

# Unlocking Gold/Copper Opportunities in Argentina and USA

---



# Cautionary Statements

---



## **Cautionary Note Regarding Forward-Looking Statements:**

Statements made regarding matters which are not historical facts are “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities legislation. These include statements relating to our ability to advance the Sand Canyon project or the Sarita Este/Desierto project and to obtain positive results. These statements are subject to risks and uncertainties, including but not limited to changes in interpretations of geological, geostatistical, metallurgical, mining or processing information and interpretations of the information resulting from future exploration, analysis or mining and processing experience; new information from drilling programs or other exploration or analysis; unexpected variations in mineral grades, types and metallurgy; fluctuations in silver and gold metal prices; failure of estimated mineral resources to meet expectations; fluctuations in exchange rates and changes in political conditions, in tax, royalty, environmental and other laws in the United States, Mexico and Argentina; financial market conditions and the ability of the company to secure external financing which will be needed in order to continue as a going concern.

This presentation should be read in conjunction with the company’s most recent Forms 10-Q and 10-K which are available on EDGAR and SEDAR.

## **Exploration Results:**

This presentation includes information regarding selected drill and sampling results on certain of our exploration properties. Complete drill and sampling results may be viewed by visiting our website at [www.goldenminerals.com](http://www.goldenminerals.com).



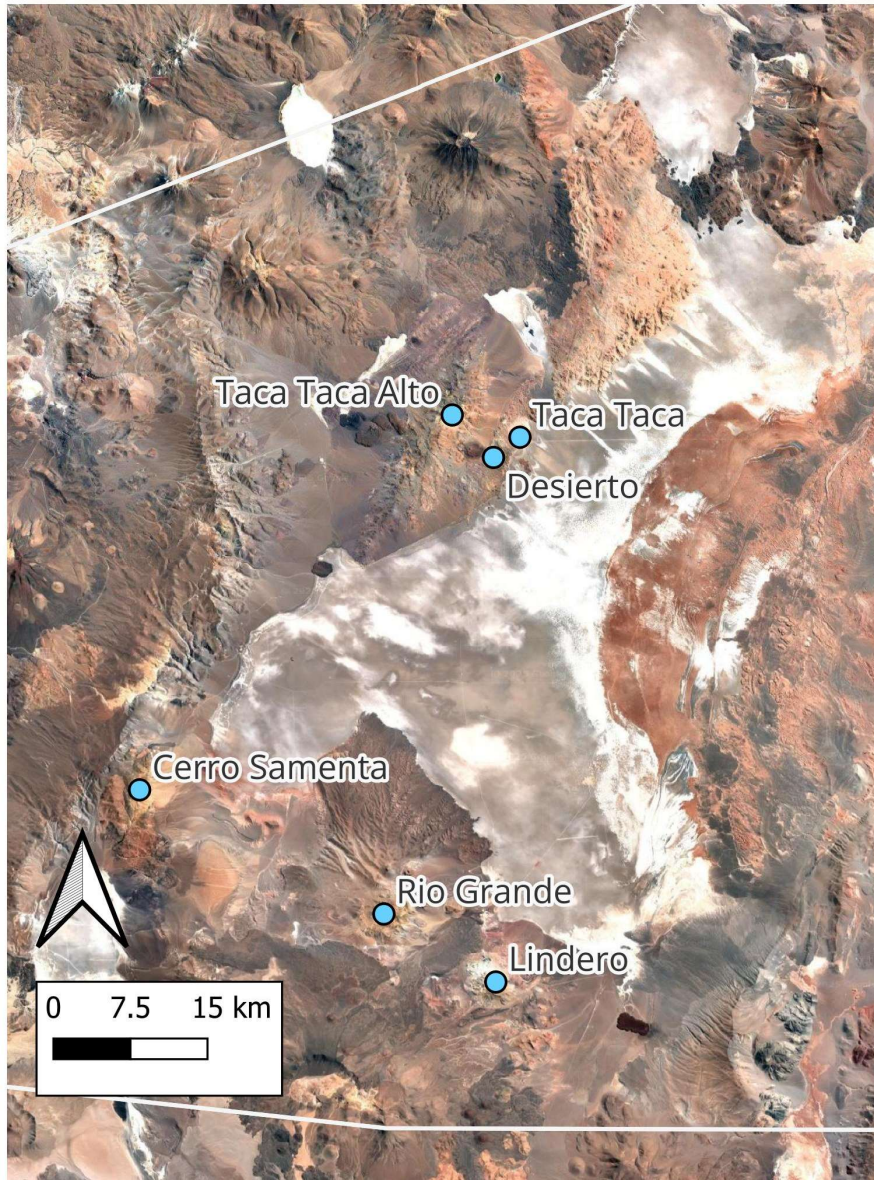
- ▶ Gold and silver focused exploration-stage company
- ▶ Projects in Salta, Argentina and Nevada, USA
- ▶ Common stock trades TSX and OTCQB
  - Stock Symbol: AUMN
  - Shares O/S: 14.6M
  - Shares F/D: 26.9M
  - Warrants O/S: 7.5M

## Prospective Exploration Projects

1. **Sarita Este/Desierto I & II (Argentina)**  
Shallow oxidized epithermal gold zone with potential economic grades identified  
  
Porphyry copper/gold target similar to First Quantum's Taca Taca deposit
2. **Sand Canyon (Nevada)**  
60% JV interest in Sleeper-style low-sulfidation epithermal target in Nevada

## Value Proposition

- Continued successful drilling at Sarita Este/Desierto could lead to a million plus ounce open pit heap leach gold project in an attractive jurisdiction
- Additional geophysical and geochemical studies at Sand Canyon are projected to lead to drill targets for a Miocene epithermal gold-silver system similar to the past-producing Sleeper gold mine (historic production of 1.6 million oz Au)



