



**Revisiting the Cu-Au Potential of the
50km CABAÇAL BELT (MATO GROSSO):
New Opportunities for VMS Systems
with Orogenic Gold Overprint**

 **RIO CABAÇAL**
MINERAÇÃO

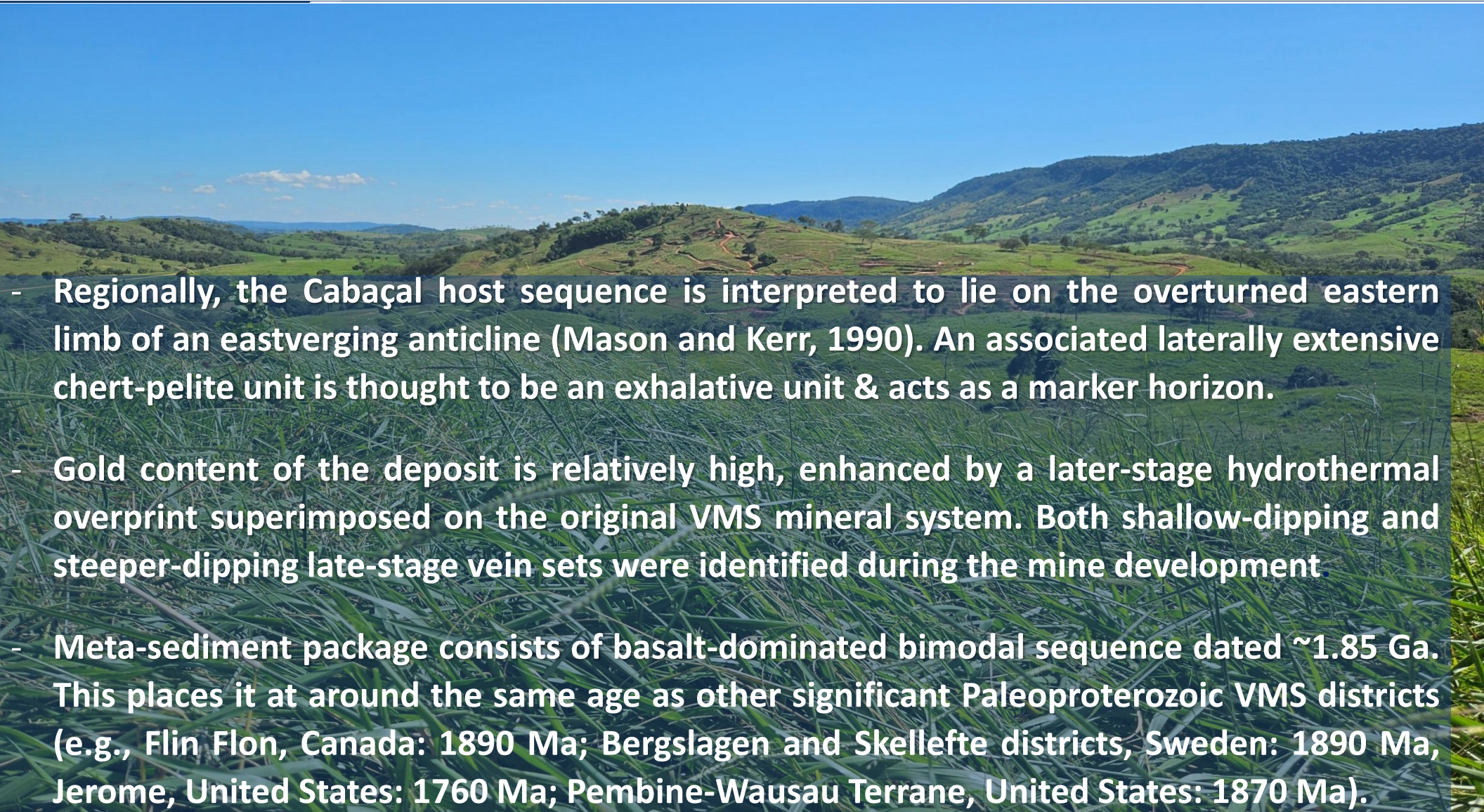


- The Cabaçal Belt is the one of the three Paleoproterozoic greenstone belts first discovered and developed in the 1970's & 1980's by BP Minerals.
- Historical mine data is being combined with new generation of drilling & exploration to lay the foundation for redevelopment & new generation of discoveries.
- An increase diversity of mineralization has been recognized with precious metal mineralization in places detached from the base metal VMS horizon.
- Multifaceted approach of surface geochemistry, coupled with surface & down-hole geophysics, has potential to unlock near-surface & blind discoveries in an under-explored mineral district.



