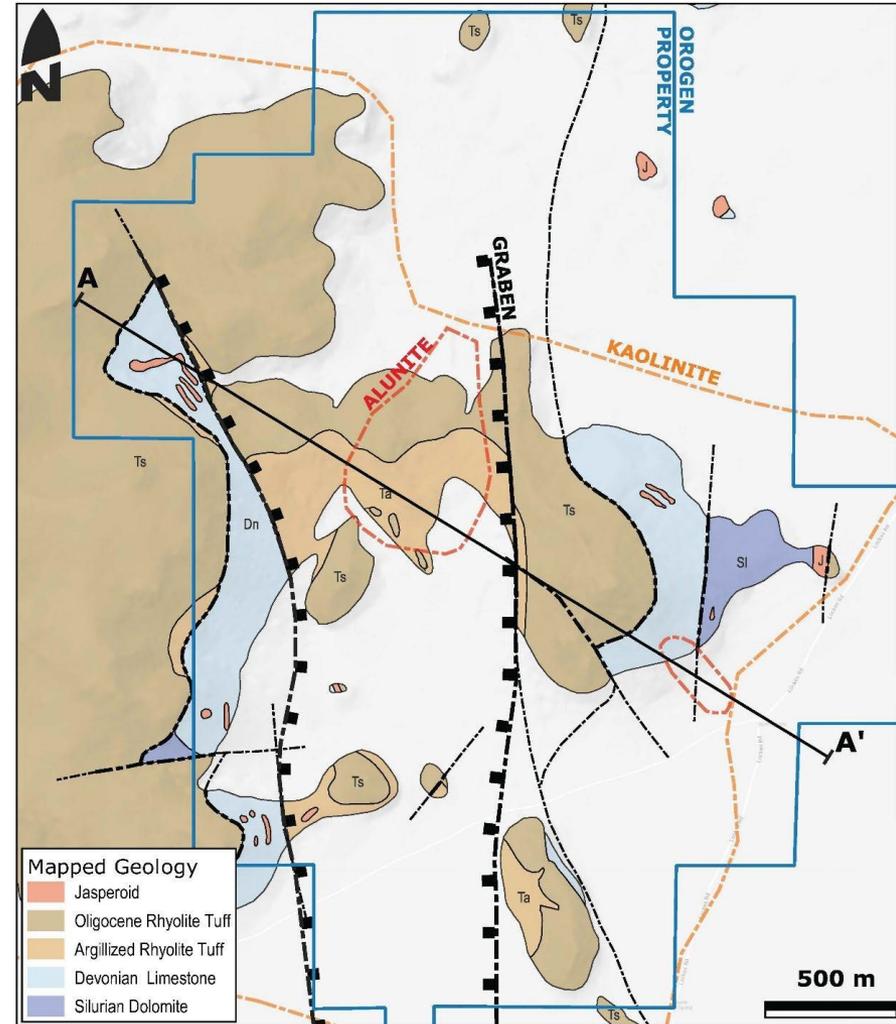
Alteration

- Four-to-five-kilometre diameter late Miocene advanced argillic alteration cell with widespread silicification focused on graben
- Argillization consists of kaolinite with significant dickite indicative of lower levels of steam heated alteration cell
- Alunite-rich core of alteration cell indicates proximity to an underlying boiling zone
- Locally developed cinnabar, residual silica and powdery silica all observed within the alteration cell
- Alteration open to east and south