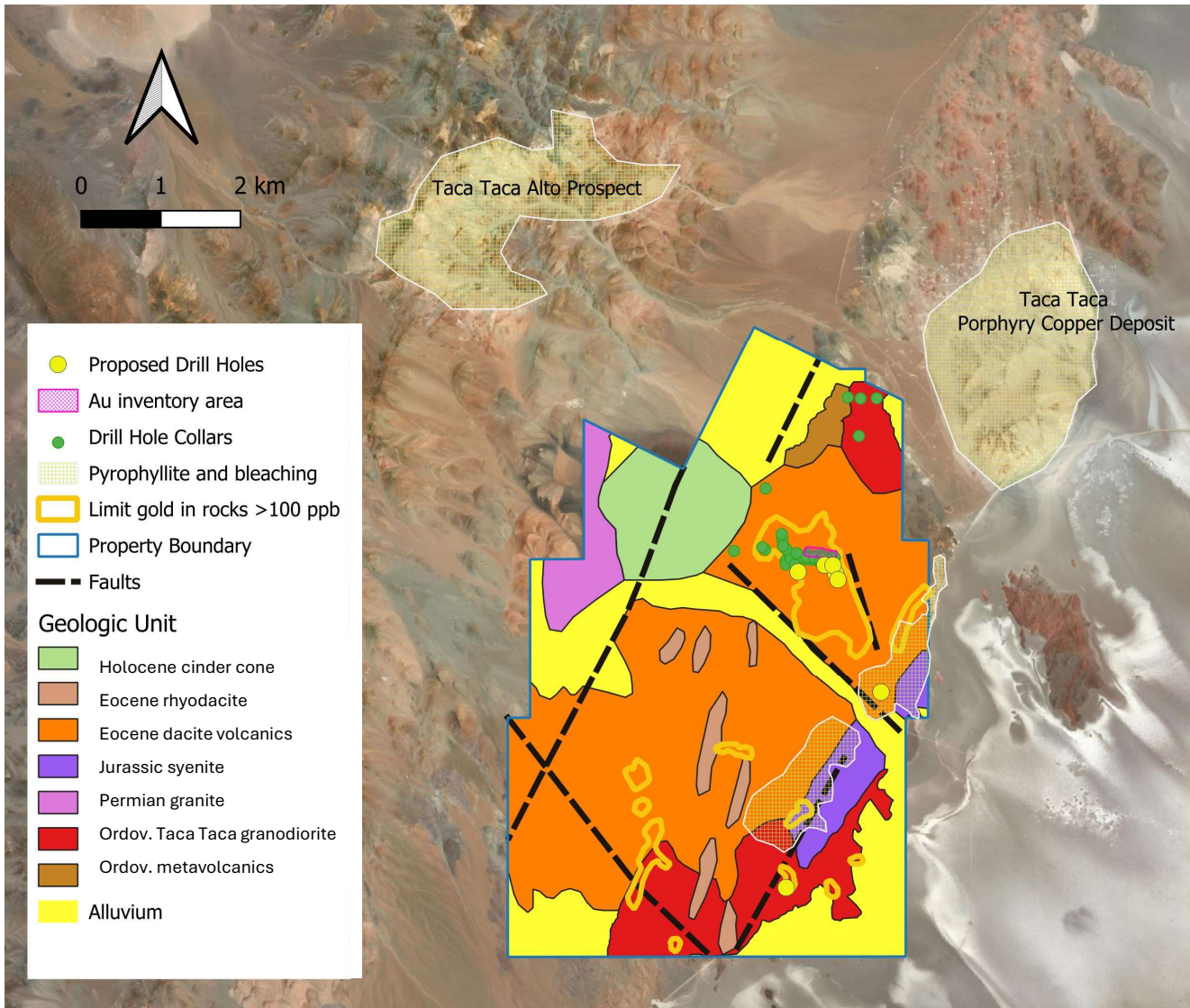
- The Sarita Este/Desierto project covers 3,335 hectares on the western side of Salar de Arizaro in the altiplano of Salta, Argentina
- Access is good with well-maintained paved and gravel roads to Salta city
- The project comprises the Sarita Este and Desierto I & II concessions located adjacent to the Taca Taca copper porphyry deposit (First Quantum) and 56 km north of the Lindero gold porphyry mine (Fortuna Mining)
- The Rio Grande project hosts a resource of 1.2 million ounces of gold. (Aldebaran Resources - Cu-Au porphyry prospect )
- Taca Taca Alto and Cerro Samenta are both copper-gold porphyry projects

# Sarita Este - Desierto



- Ownership:
  - Sarita Este: 51% and operator of JV
  - Desierto I & II: operator and 67% control. Discussions ongoing. No formal joint venture has been executed
- Sarita Este and Desierto I & II collectively cover 3,335 hectares
- Golden drilling in the Sico zone on Sarita Este has identified approximately 290k oz of gold in near surface oxidized epithermal gold mineralization grading 0.58 gpt
- Sico zone open to the south with potential to extend across the boundary onto the Desierto I concession
- Gold grades similar to Lindero
- Multiple additional defined drilled targets on Desierto I & II concessions
- Alteration and geochemistry also indicate porphyry copper targets similar to Taca Taca

# Sarita Este - Desierto Geology

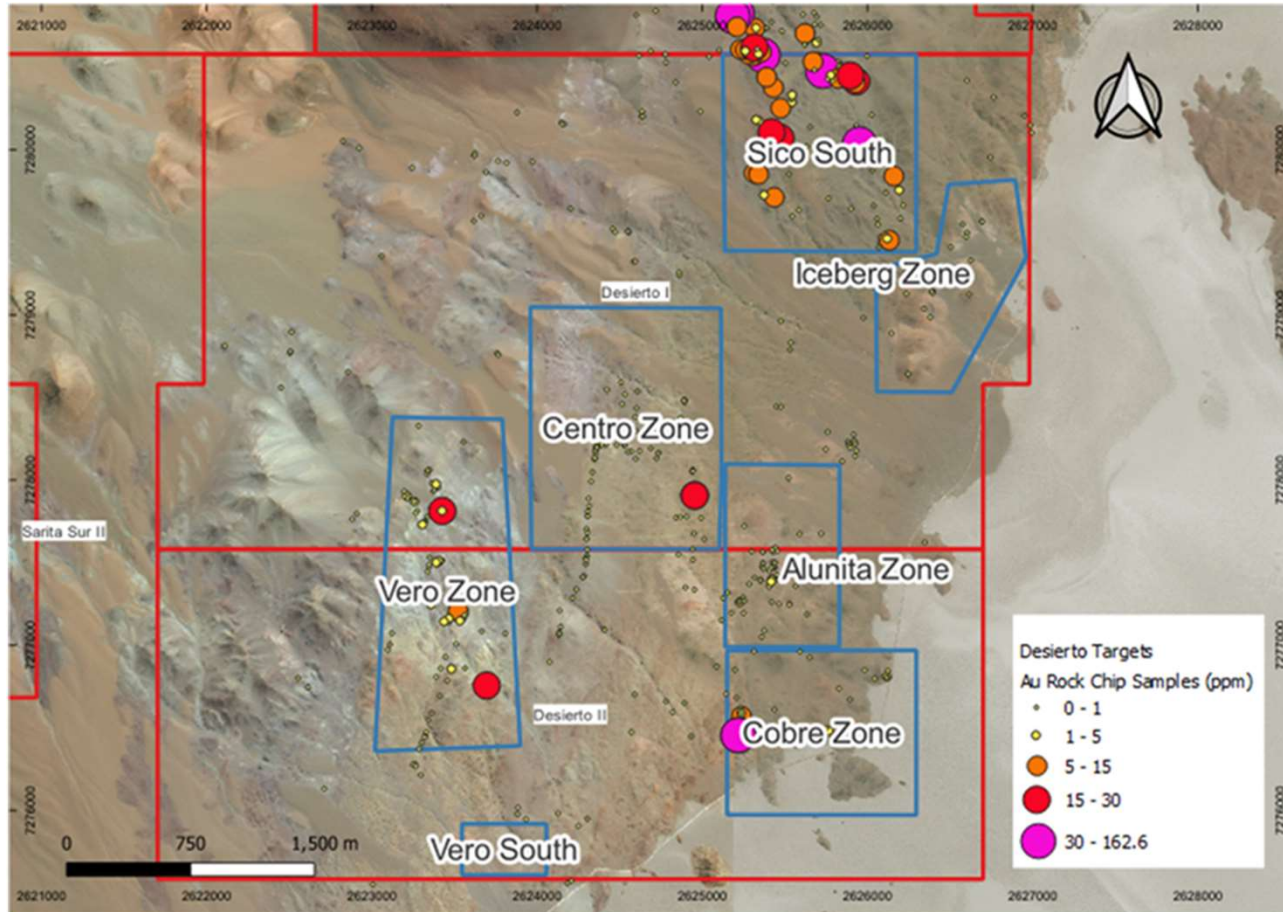


Geology of the Sarita Este – Desierto project is permissive for shallow Tertiary epithermal gold deposits similar to the nearby Lindero deposit and deeper copper porphyry deposits similar to the adjacent Taca Taca deposit