- Geological Setting, Mineralization and Deposit types are related to Paleoproterozoic volcanogenic massive, stringer and disseminated sulphide system located within deformed metavolcanic-sedimentary rocks of the Alto Jaurú Greenstone Belt.
- Mineralization comprises massive, stockwork/breccia style, stringer and disseminated sulphides dominated by primary chalcopyrite and lesser pyrite, sphalerite and galena.
- There is a shallow weathering profile, typically 10-15m deep. VMS mineral systems can often generate clusters of deposits, providing exploration discovery opportunities from both near-mine and regional exploration targets

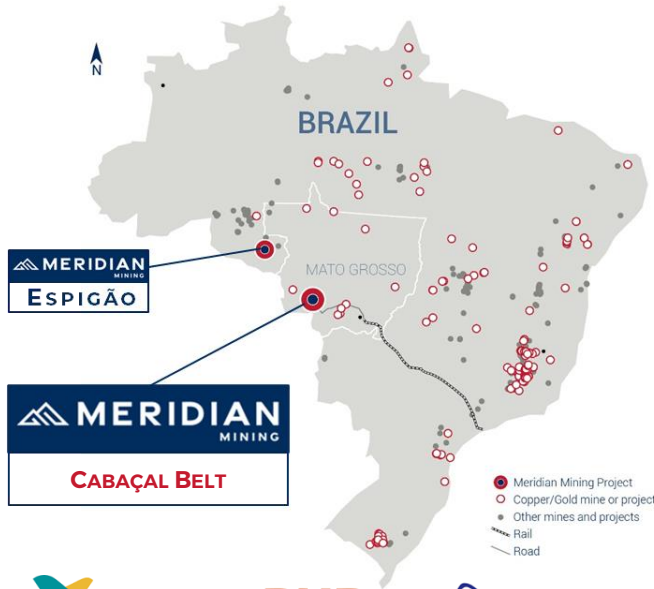
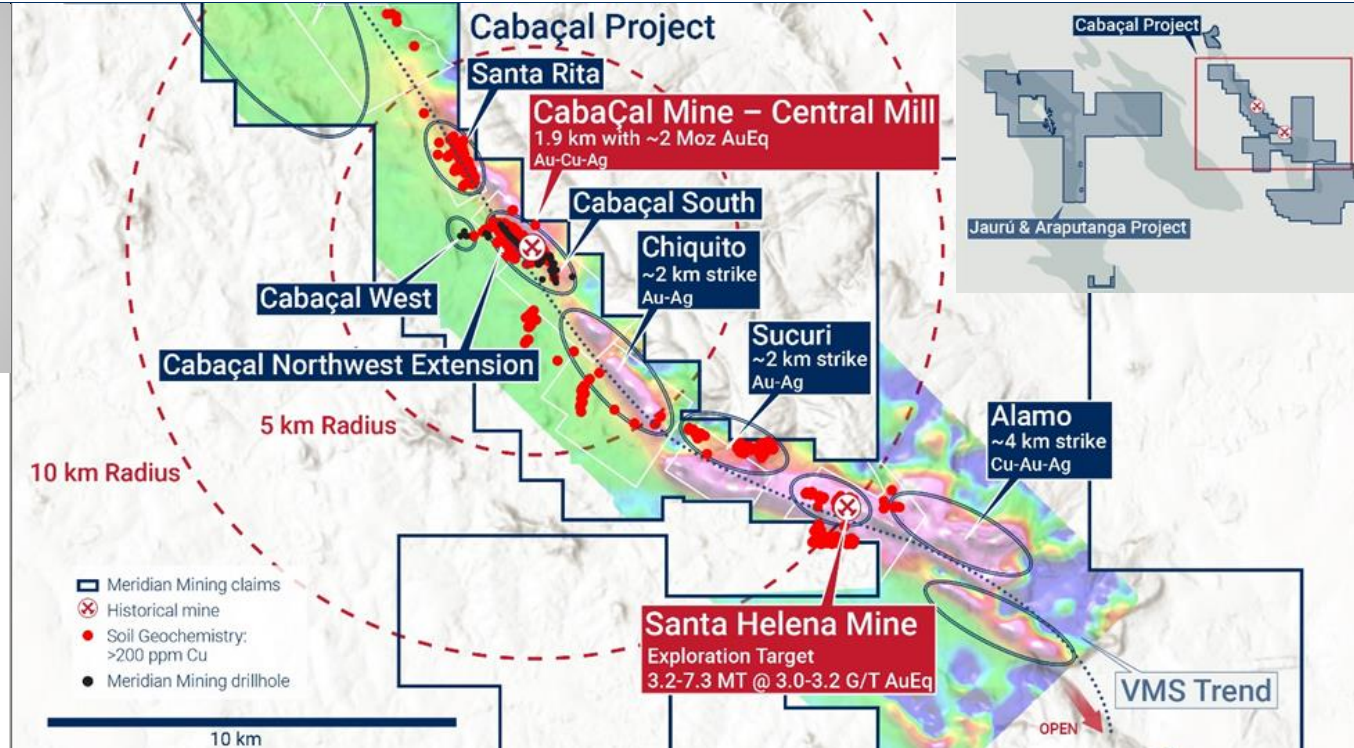


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- Regionally, the Cabaçal host sequence is interpreted to lie on the overturned eastern limb of an eastverging anticline (Mason and Kerr, 1990). An associated laterally extensive chert-pelite unit is thought to be an exhalative unit & acts as a marker horizon.
 - Gold content of the deposit is relatively high, enhanced by a later-stage hydrothermal overprint superimposed on the original VMS mineral system. Both shallow-dipping and steeper-dipping late-stage vein sets were identified during the mine development
 - Meta-sediment package consists of basalt-dominated bimodal sequence dated ~1.85 Ga. This places it at around the same age as other significant Paleoproterozoic VMS districts (e.g., Flin Flon, Canada: 1890 Ma; Bergslagen and Skellefte districts, Sweden: 1890 Ma, Jerome, United States: 1760 Ma; Pembine-Wausau Terrane, United States: 1870 Ma).