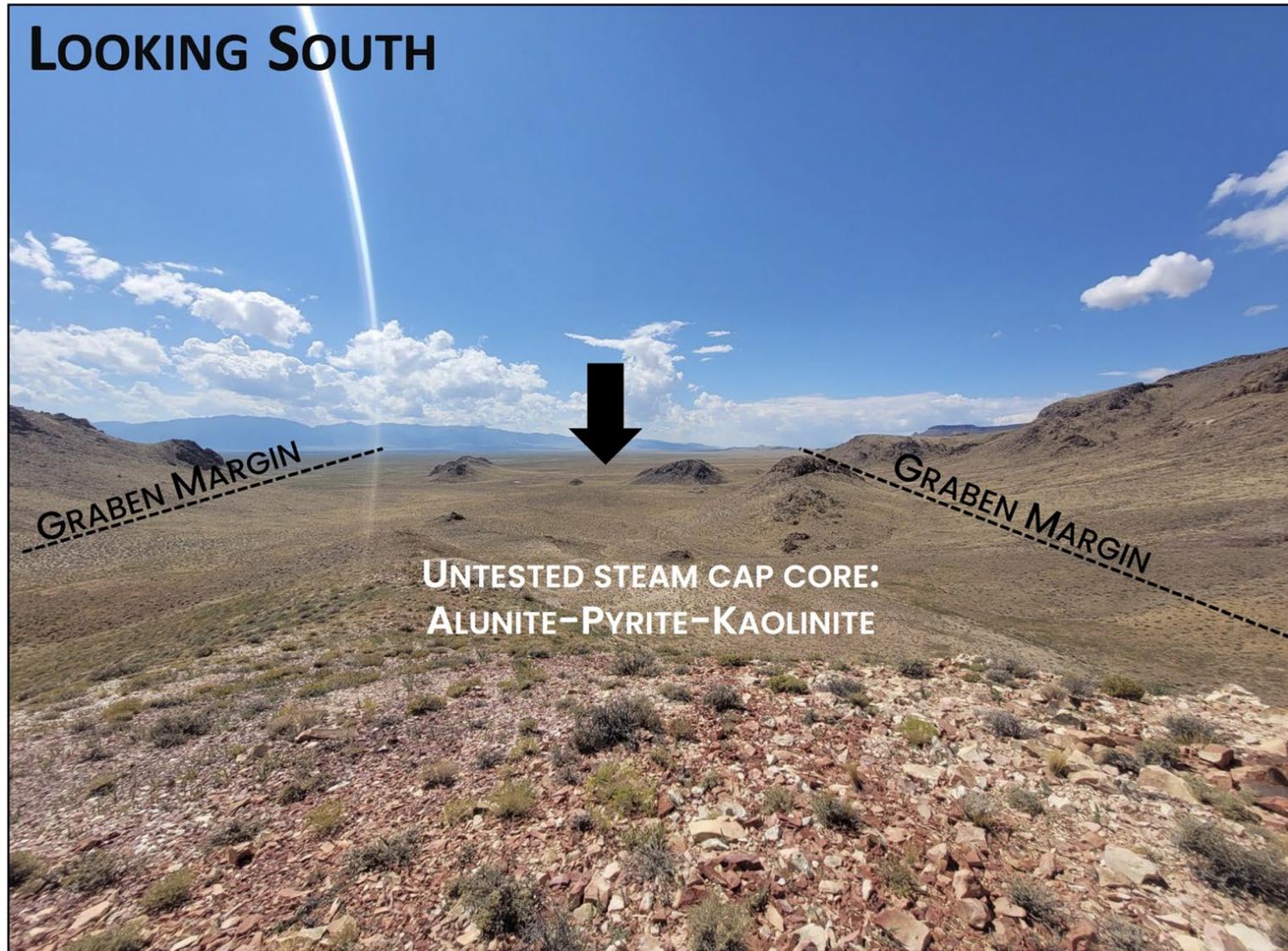


Geology

- Alteration is hosted by Oligocene volcanic rocks and calcareous sedimentary rocks of the underlying Devonian Nevada Formation
- Mineralization controlled by low-angle and high-angle structures
- Graben structure developed in central portion of prospect with up to 150 metres of displacement
- System is marginal to the 32 Ma Williams Ridge caldera and the 28 Ma Monotony Valley caldera
- Peripheral rhyolite bodies with emplacement controlled by graben structures
- Altered outcrops emerging from alluvium to the south suggest significant blue-sky potential under post-mineral cover

