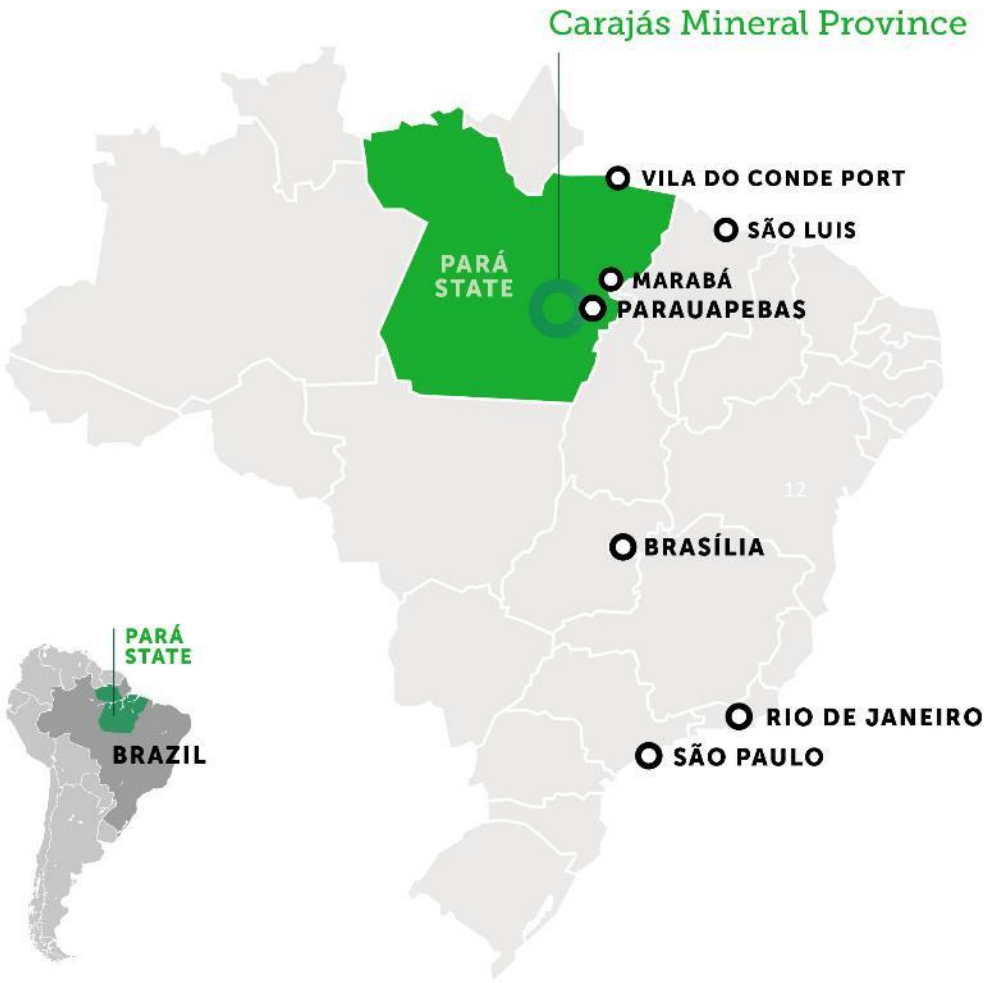
THE AUSTRALIAN COPPER COMPANY IN BRAZIL

AVANCO COPPER

Analyst Site Visit Presentation

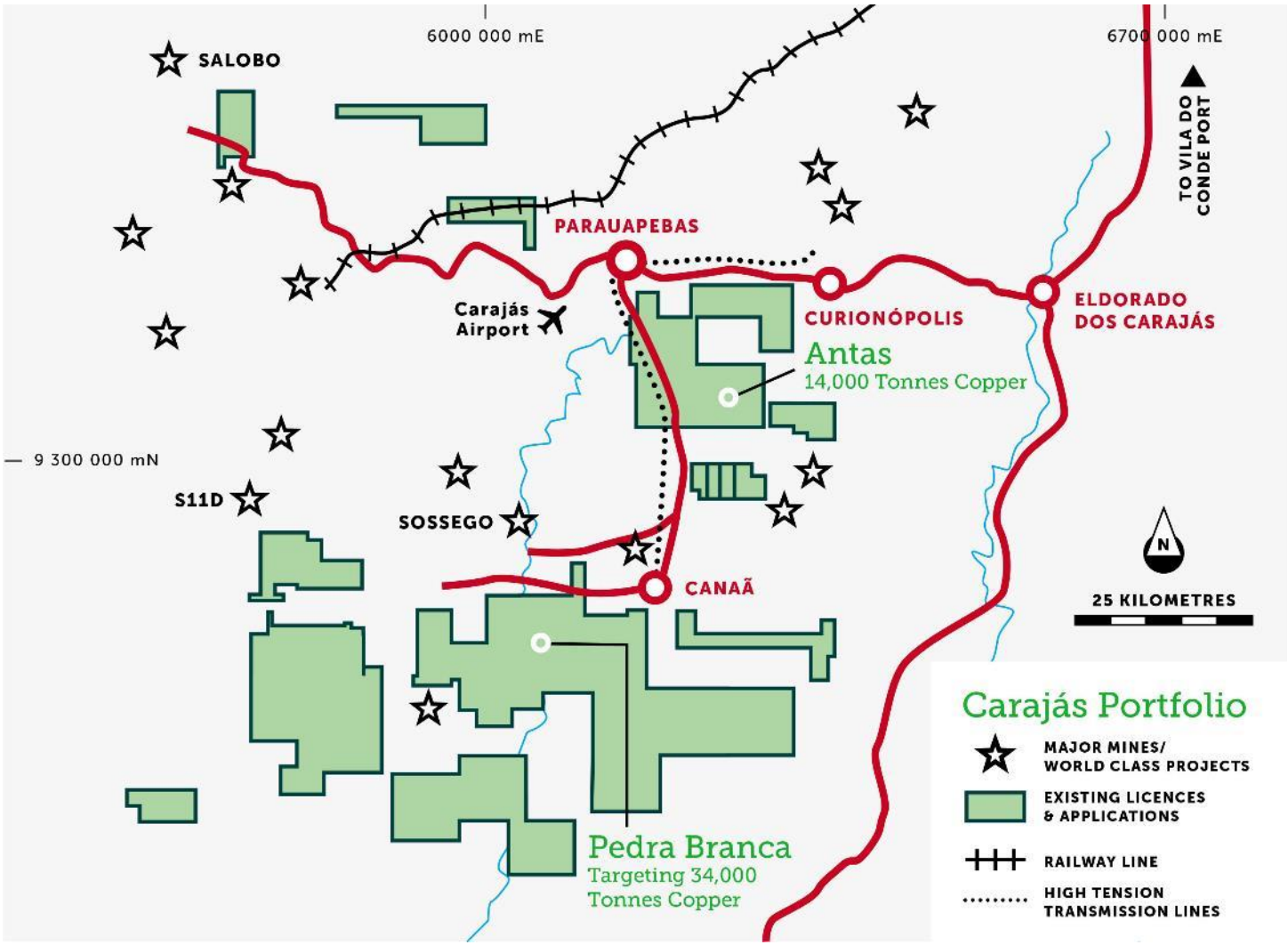
September 2017

Location



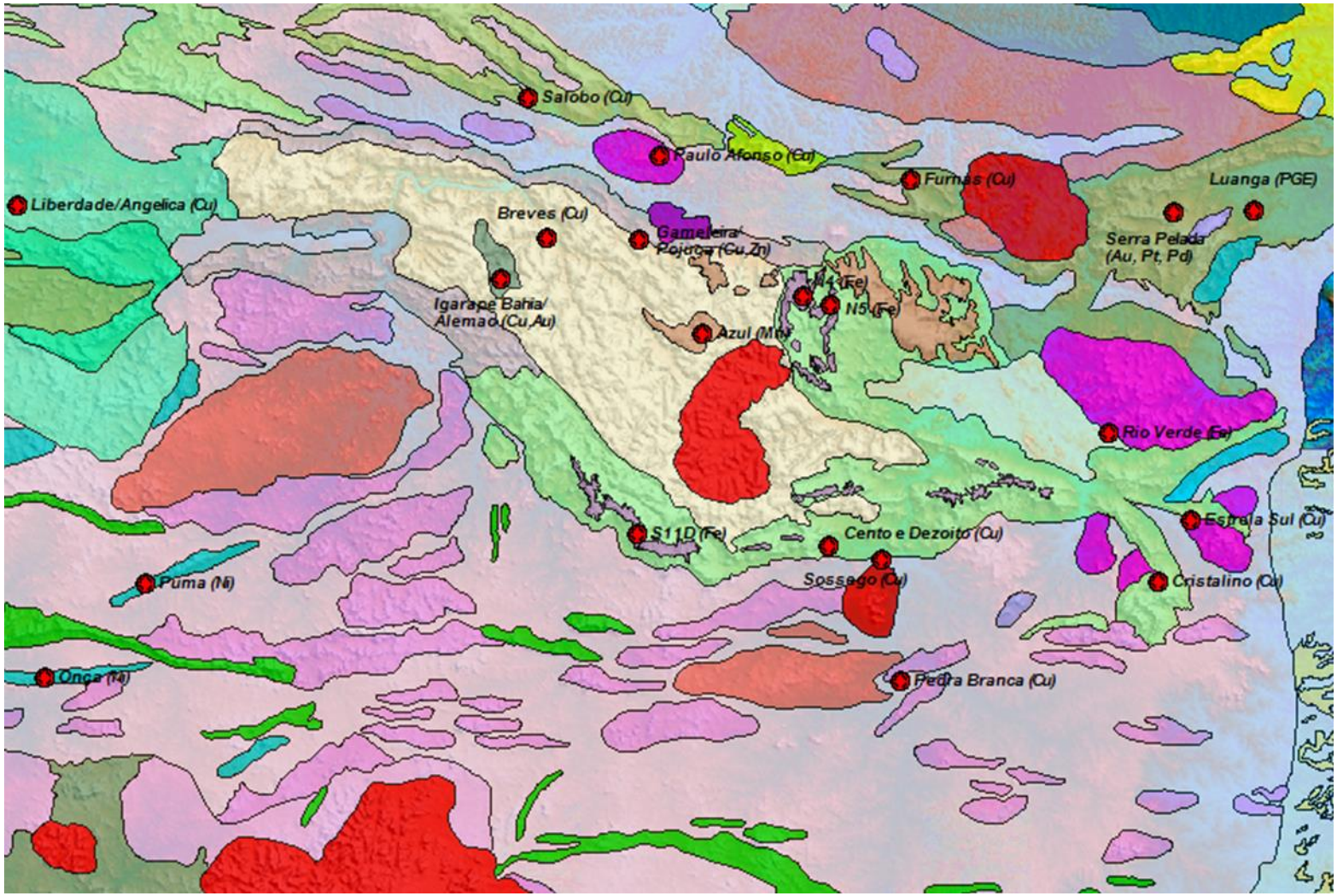
AVANCO COPPER

Carajás Portfolio



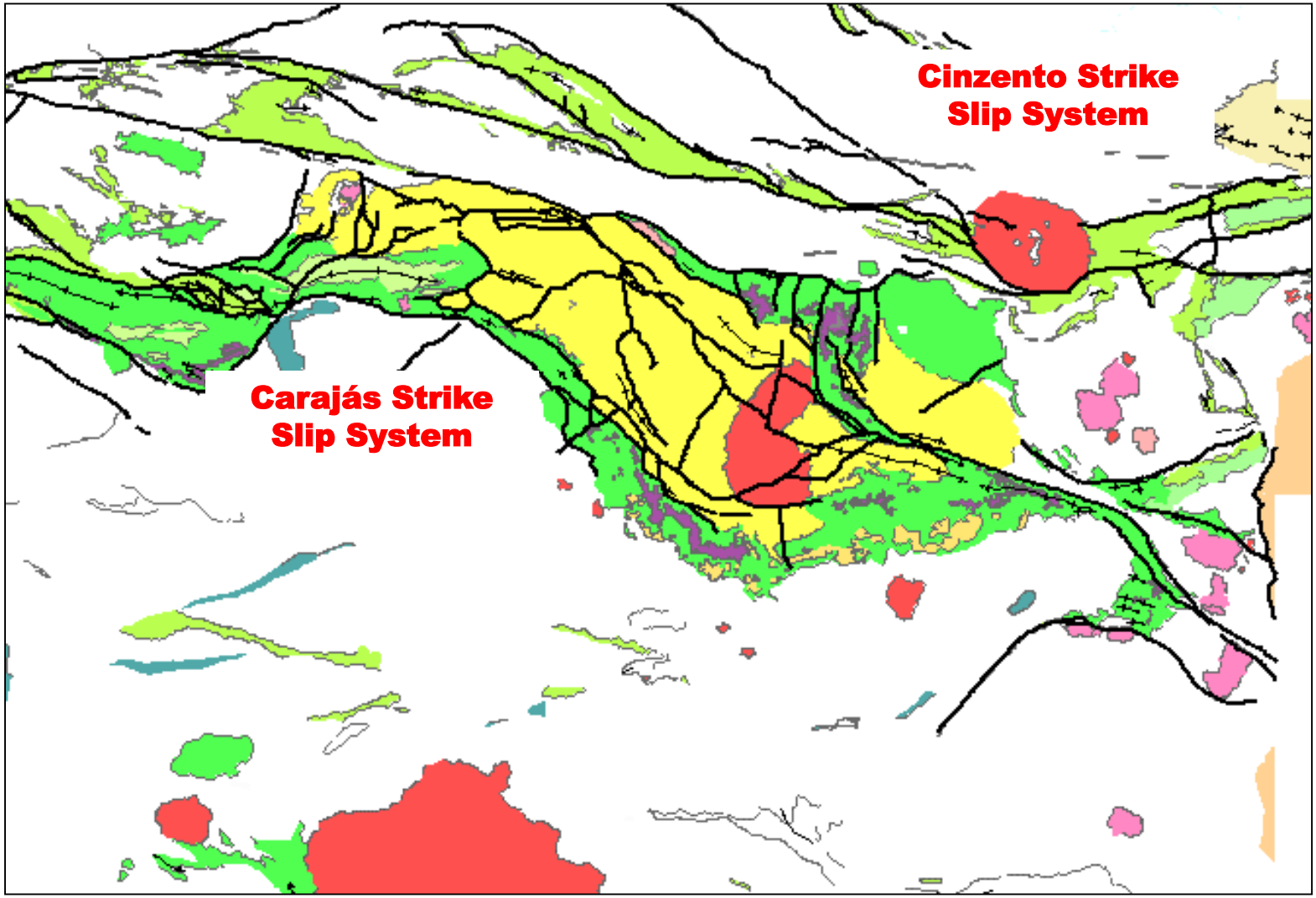