BELT SCALE EXPLORATION

- **GIANT CABAÇAL DEPOSIT DEFINED**
- **>50KM UPSIDE POTENTIAL**
- **MULTIPLE VMS PROSPECTS**
- **HUB & SPOKE DEVELOPMENT STRATEGY**



CABAÇAL MINE

- **NPV₅ - USD 573 M**
- **IRR - 58.4%**
- **PAYBACK - 10.6 MONTHS**
- **LOW CAPEX - USD 180 M**
- **LOM REVENUE - USD 2.9 B**
(ALL Post TAX)

SANTA HELENA

- **2ND HIGH-GRADE OPEN PIT**
- **EXPLORATION TARGET - 3.2-7.3 MT @ 3.0-3.2 G/T AuEq²**
- **HOSTED WITHIN ONLY 1.4KM OF ~3KM PROSPECT**

1 See Meridian NI-43-101 2nd June 2022
2 See information on Slide 22

VMS Belts have a history of Low Capex – High Returns – Intergeneration Production

VMS Clusters - Hub & Spoke Strategy

- VMS deposits occur in Clusters & tend to form ~4km spacings
- Deposit clusters ideal for Hub & Spoke development strategy

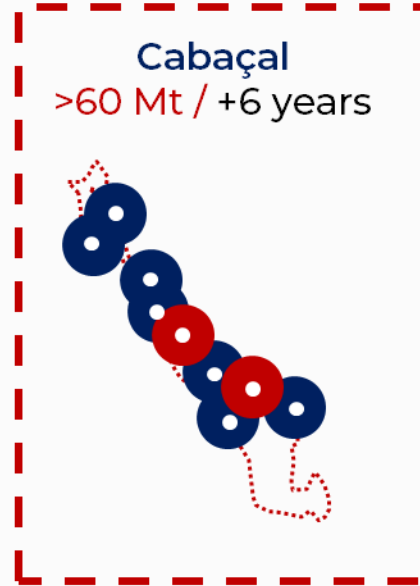
Giant Scale VMS

- Cabaçal Mine – “Giant” (>30 Mt) VMS Deposit on Standalone Basis
- Top 4% Global VMS Deposits by Tonnage
- Cabaçal VMS Belt underexplored and under-developed compared to analogue camps

Intergenerational Production

- Many large VMS Deposits have over 50 year production history
- Cabaçal - 6 years past production & 22 year projected LOM (PEA)³

Notes: ¹ See Meridian Announcements
² Source: Akita University, Galley et al. (2007); Mercier-Langevin et al. (2007) S&P Global, Hudbay 2020
³ See News Release 6th March 2023

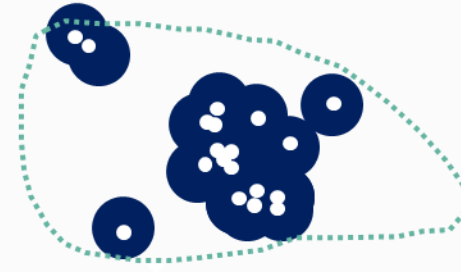


25 km

Legend:

- Deposit
- Limit of Regional Alteration

Noranda
262 Mt / +55 years



Snow Lake
56 Mt / +65 years



Flin Flon
108 Mt / +90 years



Doyon-Bousquet-La Rond
133 Mt / +90 years

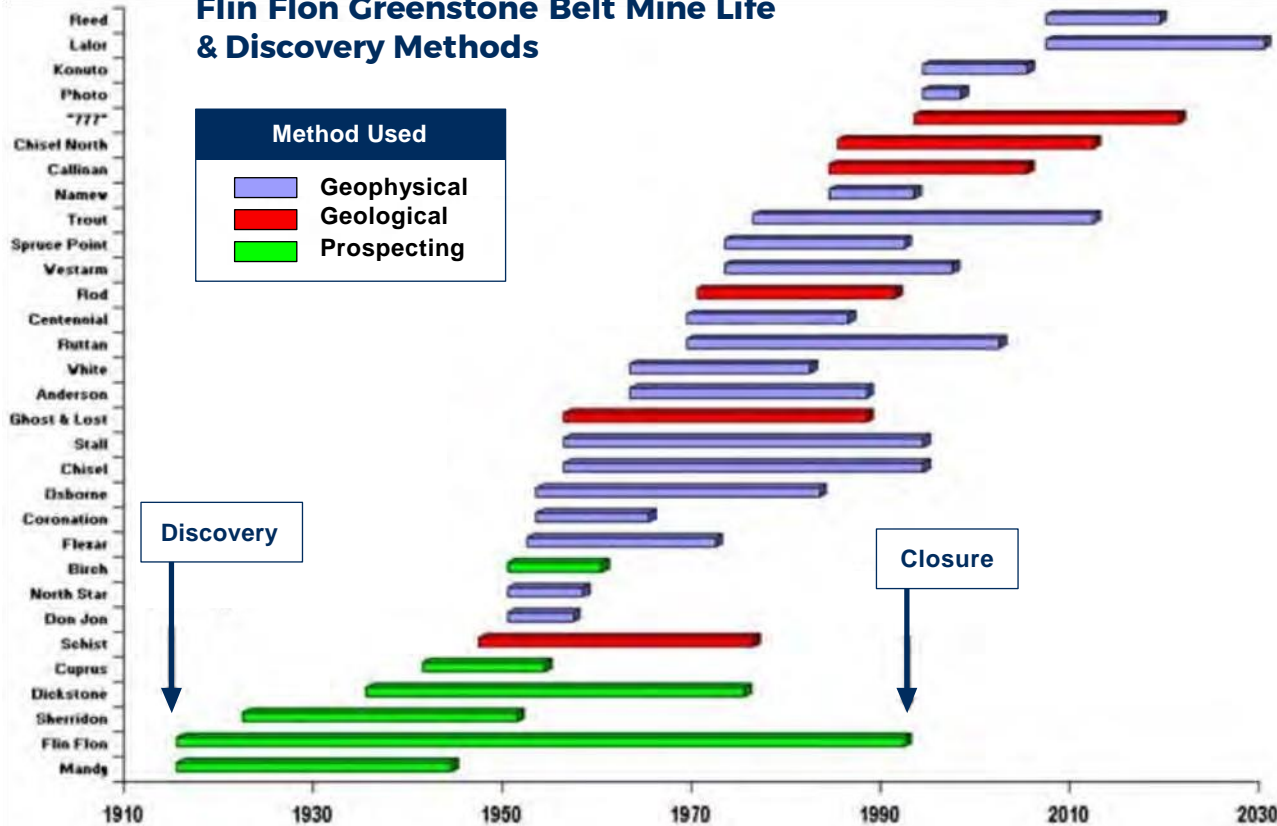


Hokuroku
122 Mt / +100 years





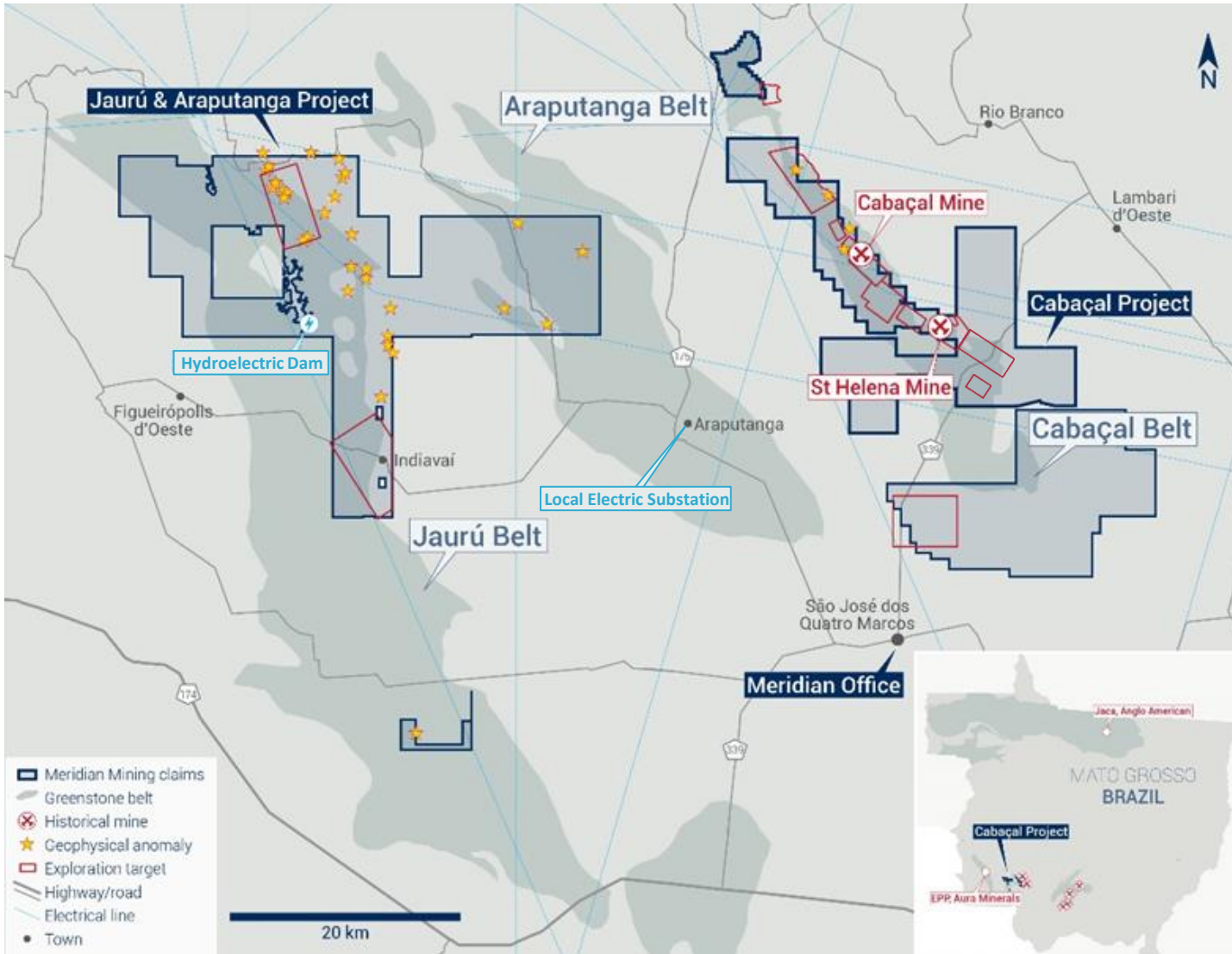
Flin Flon Greenstone Belt Mine Life & Discovery Methods