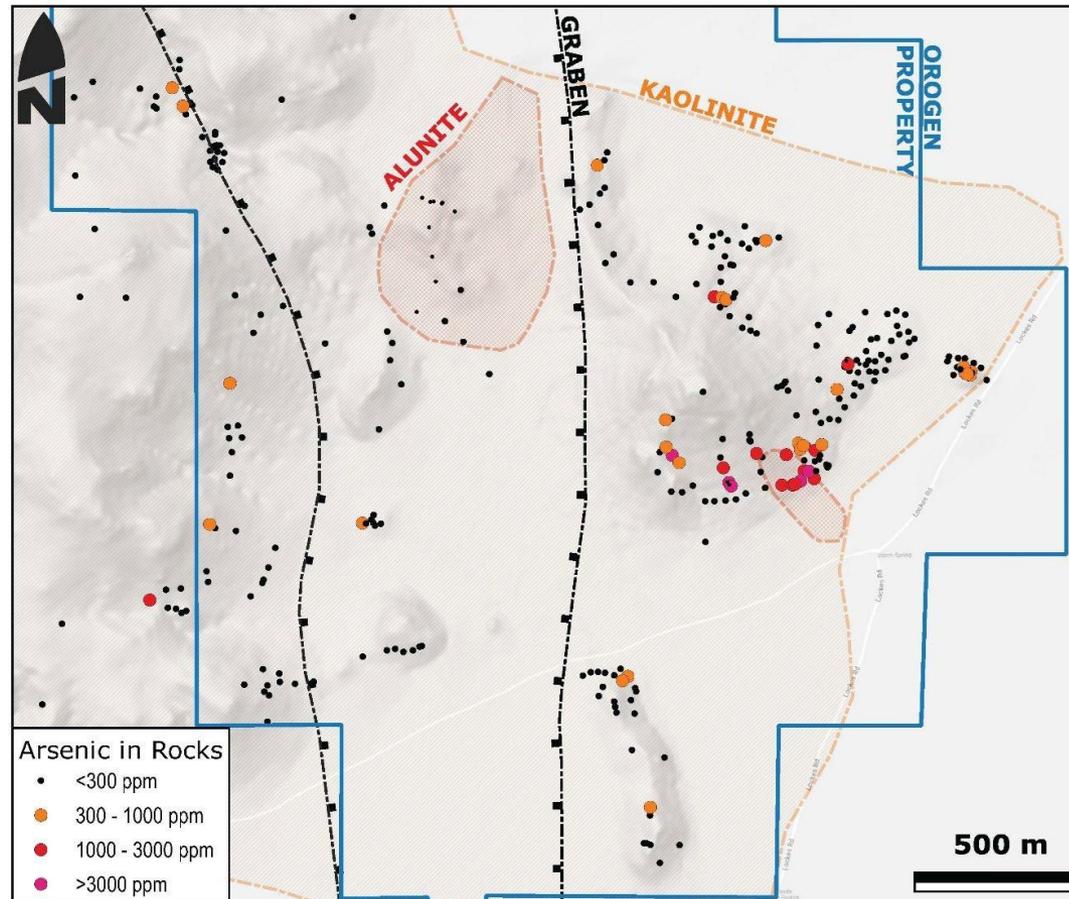


Geology



Geochemistry

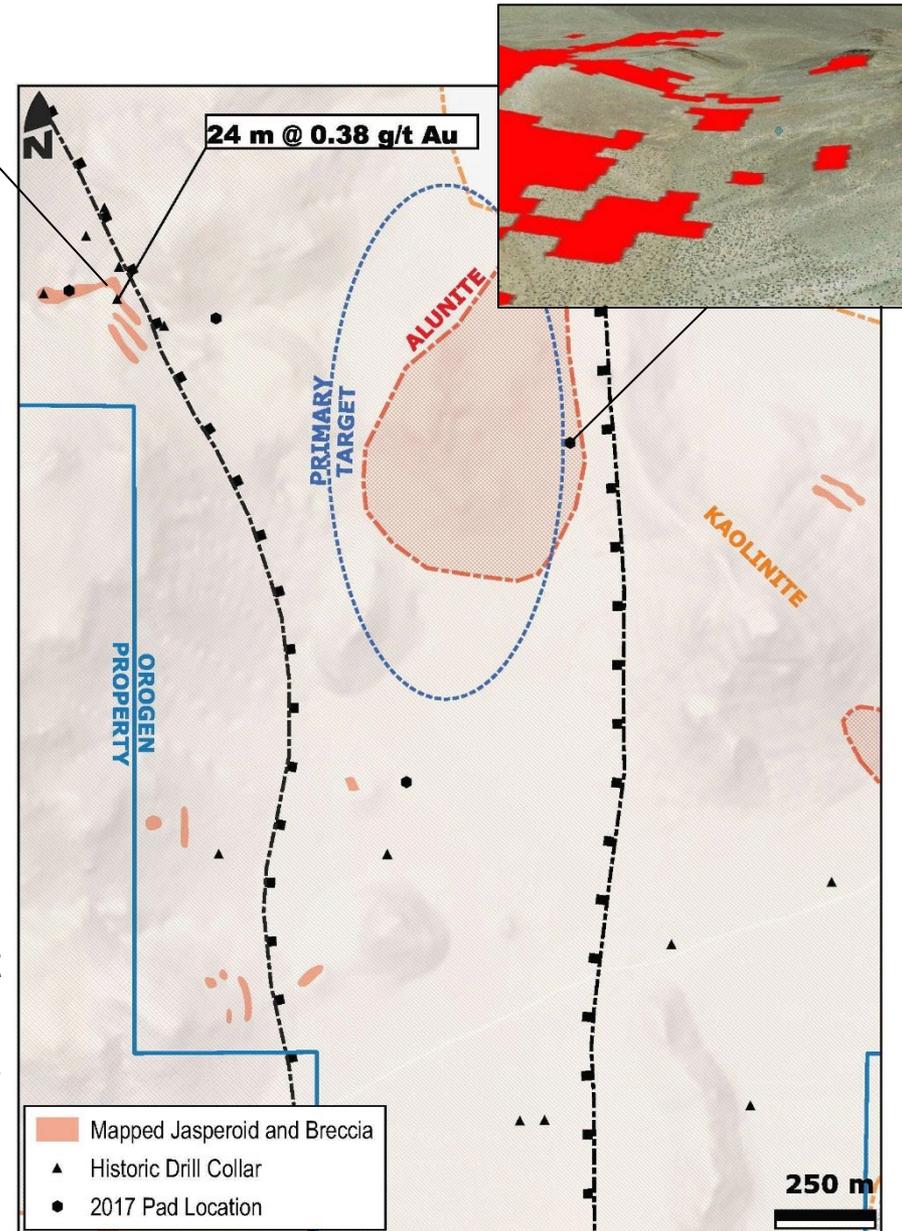
- Widespread highly anomalous pathfinder anomalism, up to 245 ppm mercury, >1% arsenic and >1% antimony
- Cinnabar and stibnite observed at surface in argillized tuffs
- Locally anomalous gold associated with jasperoids