AVANCO COPPER

Carajás Province



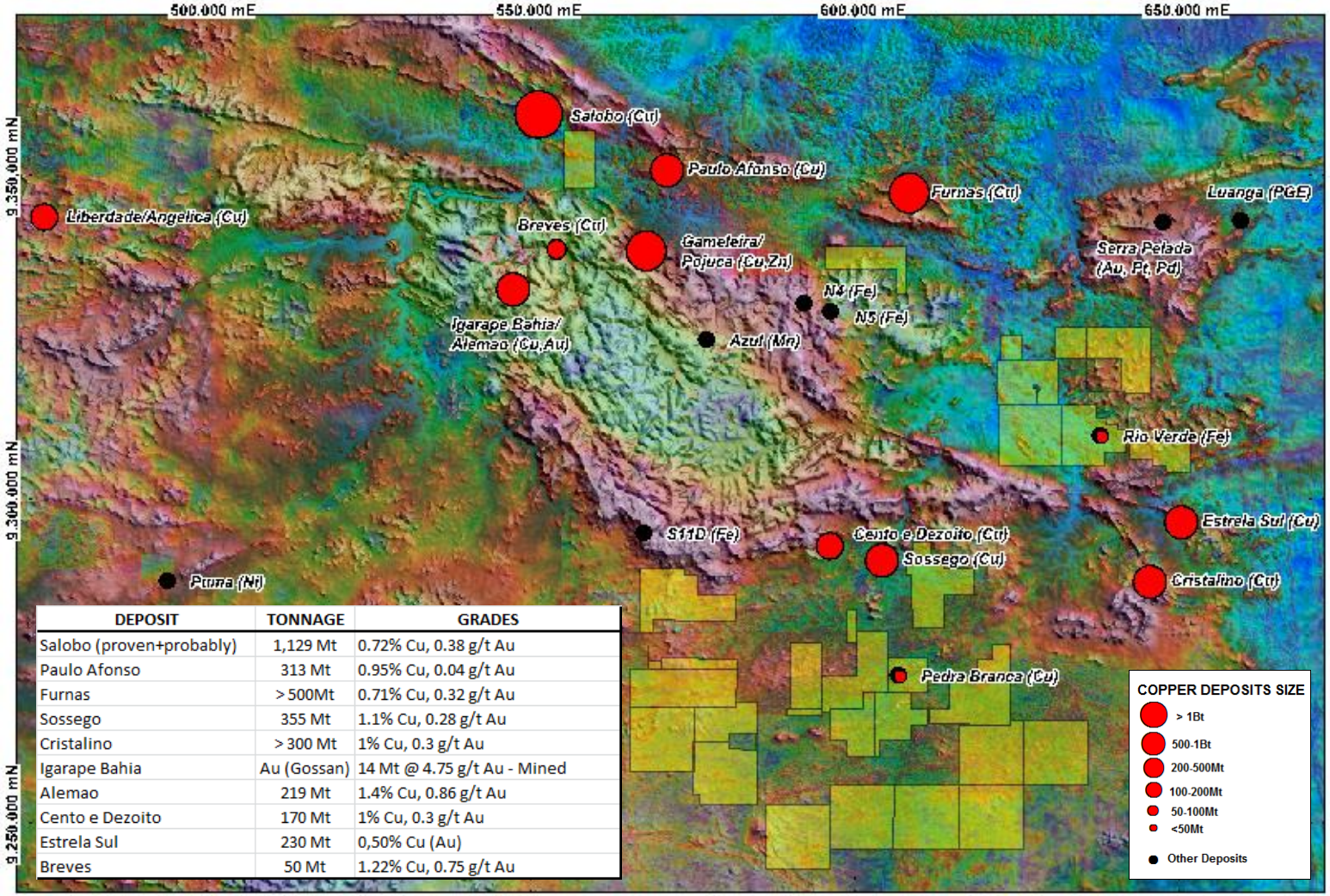
AVANCO COPPER

Cinzento & Carajás Strike Slip Faults



AVANCO
COPPER

Significant IOCG Deposits



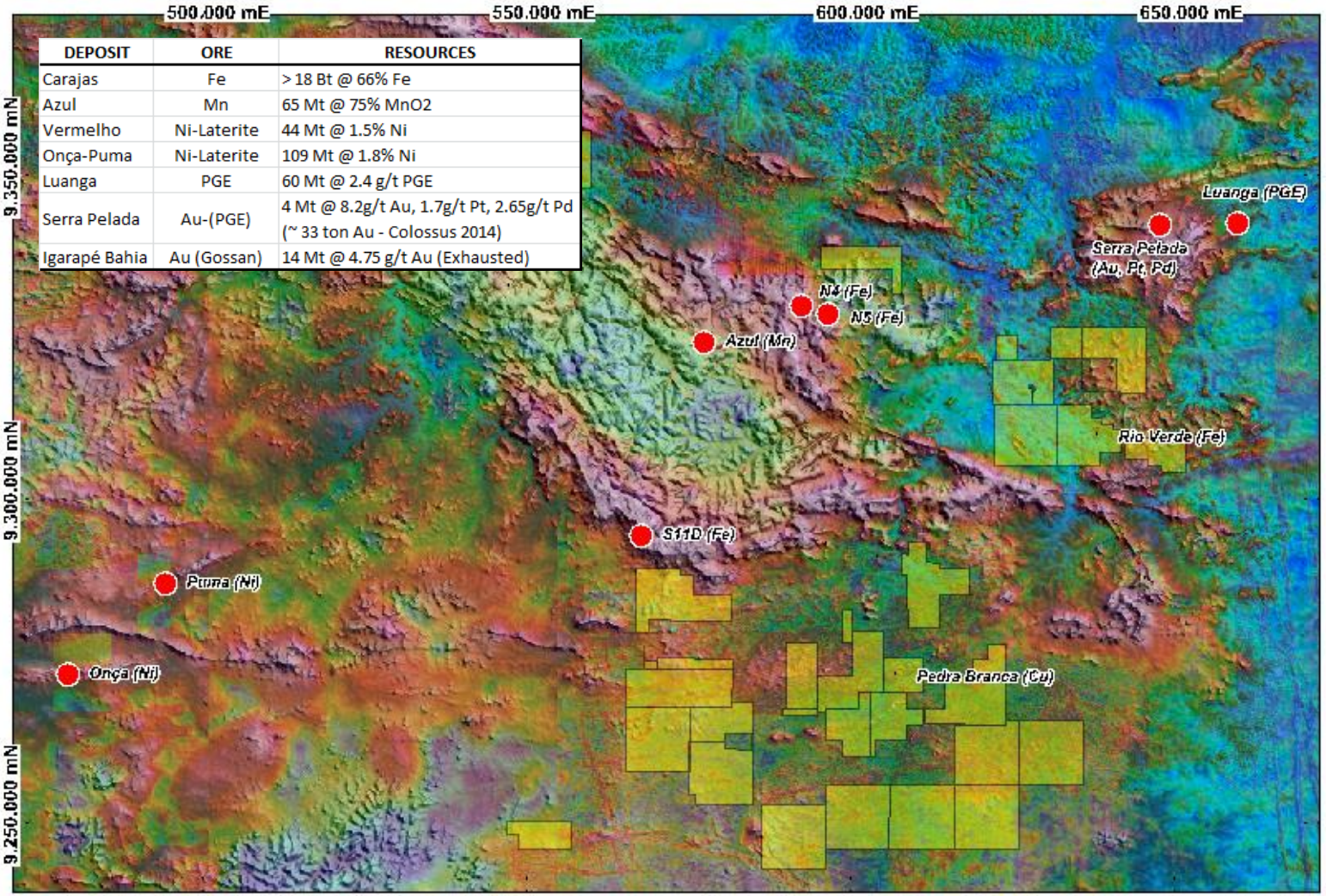
DEPOSIT	TONNAGE	GRADES
Salobo (proven+probably)	1,129 Mt	0.72% Cu, 0.38 g/t Au
Paulo Afonso	313 Mt	0.95% Cu, 0.04 g/t Au
Furnas	>500Mt	0.71% Cu, 0.32 g/t Au
Sossego	355 Mt	1.1% Cu, 0.28 g/t Au
Cristalino	>300 Mt	1% Cu, 0.3 g/t Au
Igarape Bahia	Au (Gossan)	14 Mt @ 4.75 g/t Au - Mined
Alemao	219 Mt	1.4% Cu, 0.86 g/t Au
Cento e Dezoito	170 Mt	1% Cu, 0.3 g/t Au
Estrela Sul	230 Mt	0,50% Cu (Au)
Breves	50 Mt	1.22% Cu, 0.75 g/t Au