The Technical Evolution

- ▲ First discovery identified through prospecting (David Collins - Tom Creighton, 1914)
- ▲ Early mapping and geochemistry may identify hydrothermal centers. Economic mineralization not necessarily present at surface
- ▲ Cyclical nature of metal prices can influence sustained exploration effort
- ▲ Modern geophysical exploration methods have successfully expanded the discovery window, through surface and down-hole survey techniques
- ▲ Improved analytical methods add increasingly sophisticated criteria for geochemical vectoring to mineralization
- ▲ Geochemical methods are supplemented by alteration mapping, maximizing information from deeper drilling to map fluid pathways, and model the hydrothermal system in 3D

▲ FLIN FLON: FROM THE PROSPECTOR TO VTEM



928 km² tenements

Regional Exploration by BP Minerals

Historical Cu-Au-Zn geochemical anomalies

Potential extensions of VMS belt stratigraphy

Jaurú & Araputanga Greenstone belts potential to repeat discovery success at Cabaçal

¹ See News Releases: 20th June 2022, 5th Jan 2022 & 12th April 2021



Cabaçal Project

Cabaçal Mine
Peak Cu: 56 ppm
Cabaçal Resource:
Indicated: 52.9Mt @ 0.6g/t Au, 0.3% Cu and 1.4g/t Ag
Inferred: 10.3Mt @ 0.7g/t Au, 0.2% Cu & 1.1g/t Ag

Santa Helena Mine
Peak Cu: 36 ppm
Santa Helena Historical Resource
Initial Exploration Target
3.2 - 7.3 MT @ 3.0 – 3.2 g/t AuEq*
Exploration Target contained within only 1.4km of the ~3km prospective trend
Potential high-grade metal inventory range of between 306,000 to 763,000 AuEq ounces

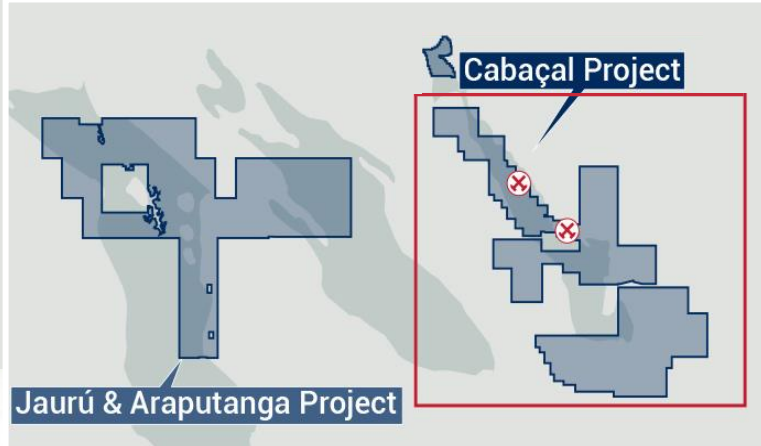
Alluvial Au Workings

Alvorada
Peak Cu: 164 ppm

- Meridian Mining claims
- Historical mine
- BP Copper Anomalies
- World View Target