Historic Drilling

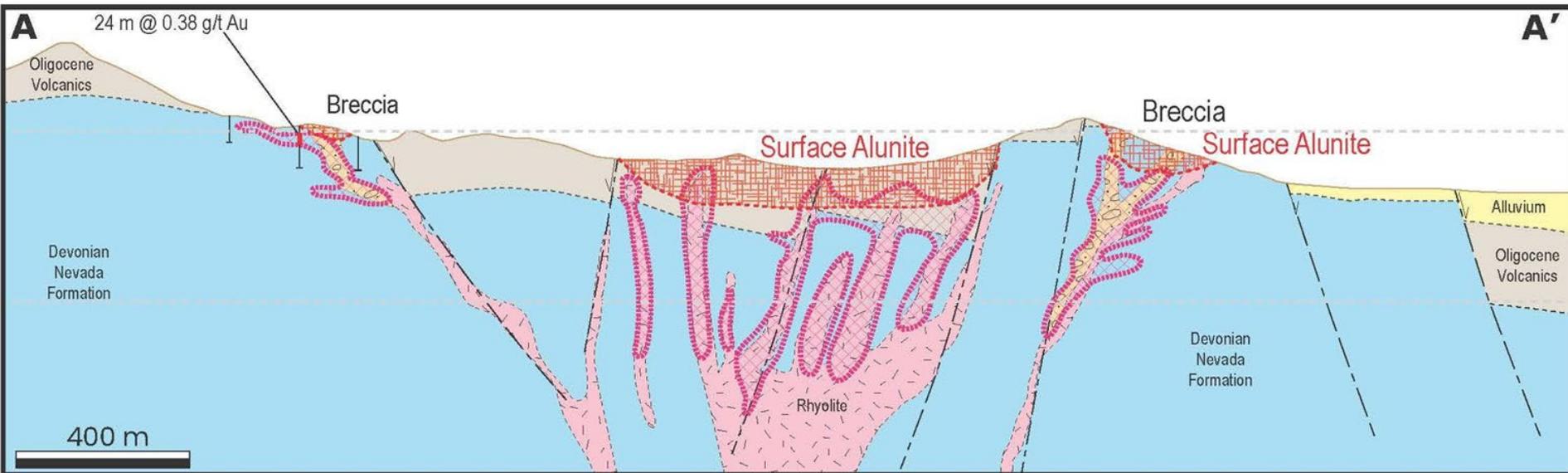


- Eighteen holes drilled by Fisher Watt in 1980's. Average depth 71 metres
- Historical exploration targeted jasperoid and breccia outcrops and Carlin style mineralization
- Best intercept of 24 m @ 0.38 g/t gold near a hydrothermal breccia outside NW margin of the graben
- Results from 2017 drill program by Coeur not known but pad locations mapped in field
- No holes have tested central alunite anomaly