Total resources more than 5 billion tonnes at ~ 0.8% Cu

AVANCO COPPER

Non-IOCG Deposits

DEPOSIT	ORE	RESOURCES
Carajas	Fe	> 18 Bt @ 66% Fe
Azul	Mn	65 Mt @ 75% MnO2
Vermelho	Ni-Laterite	44 Mt @ 1.5% Ni
Onça-Puma	Ni-Laterite	109 Mt @ 1.8% Ni
Luanga	PGE	60 Mt @ 2.4 g/t PGE
Serra Pelada	Au-(PGE)	4 Mt @ 8.2g/t Au, 1.7g/t Pt, 2.65g/t Pd (~ 33 ton Au - Colossus 2014)
Igarapé Bahia	Au (Gossan)	14 Mt @ 4.75 g/t Au (Exhausted)



AVANCO COPPER

Copper Deposits

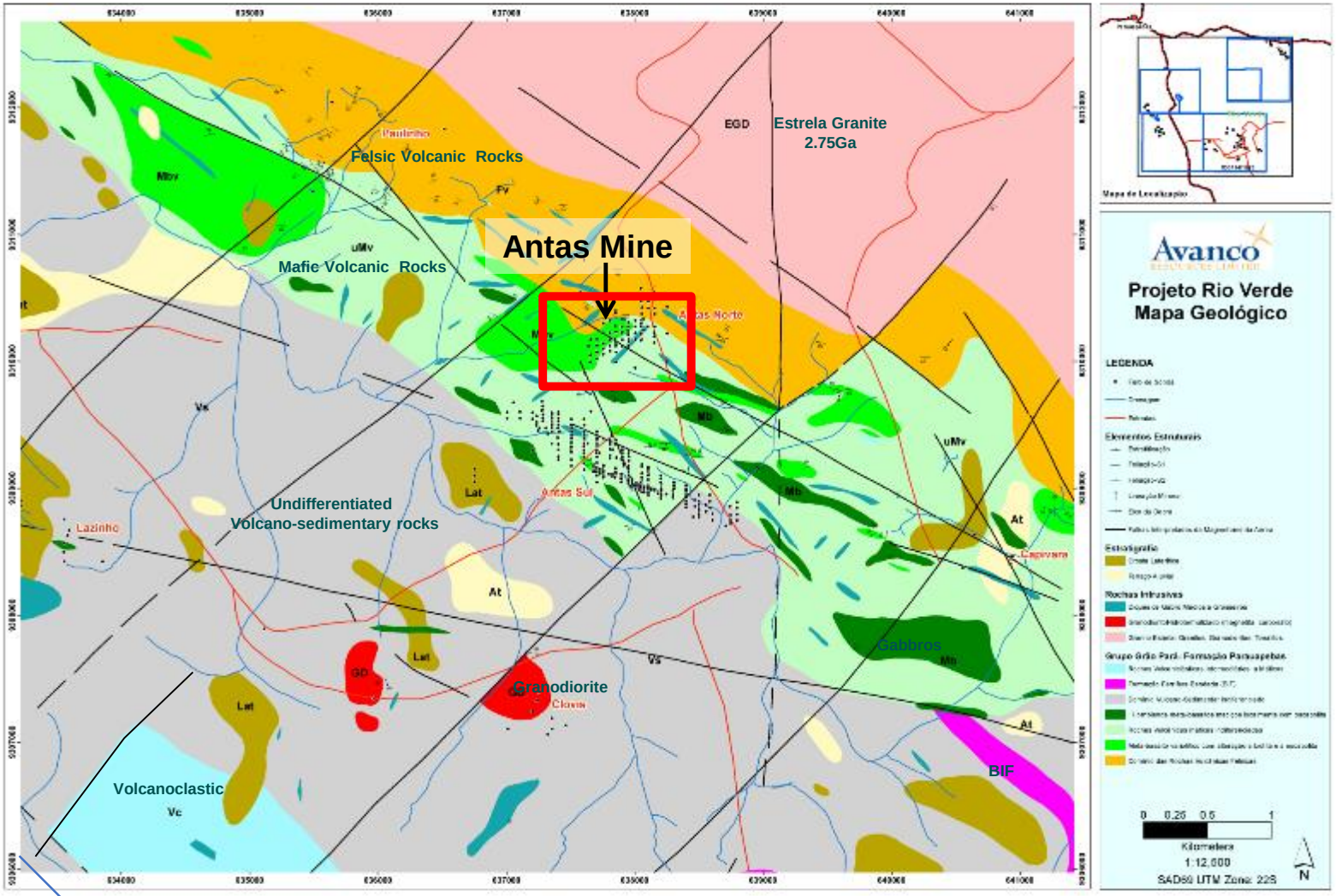
Neoarchean vs Paleoproterozoic Deposits

Deposit-Type	Fe-Oxide Cu-Au-(U-REE)	Cu-Au-(W-Bi-Sn) - IR
Age	~2.57 Ga	~1.88 Ga
Ore Paragenesis	Oxidized and Sulphur Poor mt-cpy-bn-cc	Reduce and Sulphur Rich po-py-cpy
Traces	Co-Ni-U-REE	W-Bi-Sn
Silica content	Silica destructive	Quartz-rich
Hydrothermal Alteration	Early Na-Ca metasomatism Potassic alteration Carbonate alt. (Siderite) Amph-(chl)-magnetite-(hm) Cpy-bn-cc	Greisen-Type Qz+Musc Stockwork Qz veins Calcite veins
Tonnage	World-Class +200 Mt	Up to 80Mt

Tallarico et al. (2004) Mineralium Deposita 39: pp68-86
Tallarico et al. (2005) Economic Geologist 100: pp7-28