10 km

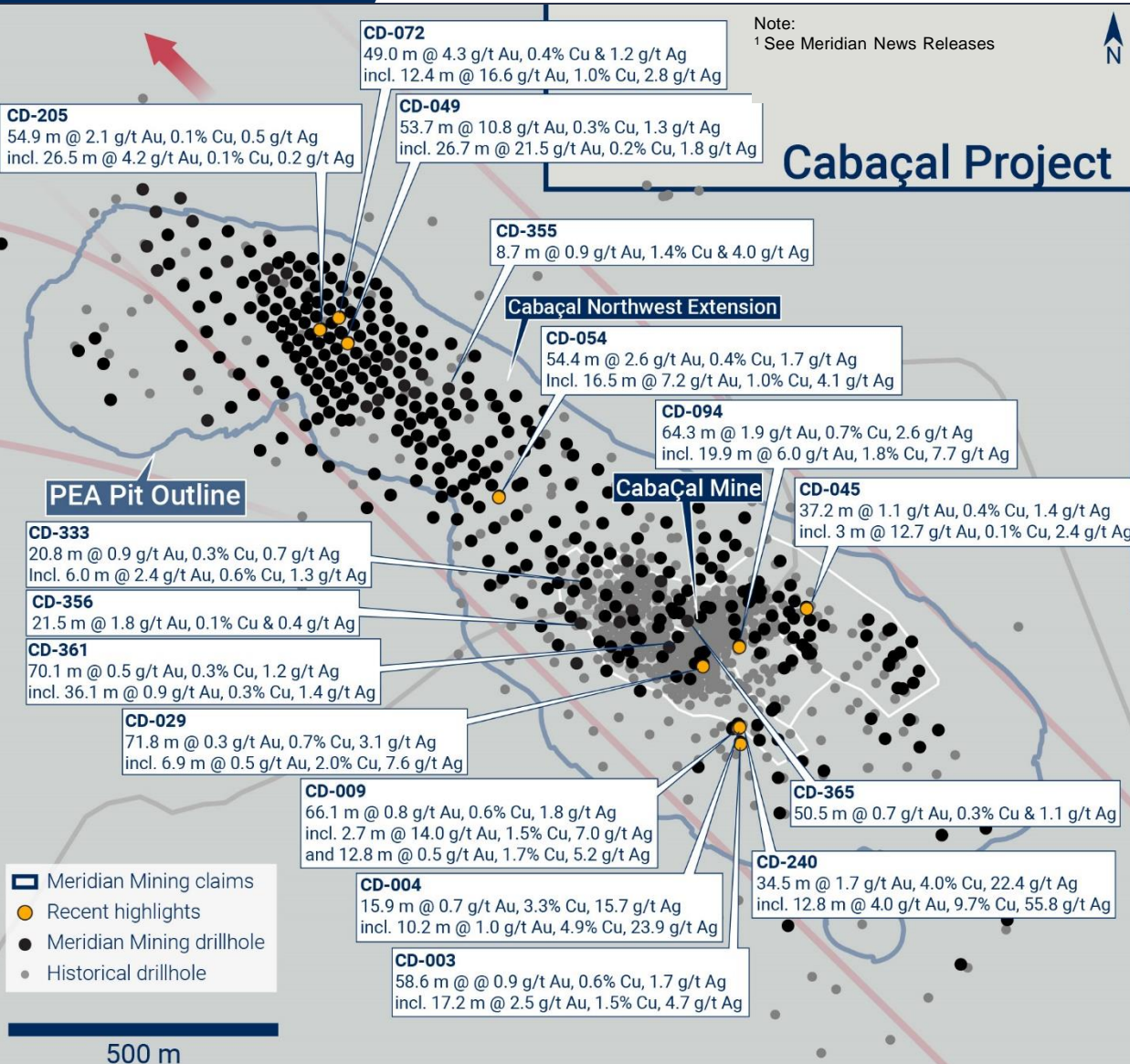
Alvorada uncovered as Cabaçal's most significant copper in stream anomaly



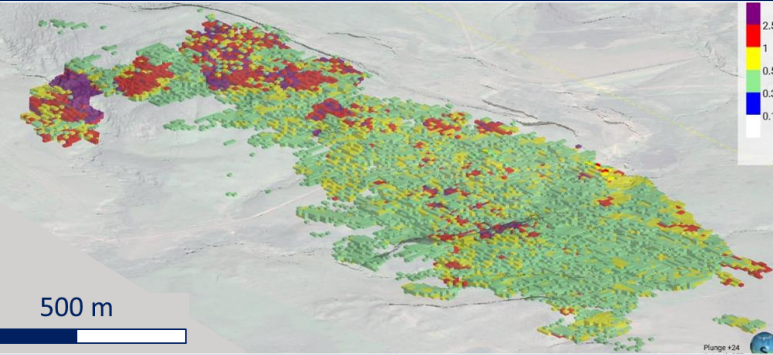
*The potential quantity and grade of an Exploration Target is conceptual in nature. There has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

The metal equivalence formula is based on the historical Santa Helena resource report, calculated as AuEq based on gold being the dominant metal of the Cabaçal VMS camp, as the expectation is that Santa Helena's mineralization will be evaluated for processing through a centralized facility at the Cabaçal mill with the addition of a zinc circuit.

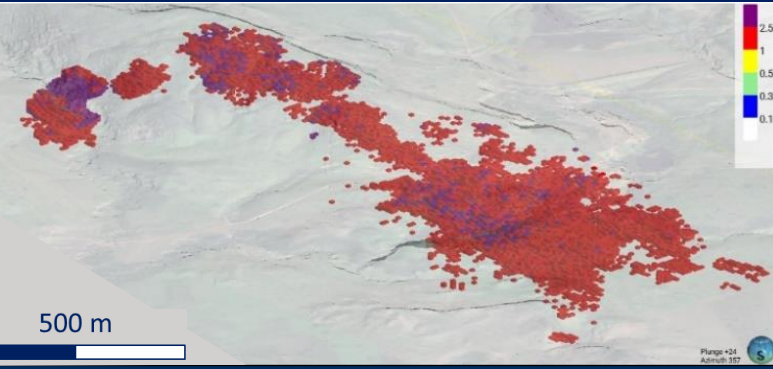
¹ See Meridian News Release 14th February 2023