- Taca Taca is a 2.9 billion tonne copper porphyry deposit containing 11.7 million tonnes of copper and 7 million oz Au (First Quantum FS 2021)
- Lindero is a gold porphyry mine of 69.2 mmt grading 0.54 gpt containing 1.2 mm ozs Au (Fortuna website)

Proposed drilling on Desierto will test for extensions of Sico gold mineralization and test porphyry copper/gold targets

# Defined Drill Targets



- **Sico South** - Southern extension of shallow gold zone discovered on Sarita Este
- **Iceberg** - Alunite/pyrophyllite alteration in host rocks similar to Taca Taca
- **Alunita** - Alunite/pyrophyllite alteration in host rocks similar to Taca Taca
- **Cobre** - Quartz veins with high grade gold
- **Centro** - Ag-Au veins drilled by Mansfield (4 holes)
- **Vero** - Vein zone with Au and Ag values
- **Vero South** - Veins with Au and Ag values



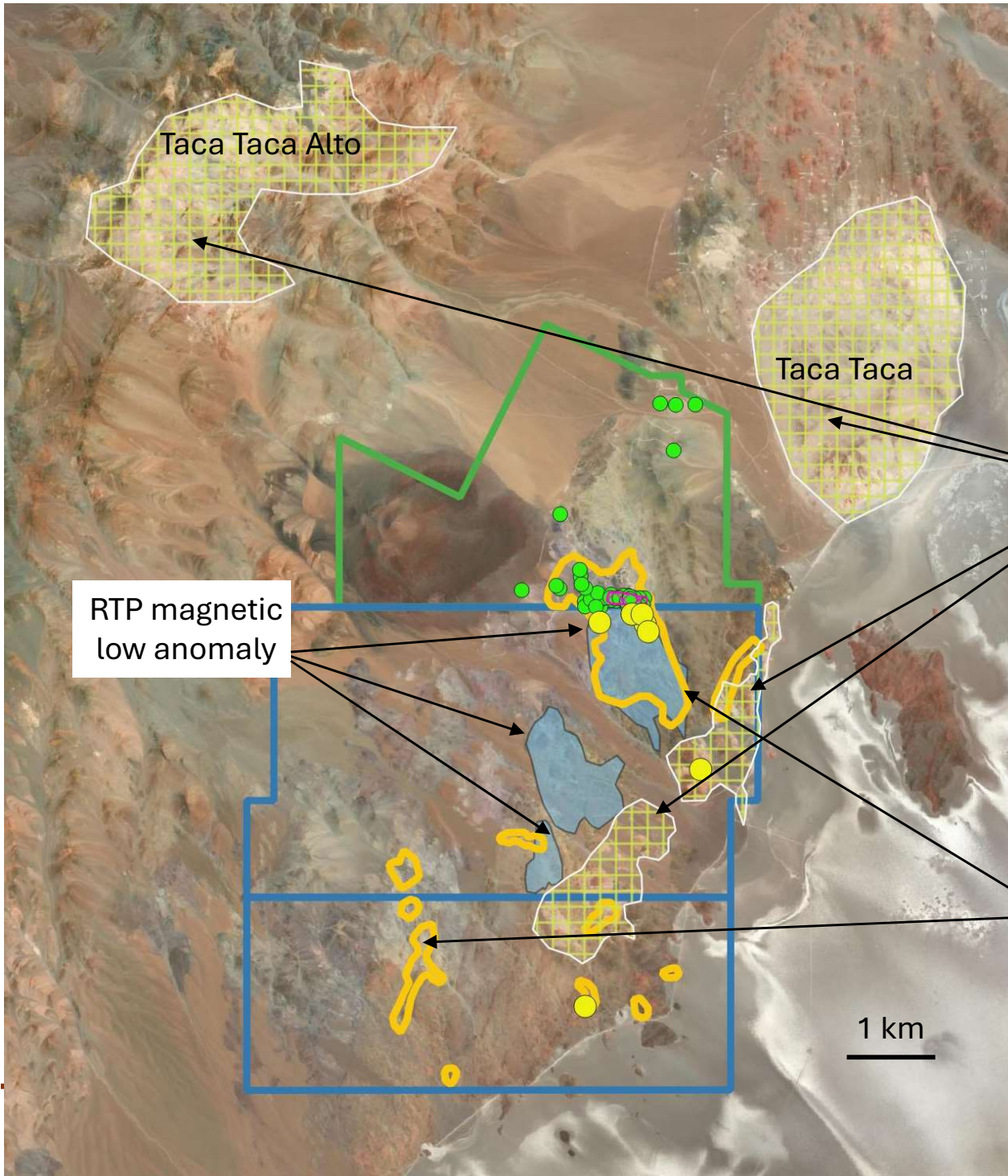
## Drill Target Overview

Showing location of advanced argillic alteration, aeromagnetic low anomalies, and areas of anomalous gold from surface rock samples

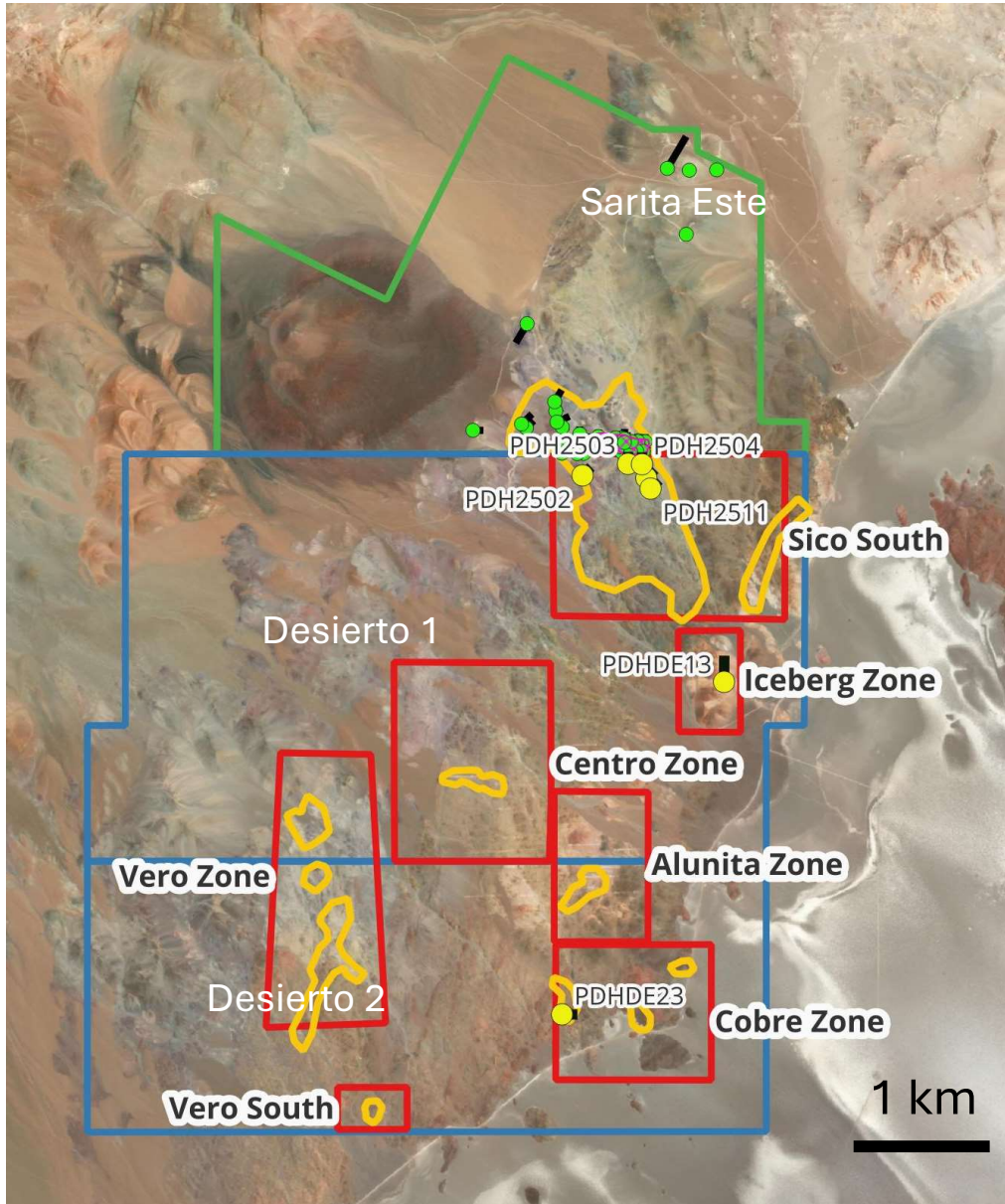
Advanced argillic alteration  
Interpreted from Aster data