AVANCO COPPER

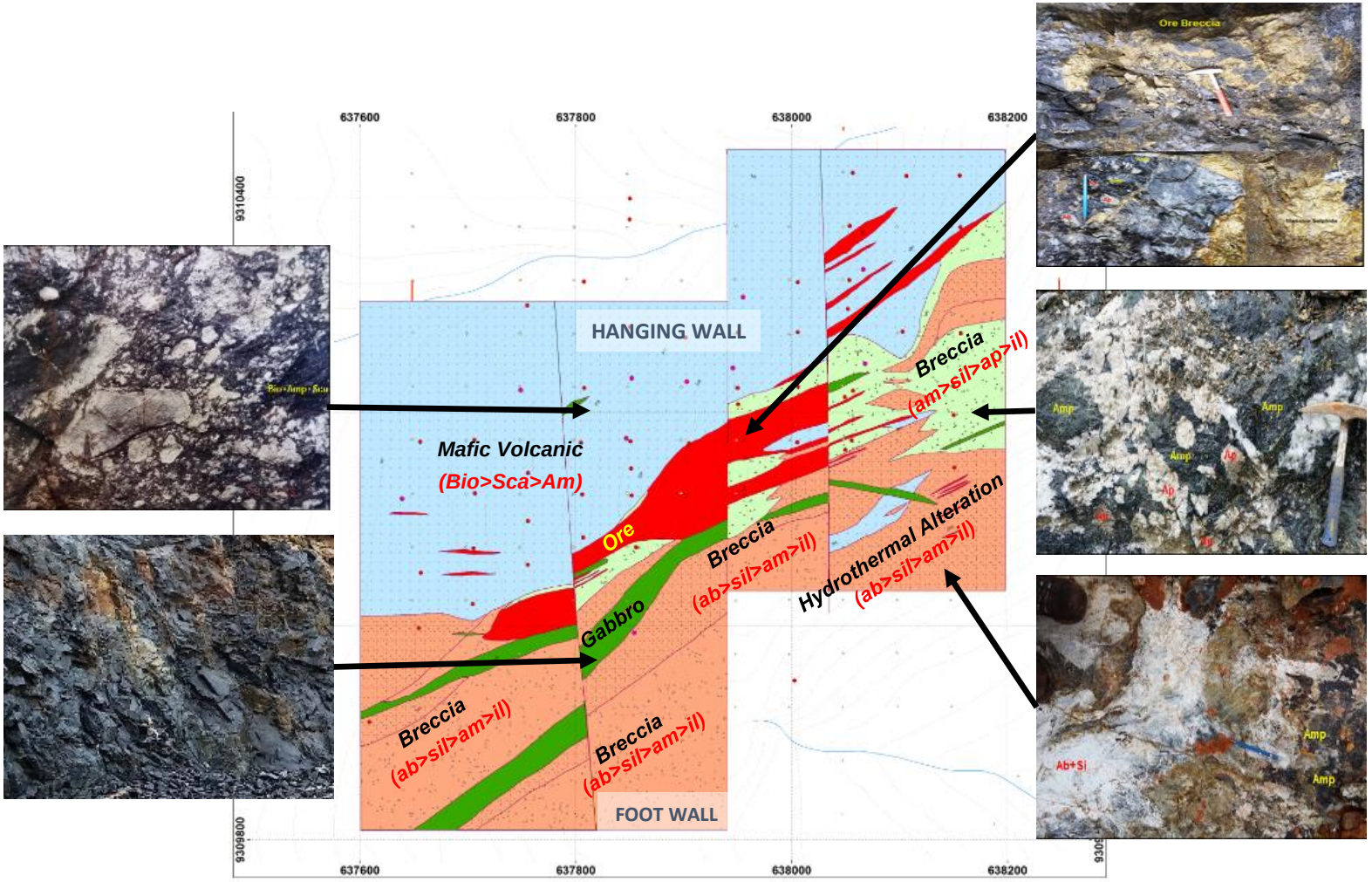
Rio Verde Licence (Antas Mine)



AVANCO COPPER

Antas North Deposit

Geology



Antas North Deposit

JORC Ore Reserves & Resources

Resources

DEPOSIT	Category	Million Tonnes	Cu (%)	Au (ppm)	Copper Metal (T)	Gold Metal (Oz)
Antas North[8]	Measured	1.96	3.42	0.76	67,000	48,000
	Indicated	1.61	2.23	0.42	36,000	22,000
	Inferred	1.89	1.59	0.23	30,000	14,000
	Total	**5.46**	**2.43**	**0.48**	**133,000**	**84,000**

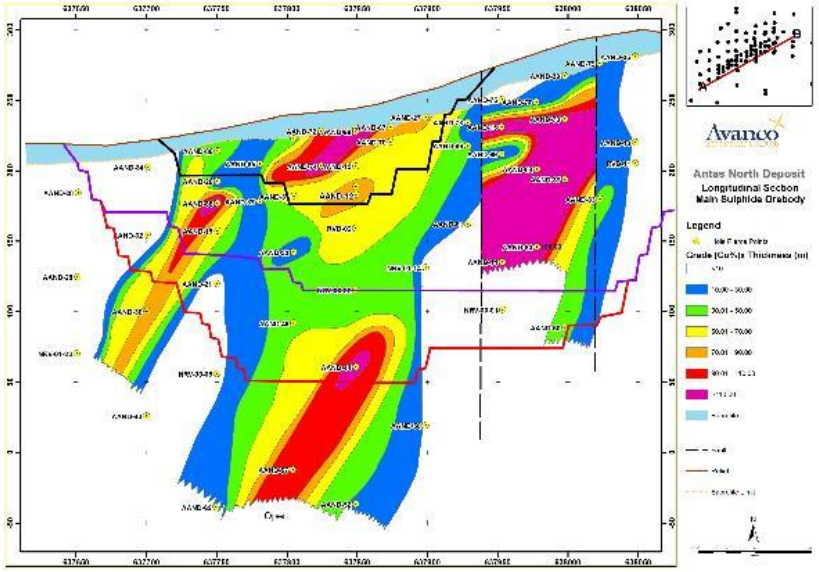
Reserves

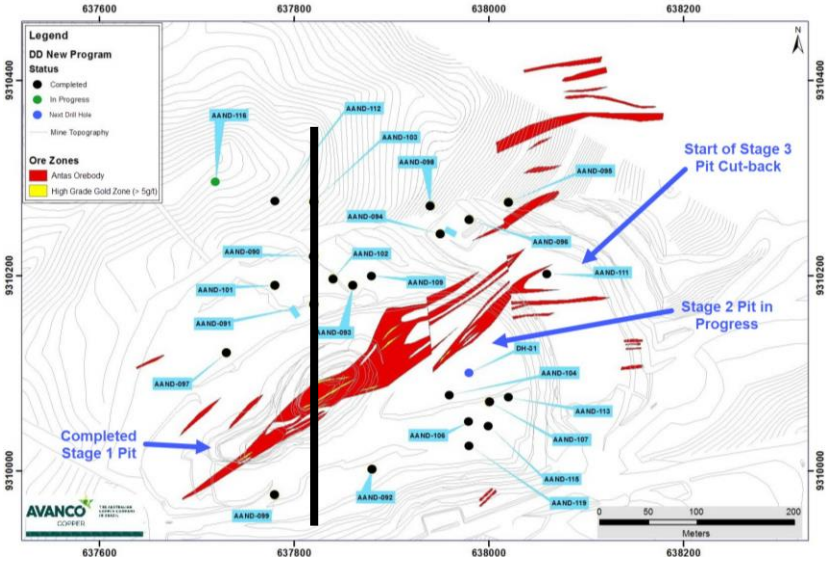
LOCATION	JORC Category	Economic Cut-Off Cu%	Million Tonnes	Copper (%)	Gold (g/t)	Copper Metal (T)	Gold Metal (Oz)
Antas Mine	Proved	0.65	1.23	3.34	0.73	41,100	28,900
	Probable	0.65	1.69	2.16	0.47	36,500	25,500
Mine Stockpiles	Proved	0.65	0.12	2.26	0.53	2,800	2,100
TOTAL PROVEN + PROBABLE			**3.04**	2.64	0.58	**80,400**	**56,500**