▼ Resource Model (0.3 g/t AuEq Cut Off)



▼ Resource Model (1.0 g/t AuEq Cut Off)



Cabaçal Mineral Resource

Cat.	Tonne (Mt)	Au (g/t)	Cu (%)	Ag (g/t)	AuEq (g/t)	AuEq (Moz)
Ind.	52.9	0.64	0.32	1.4	1.05	1.8
Inf.	10.3	0.68	0.24	1.1	0.96	0.3



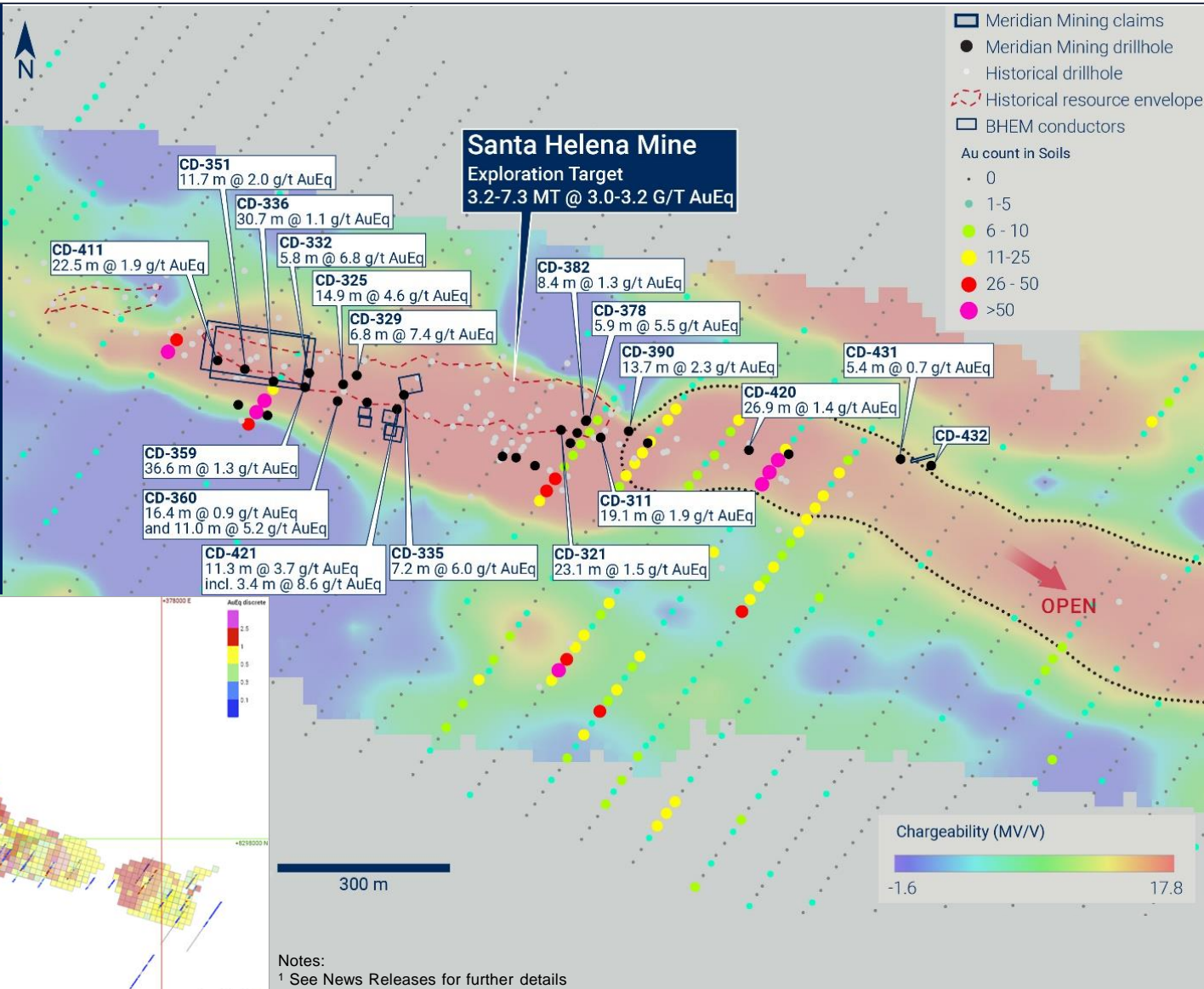
High-grade Cu-Au-Ag-Zn massive sulphide intercepted