● Proposed drill holes  
7 proposed holes  
1250 meters total

Limit of gold anomaly in rock samples  
>100 ppb Au



# Proposed Drill Program



## Existing drill hole

51 drill holes  
3,672 meters



## Proposed drill hole

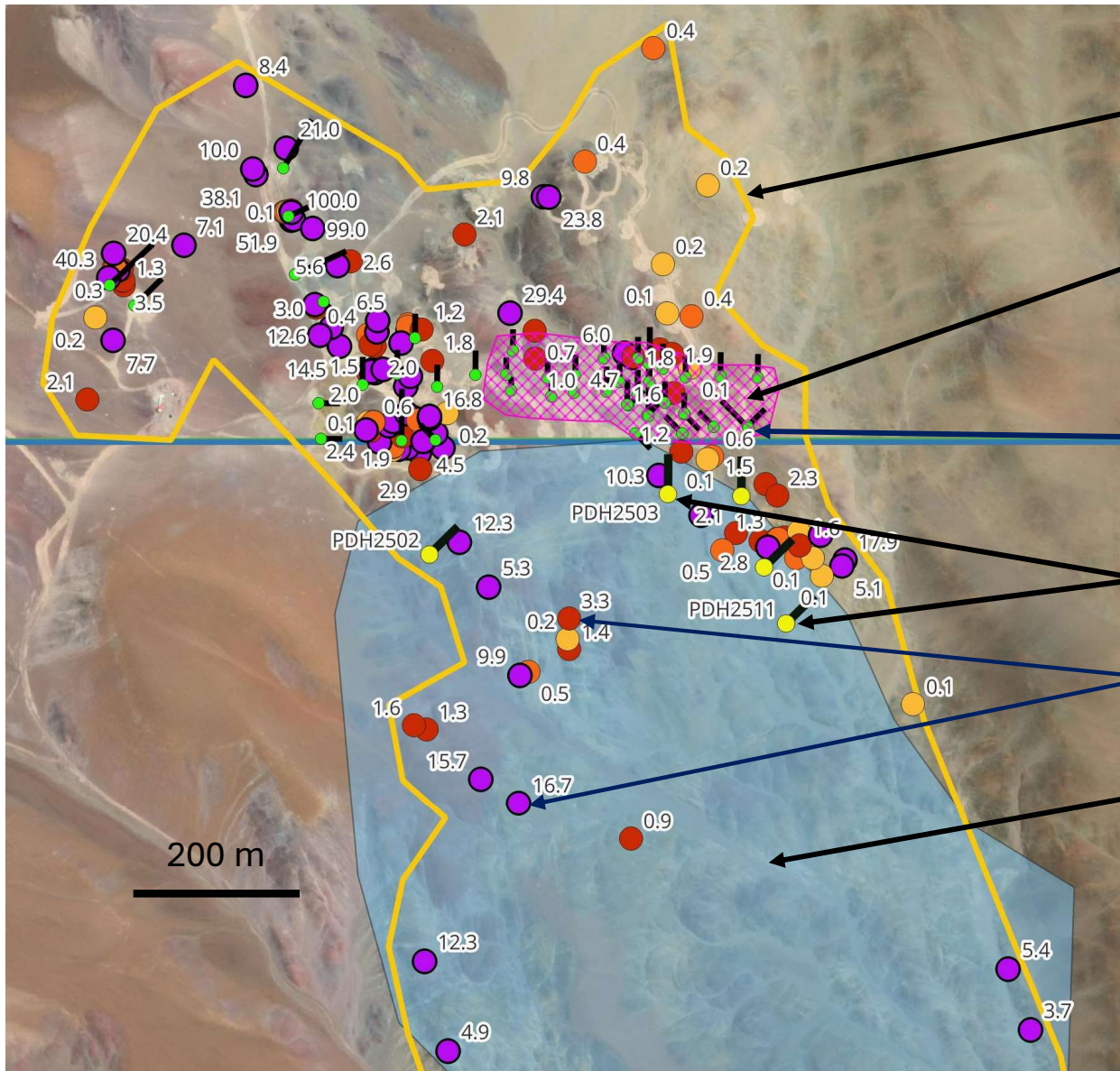
- 7 proposed holes
  - Five 100 meter drill holes at Sico South
  - 600 meter drill hole at Iceberg
  - 150 meter drill hole at Cobre
- 1250 meters total

## Proposed drill holes

- Sico South
  - Test south extension of the existing gold mineralization on Sarita Este.
  - Favorable geology with anomalous gold surface samples on the margin of a magnetic low anomaly which could represent a hidden intrusive body.
- Iceberg
  - Test for Taca Taca style copper gold mineralization beneath highly altered surface rocks.
- Cobre
  - Test depth continuity of high-grade surface gold mineralization observed in a prominent sugary to chalcedonic quartz vein.