AVANCO COPPER

Antas Open Pit Growth

Infill & Extensional Drilling Programme





Completed 5,000m Drill Programme for Resource/Reserve Upgrade

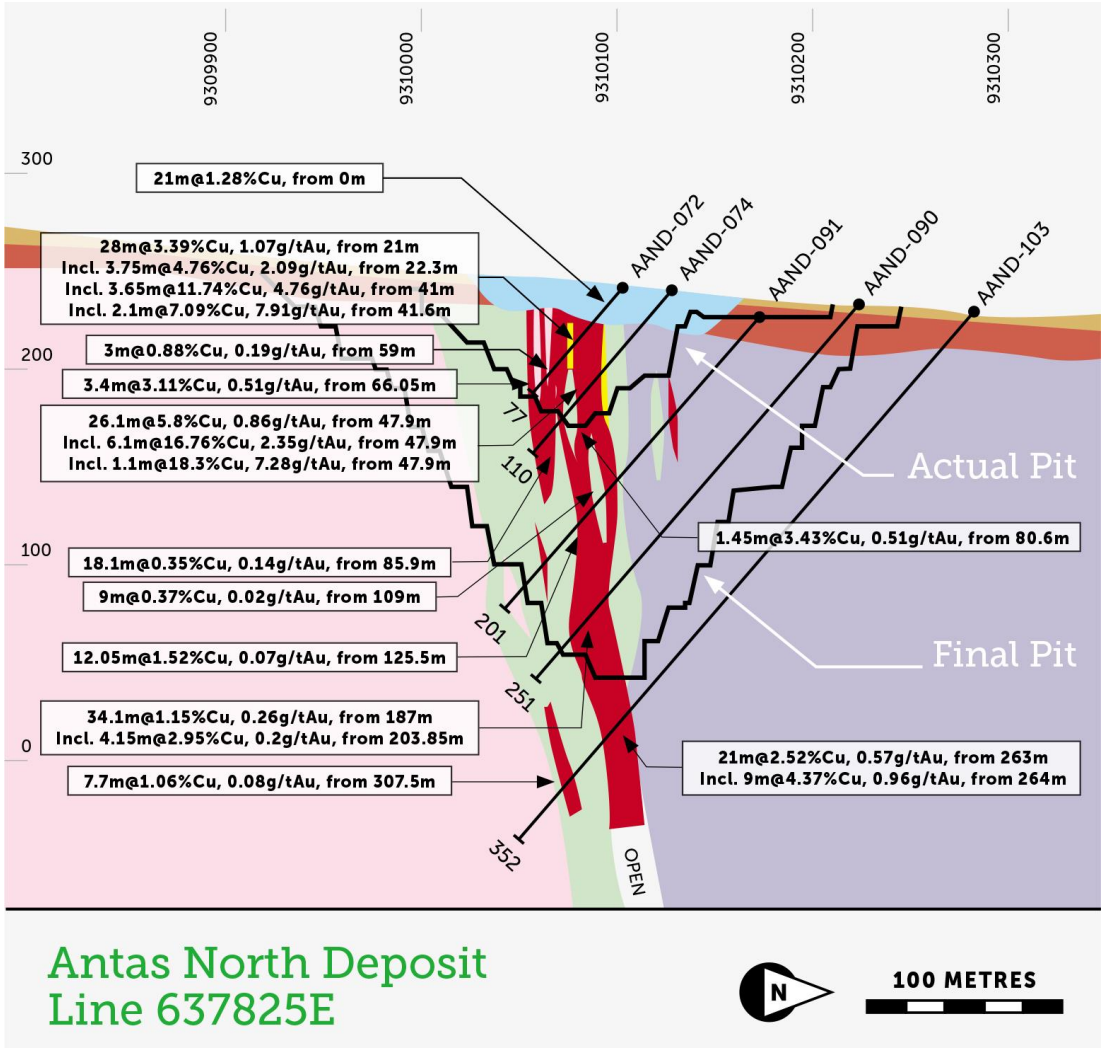
Resource Update (Now – with CSA)
Pit Optimisation and Design Update
JORC Reserves Reporting and Classification

Timing: complete by year end
Targeting: more than >1mt additional reserves
Further Scope: open for further drilling and upgrades

AVANCO COPPER

Antas North Deposit

Cross Section



AVANCO COPPER

THE AUSTRALIAN COPPER COMPANY IN BRAZIL

AVANCO COPPER

Mining

Mining Team

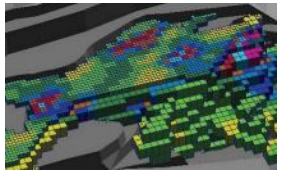
Antas Mining Team

AVANCO TECHNICAL TEAM	13 people	• Planning Engineer • Senior Geologist • Production Geologist • Resource Geologist • Grade Control Spotter/s • Surveyor & assistants
MINING CONTRACTOR	MACA	• Pit Supervision • Load and Haul • Production Drilling • Mechanical Maintenance
EXPLOSIVE PROVIDER	Britanite	• Largest explosive provider and Ammonium Nitrate Manufacture in Southern Americas • Full Down the Hole Service

AVANCO COPPER

Mine Overview

One of the World's top-5 high-grade open-pit copper mines

 Grade Control Drilling	• Sampling on a 5m x 10m spacing every 1m • Drill depth to 30m
 Geological Model	• Data is convert into Surpac for Mine planning and ore mark outs
 Drilling	• Separate Ore and Waste shots • 2 x CAT 5150 units
 Blasting	• 5 meter blasts with emulsion explosives
 Load And Haul	• R9150 Excavator (120t) • 7 x Volvo A40F trucks • 2 x CAT D9T dozers

AVANCO COPPER

Mine Overview

High-grade with competent rocks makes for efficient mining

Planned 3 Stage development:

Stage One: 100% Completed, to the 170 bench
Stage Two: 60% completed, currently at the 190 bench
Stage Three: 20% completed, Final cut back to the 40 bench

Mine Facts

- Stage Three final dimensions will be, 650m length, 350m wide, 250m deep
- Life-of-mine strip ratio of 6.4 : 1
- Average slope angle 55° with ramps at 15°
- Current life-of-mine to 2021

Operations

- Mining contracted to Mining & Civil Australia (MACA)
- Conventional mining method with load and haul
- Three shifts, 24 hours a day, 365 days a year

AVANCO COPPER

Conventional load and haul mining using a modern fleet

Mining Process (1 of 3)

Grade Control Drilling

- Critical step in ore mining control and planning
- Drilling 5m x 10m drill pattern at 30m vertical depths
- Sampling is taken every 1m and assayed by atomic absorption
- Infill drilling 15m x 10m at 50m metre drilling (every third hole) to overlap drilling
- Drilling completed by reverse circulation
- Geological model created in Surpac Mine planning Software