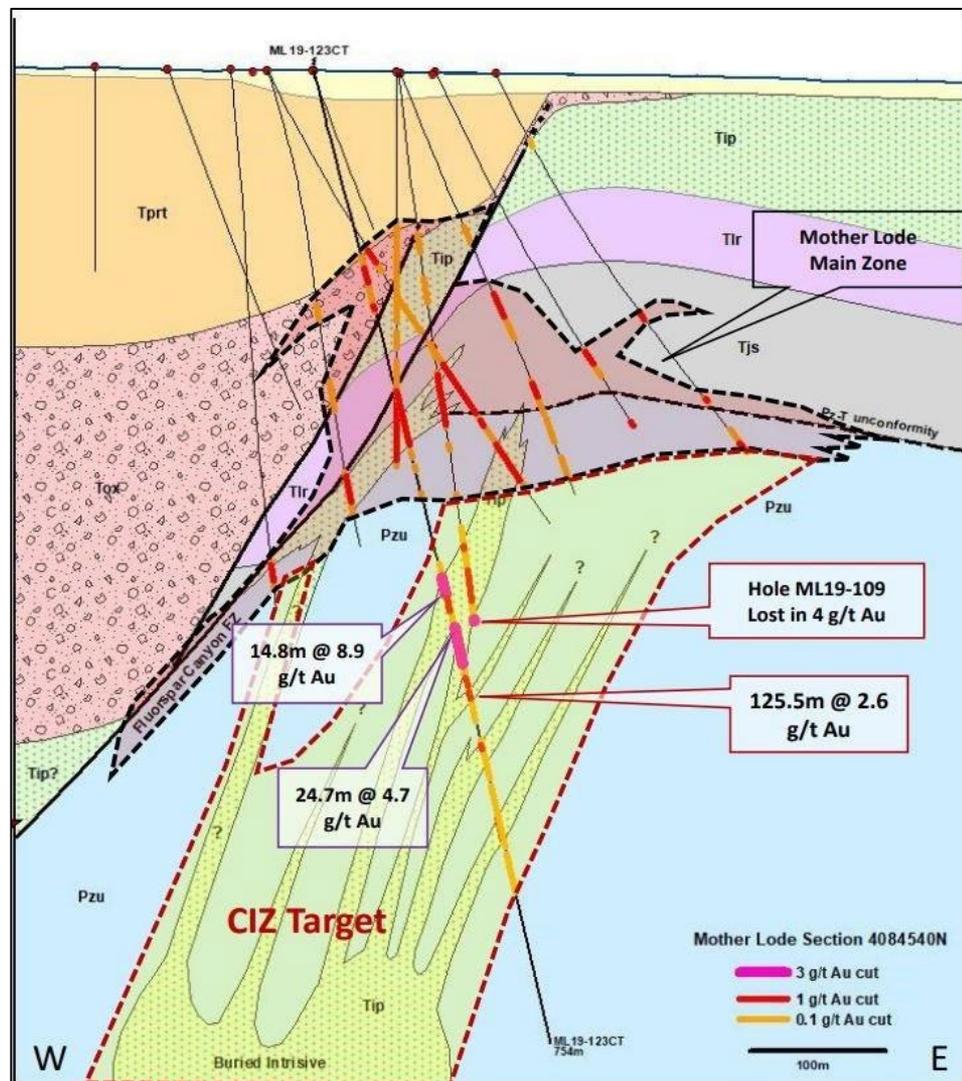
Primary Target

- Principal undrilled target is the most intense portion of the exposed hydrothermal system
- Target located in centre of graben with intense alunite-kaolinite-pyrite alteration in a recessive region
- Peripheral gold mineralization intercepted in historical drilling
- Rhyolites identified at surface proposed to be apophyses of favourable intrusive host rocks at depth



Mother Lode Analog

- Global resource of 1.7 Moz gold @ 0.77 g/t¹
- Mineralization hosted primarily by rhyolite porphyry dykes intruding Silurian dolomite, and Cenozoic volcanics
- Fluorspar Canyon fault and rhyolite dykes are principal controls on gold grade
- Overlain by pervasive advanced argillic alteration (kaolinite-alunite steam cap)



1. <https://reports.anglogoldashanti.com/22/wp-content/uploads/2023/05/AGARR22.pdf>

Opportunity

- Over 12 km² epithermal alteration cell
- Central structural control with the most intense alteration remains untested
- Anomalous gold and highly anomalous pathfinders at surface and in historical drilling
- Analogous to the Mother Lode deposit in AngloGold Ashanti's emerging Beatty District



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