Numerous other attractive targets for future drilling

# Sico South Target



Limit of strongly anomalous gold in rock samples >100 ppb Au

Mineral inventory: 289K oz Au @ 0.58 g/t

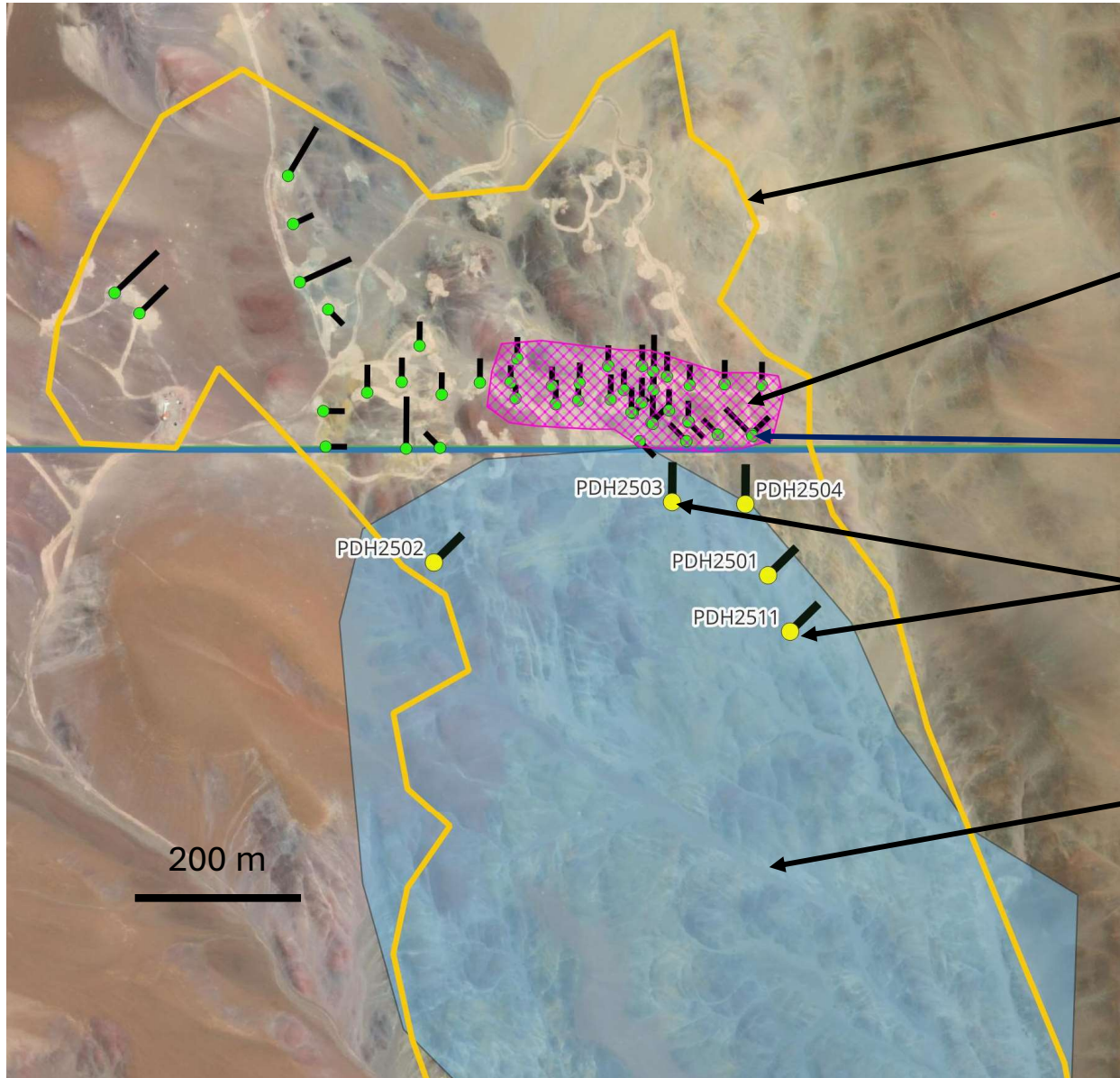
Existing drill holes (46 ddh 3152 m)

Proposed drill holes (5 holes, 500 m)

Au in rock samples ppm

RTP magnetic low anomaly

# Sico South Target



Limit of strongly anomalous gold in rock samples >100 ppb Au

Mineral inventory: 289K oz Au @ 0.58 g/t

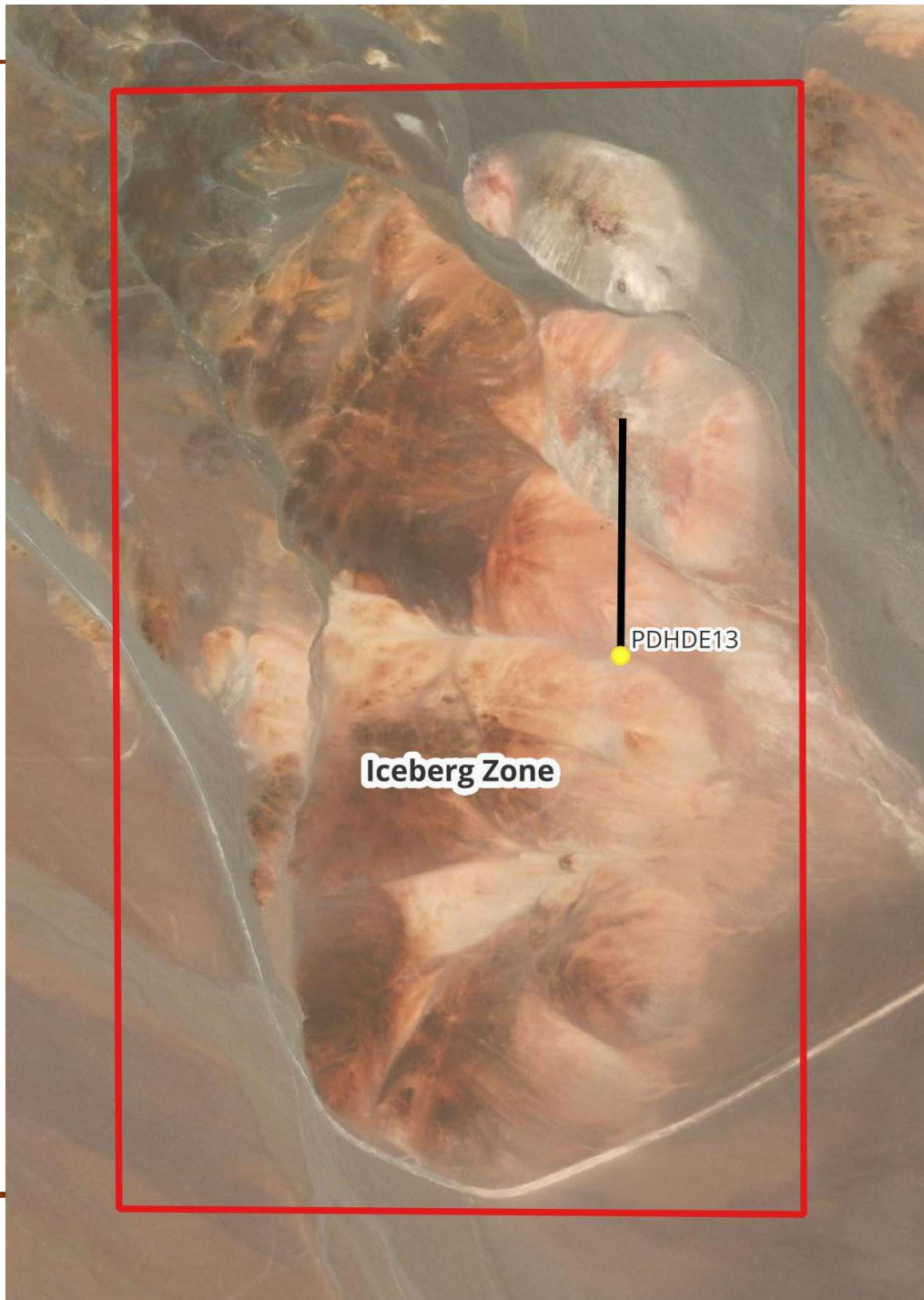
Existing drill holes (46 ddh 3152 m)

Proposed drill holes (5 holes, 500 m)