AVANCO COPPER

Mining Process (2 of 3)

Blast Hole Drilling

- Drilling and blasting completed on 5m benches
- Conventional drill and blast techniques with staggered drill pattern
- Drill parameters change with material characteristics
- Drill hole cuttings are sampled to added further geological data for grade control due to the geological nature of the ore body
- Average 3-4 blasts a week

AVANCO COPPER

Mining Process (3 of 3)

Mining

- Mining completed in 2.5m flitches
- Ore mining visually controlled by in-field geological technicians with survey control marking up ore boundaries defined by both blast hole sampling and geological models
- Ore is designated by copper content and individually stockpiled on the Run of Mine stockpiles (ROM pad) to maintain consistent copper grades
- Waste stockpiled in single location in 10 metre high benches

AVANCO COPPER

Mining Fleet

Newly purchased equipment tailored to the operation

Liebherr R9100 Excavators x 1

120t class excavator in backhoe configuration,
565kW, 7.6 metre cubed rock bucket

Volvo A40F articulated off road haul trucks x 7

6-wheel drive, which is excellent for wet weather conditions,
40 km/hr, with a nominal 40 tonne payload, equal to 14 cubic metres

Caterpillar 5150 top hammer drill rigs x 3

32kw Hammer, 97-115mm drill diameter, averaging 22 meters per hour

Auxiliary equipment

Including front-end loaders, dozers, graders, water carts and service trucks.

AVANCO COPPER

100% local workforce

THE AUSTRALIAN COPPER COMPANY IN BRAZIL

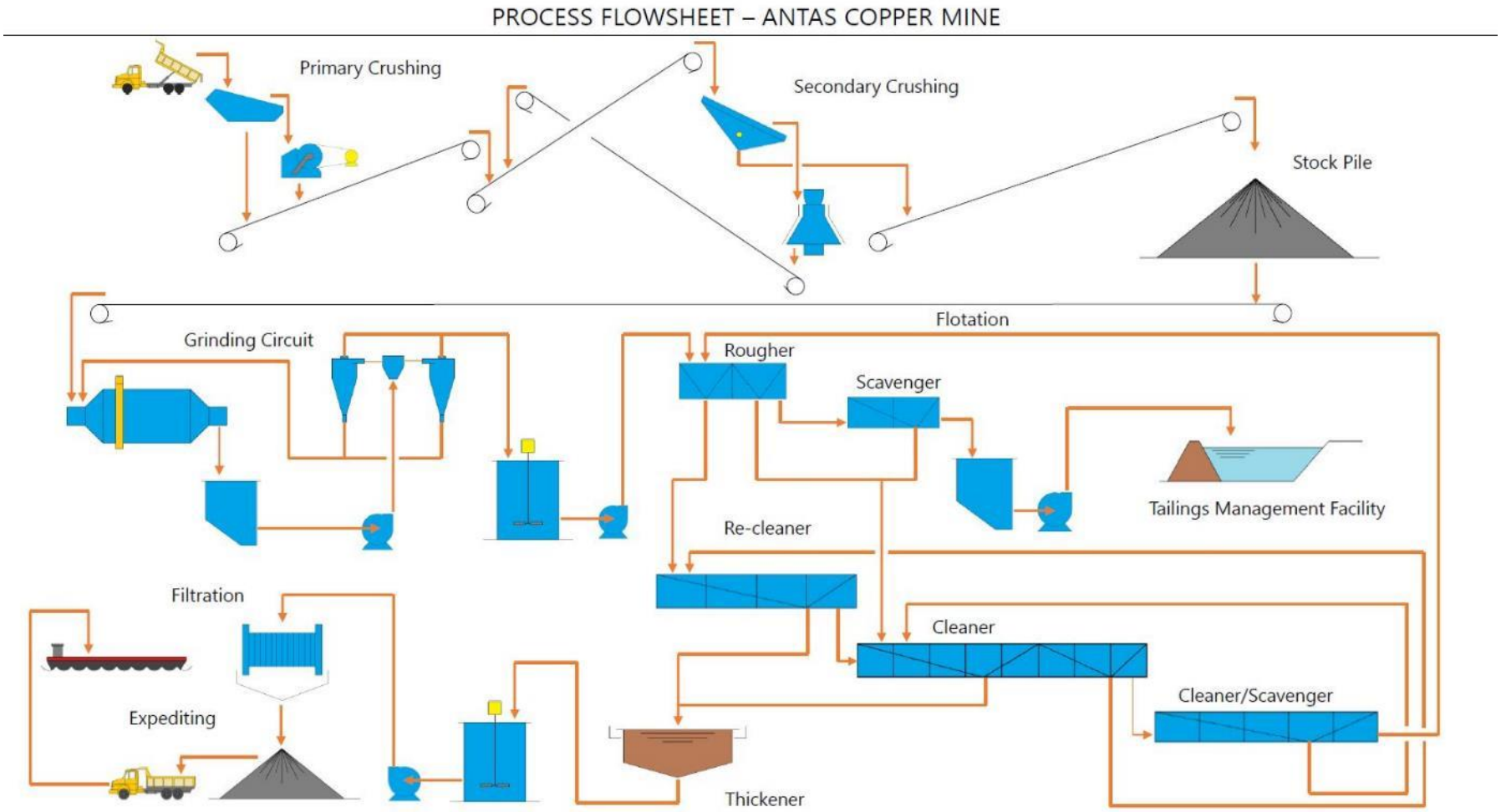
AVANCO COPPER

Metallurgy

Antas Processing Plant and Tailings Dam

Process Plant Overview

Conventional Crushing, Grinding, Flotation, Filtration Process



AVANCO COPPER

Crushing Circuit	Accumulated 2017	
Availability	%	74.2
Utalization	%	77.5
Productivity	t/h	133.0
Jaw Crusher Product	inches	4.0
Final Product	mm	19.0

Grinding Circuit	Accumulated 2017	
Availability	%	89.5
Utalization	%	98.5
Productivity	t/h	88.3
p80	mícrons	106.0
% solids	%	30.0

Flotation	Accumulated 2017	
Collector Aero 3894	g/t	8.0
Frother MIBC	g/t	9.0
Copper Recovery	%	97.0
Gold Recovery	%	84.3
pH		8.2

Concentrate Filtration	Accumulated 2017	
Copper Grade	%	28.1
Gold Grade	g/t	7.2
Silver Grade	g/t	28.5
Copper Metal produced	t	10,400
Concentrate Humidity	%	7.0

Plant Construction

Under Budget – Under Schedule

- Completed ahead of schedule and below budget
- Many major components sourced second hand:
  - Mill – Unused METSO 24’ x 12’ Ball – 1800HP
  - Flotation circuit – OUTOTEC OK38 & Denver 21s
  - Filter feed tank, Concentrate building, METSO sump pumps, air receivers

Many costs halved lead times reduced

- Self designed with specialist Brazilian OEMS transportable ‘plug-and-go’ components
  - SIMPLEX - Mobile Crushing Circuit
  - VISION - Electro Centre
  - WESTEC - Thickener

Reduced commissioning time

- All Installation done by Local Contract Companies
  - IRF
  - COMPACTA
  - MCM
  - SENIC
  - CERNE
  - LUK