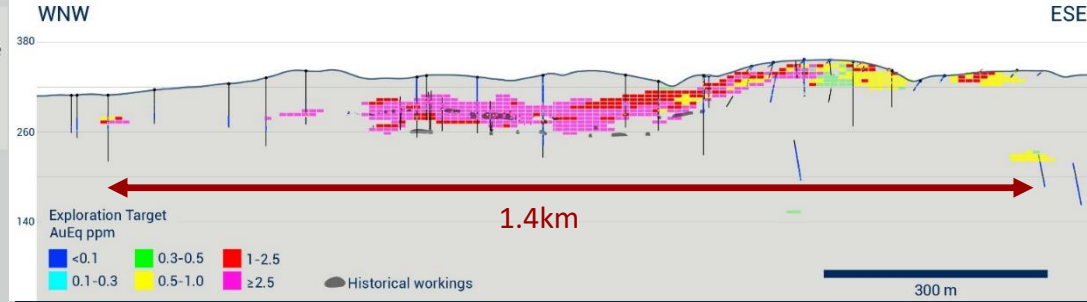
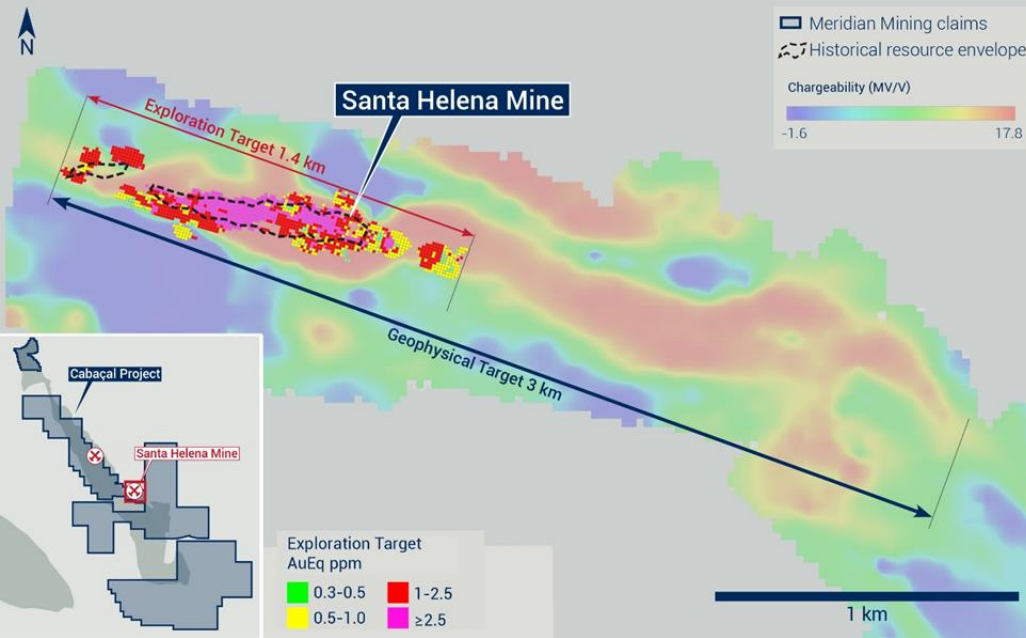
Multiple new EM plates extending out from Santa Helena Mine

Untested targets for further Cu-Zn-Au-Ag zones

1.6km open exploration target extending to the East

New polymetallic VMS lens discovered

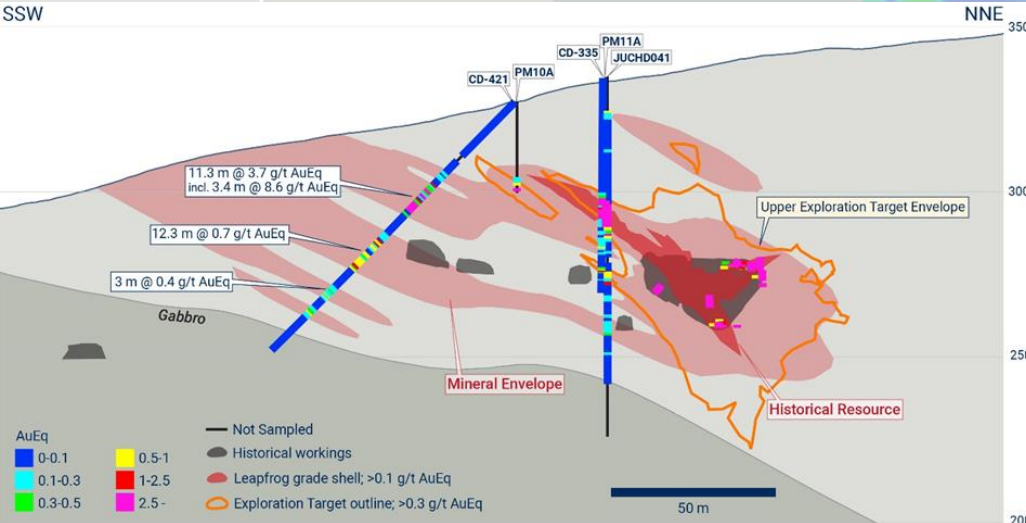




Initial Exploration Target 3.2 - 7.3 MT @ 3.0 - 3.2 g/t AuEq*

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Notes: ¹ See News Releases for further details



CABAÇAL

PFS & Resource Update leading to Higher Project Certainty
Evaluating potential increase throughput rate up to ~4.5 mtpa
Low strip open pit mine – Simple process flowsheet – Green Hydroelectricity
PEA - NPV₅ USD 573M & IRR 58.4% - Low Capital Cost USD 180M

SANTA HELENA

Potential 2nd open pit for Hub & Spoke strategy
Exploration Target shows potential for high-grade project

BELT SCALE

Mine corridor exploration upside in 50km belt
Advancing regional target - Sucuri & Alamo Cu/Au

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