RTP magnetic low anomaly

200 m

# Iceberg Target



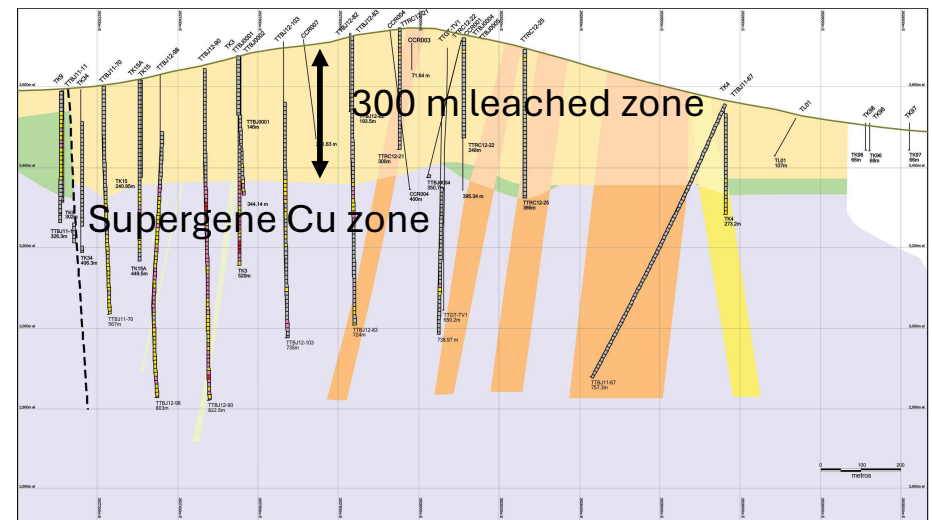
Strong alunite-pyrophyllite alteration from Aster image

Strongly leached

Proposed hole is 600 meters at  $-75^\circ$

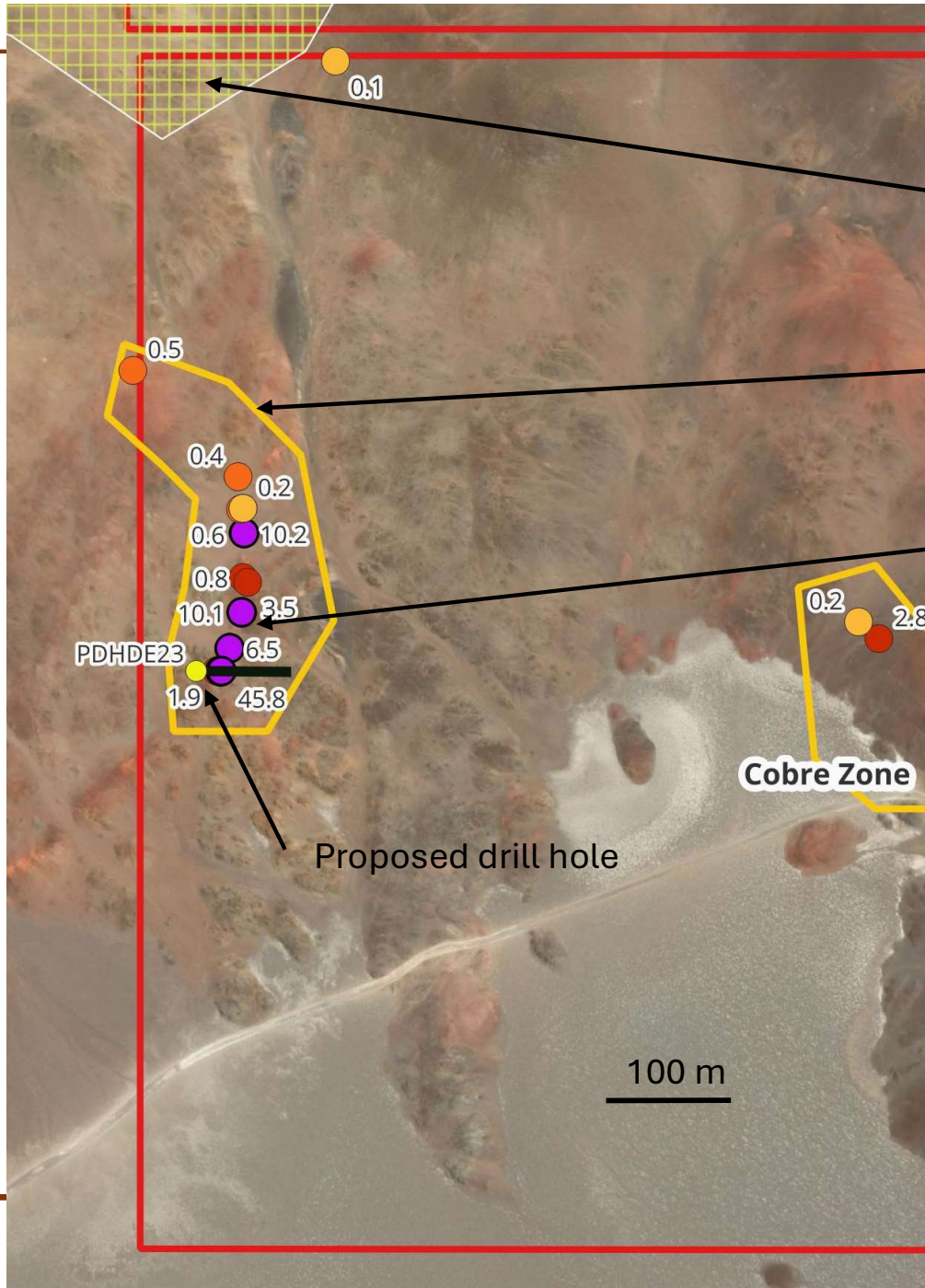
Surface trace is 155 m (564 m vertical reach)

Supergene copper blanket at Taca Taca starts at 300 to 400 m depth below surface



Taca Taca section, looking north

# Cobre Target



Advanced argillic alteration  
Interpreted from Aster data

Limit of strongly anomalous gold in  
rock samples >100 ppb Au

Au in rock samples, ppm



Cobre Vein looking south  
1 to 2 meters width

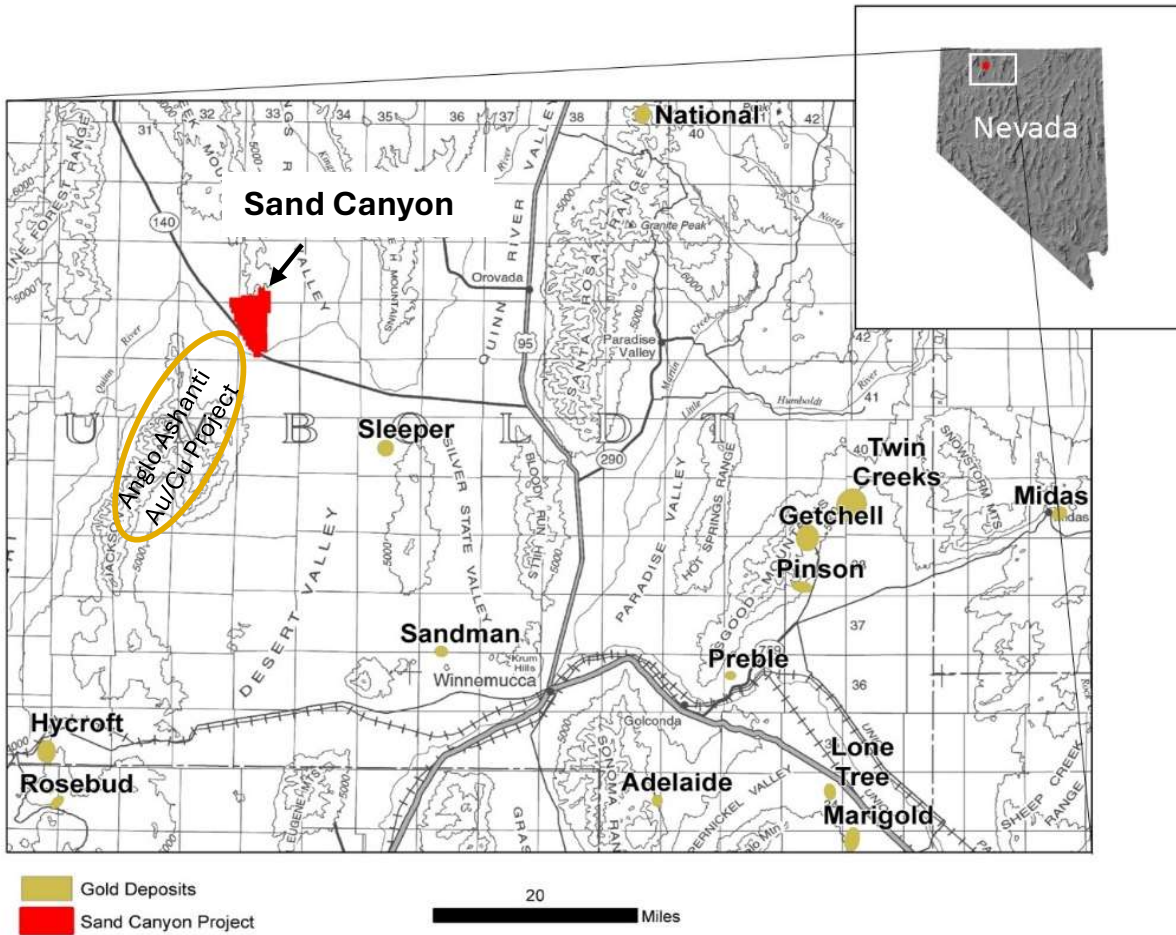
## Political Update

- The new regime came into power in December 2023, replacing the Peronist Alberto Fernandez
- Javier Milei is an economist who supports free markets, a minimalist state and fiscal responsibility
- Recently passed a bill with the largest reforms in Argentine history designed to deregulate the economy

## Economy

- Austerity measures have resulted in a balanced budget, and a sharp reduction in inflation
  - The government is looking to remove currency controls to attract investment
  - Milei's approval rating is positive
  - The overall outlook for the economy is positive
-

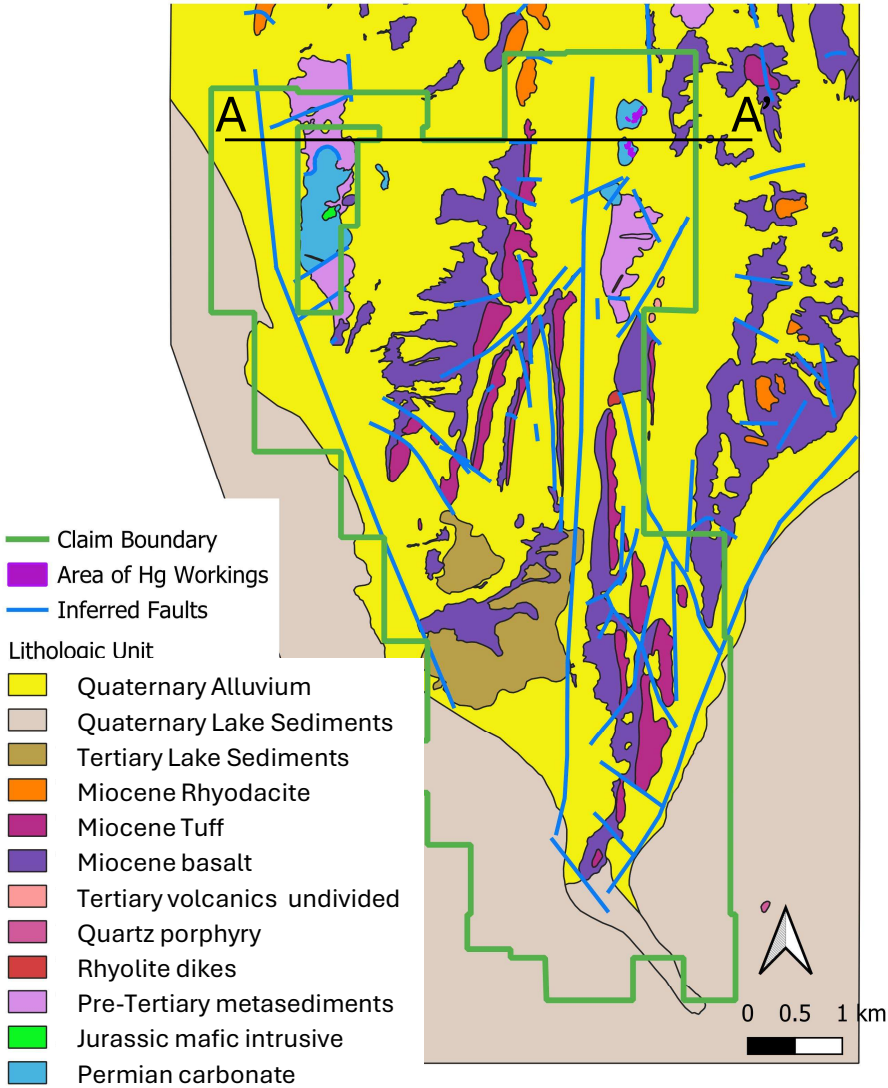
# Sand Canyon Project – NV, USA



- Option to earn 60% has been exercised and JV documents are in the process of being finalized to formalize ownership and operational structure
- JV has 8079 acres of mining claims located in productive Miocene Au/Ag mineral belt
- Historic mercury prospects
- Numerous untested geochemical anomalies
- Hydrothermal breccia veins at surface
- Silicified limestone in upthrown basement blocks
- Further target delineation in progress
- Additional IP and MT geophysical surveys planned to follow-up on prior work and further define drill targets
- 2020 drilling (4 core holes, 1800 m) intersected a mineralized breccia vein in one drill hole

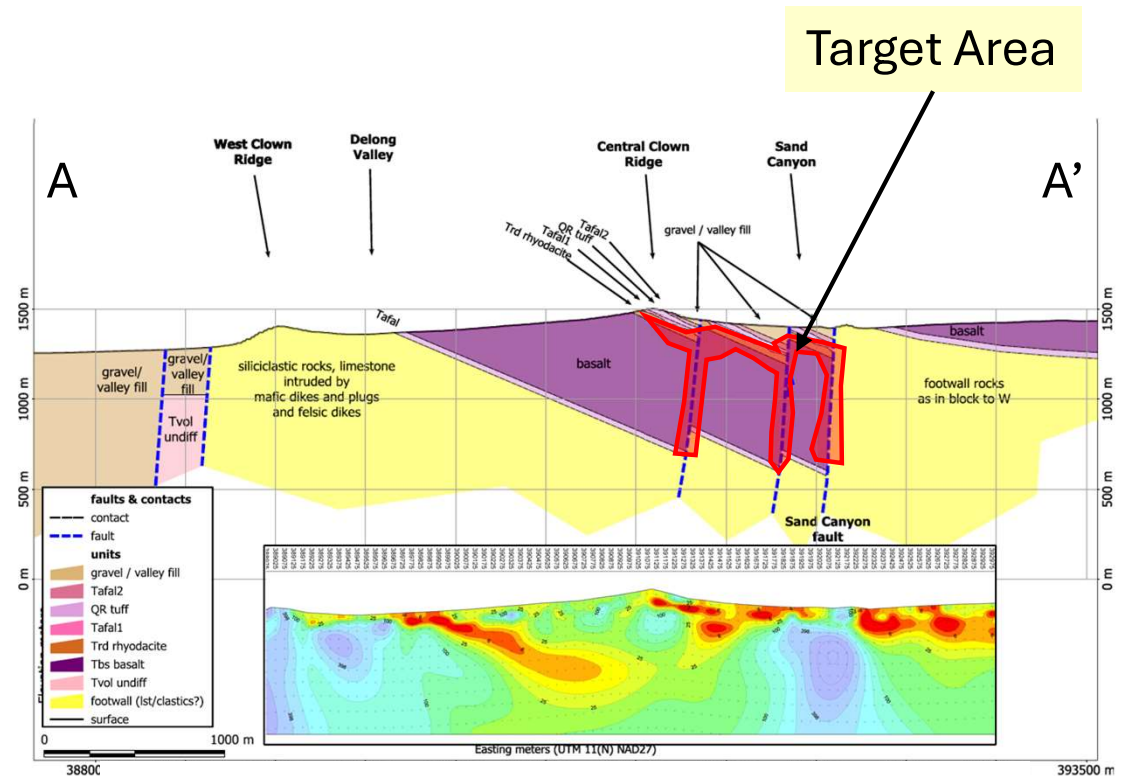


# Sand Canyon Geology

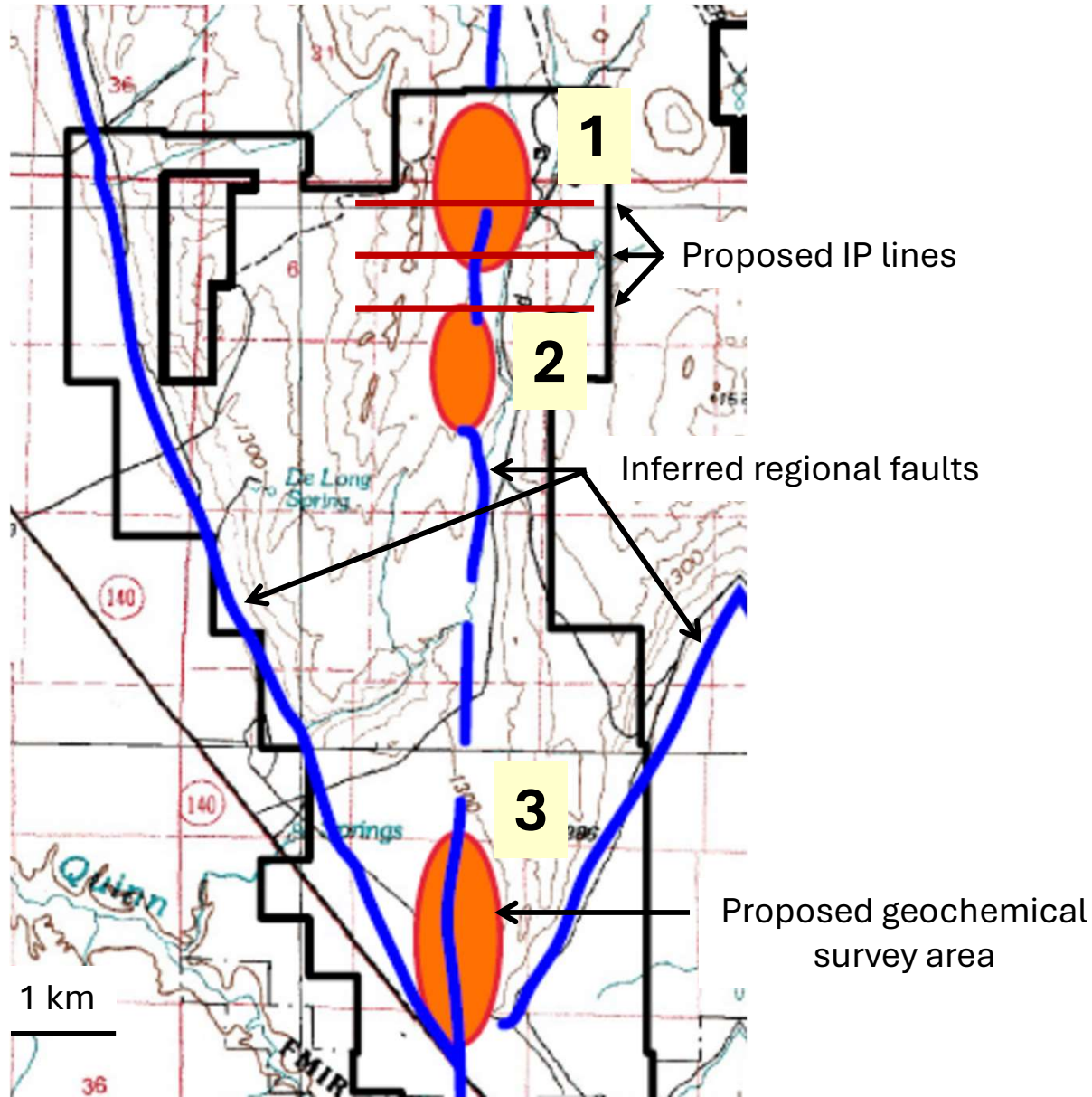


Miocene volcanics overly Permian limestone and clastic rocks in a complexly faulted area with ample evidence of hydrothermal activity including mercury showings.

Geophysical evidence for alteration (resistivity lows) along the Tertiary/Paleozoic unconformity is strong. Targets for epithermal gold/silver mineralization include high angle faults and the unconformity



Cross section on UTM 4600000 N showing geology and resistivity from MT line  
 On MT line, red areas are resistivity lows, probably alteration (clays).  
 Violet areas are resistivity highs representing Paleozoic rocks.



## Proposed Targeting Program

IP lines crossing the northern target areas

Additional geochemical sampling to further delineate anomalous Ag, Au and pathfinder elements

### Target Areas

1. The north target area is the site of historic Hg mining prospects with associated rock chemical anomalies, strong alteration of carbonate rocks, and a concealed NSAMT anomaly associated with the Sand Canyon structure
2. The central target area shows strong rock and soil chemical anomalies in the basement block immediately east of the Sand Canyon structure
3. The south target area is the site of strong rock chemical anomalies in the Tertiary volcanics immediately east of the Sand Canyon structure, and strong plant chemical anomalies along the concealed trace of the Sand Canyon structure

**Drilling 2025:** Advancing a targeted drilling program at our **Desierto Project** in Argentina

**Strategic Exit from Mexico:** Streamlined operations to sharpen geographic and financial focus

**Strong Financial Position:**

- Debt-Free
- Cash on Hand
- Reduced Liabilities
- Clean Balance Sheet

**Clear Vision:**

- Pursuing high-impact gold projects in premier mining jurisdictions - Argentina and Nevada
- Fully aligned for value creation with minimal legacy risk

**Lean, focused, and ready to grow**  
delivering exploration upside with financial discipline

---