Community Relations

AVANCO COPPER

Operating KPIs

Exceeding every expected metric since day one

Today process above design; further optimisation ongoing

- Throughput capacity 20% at 100/tph
- Copper Production +17% at 14,000 annual copper production
- Copper recoveries +2% at 97%

For the future, plant design flexible and expandable:

- Capacity can be doubled for less than $20million

AVANCO COPPER

Concentrate Sales & Logistic

Profitable operation ahead of targets

High Quality Concentrate

- Very clean medium-grade concentrate with negligible impurity level
- Average 28% copper content, 5g/t gold and 30g/t silver
- Highly sought by traders and smelters globally

Efficient and cost competitive Route-to-Market

- Established infrastructure from mine to Vila do Conde port
- Containers ensure seamless transhipping; no warehousing or trans-handling costs
- Facilitates higher frequency shipments, smoothing cash-flows

Antas Concentrates Realise Higher Values

- Quality product achieves superior sales prices and terms achieved
- Some of the lowest treatment and refining charges in market
- Payment at departure port, not arrival port, good for cash flow

AVANCO COPPER

Containerised concentrate shipping is seamless – Plant to Overseas Purchaser Depot

TMF

Conventional Safe Design

AVANCO COPPER

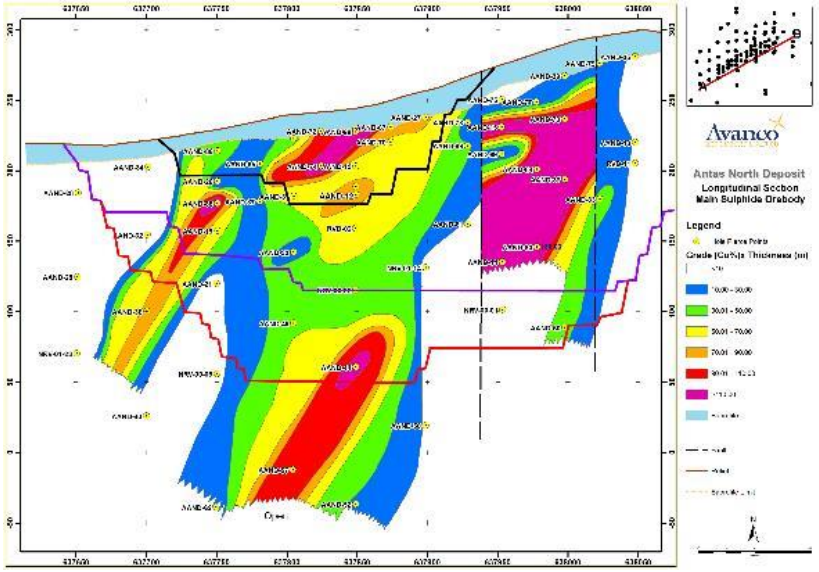
THE AUSTRALIAN COPPER COMPANY IN BRAZIL

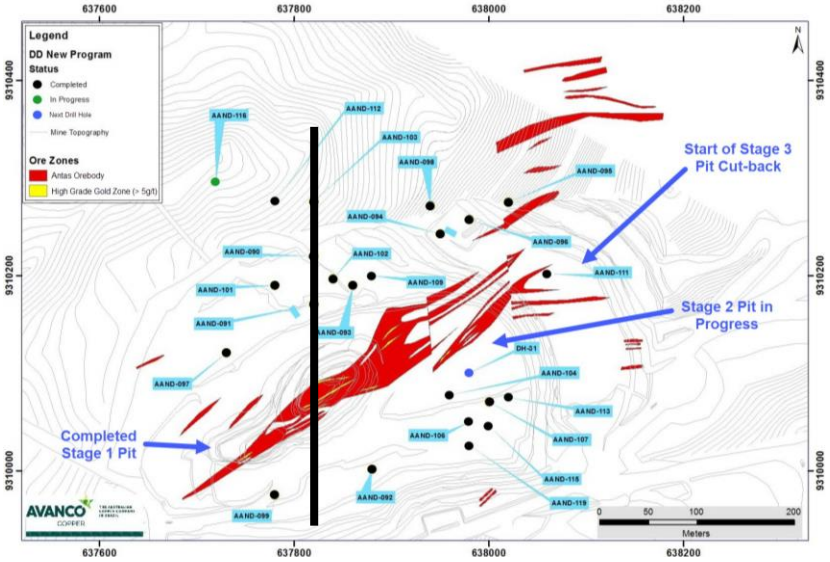
AVANCO COPPER

Growth

Antas Open Pit Growth

Infill & Extensional Drilling Programme





Completed 5,000m Drill Programme for Resource/Reserve Upgrade

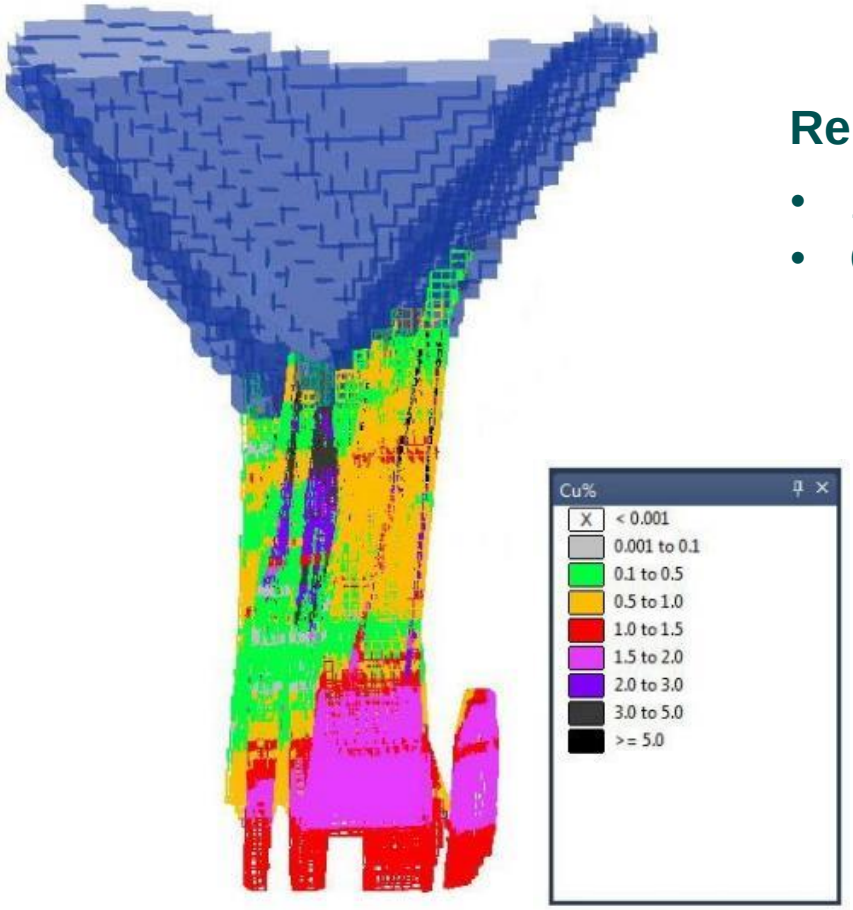
Resource Update (Now – with CSA)
Pit Optimisation and Design Update
JORC Reserves Reporting and Classification

Timing: complete by year end
Targeting: more than >1mt additional reserves
Further Scope: open for further drilling and upgrades

AVANCO COPPER

Antas North Deposit

Underground Potential



Open at Depth

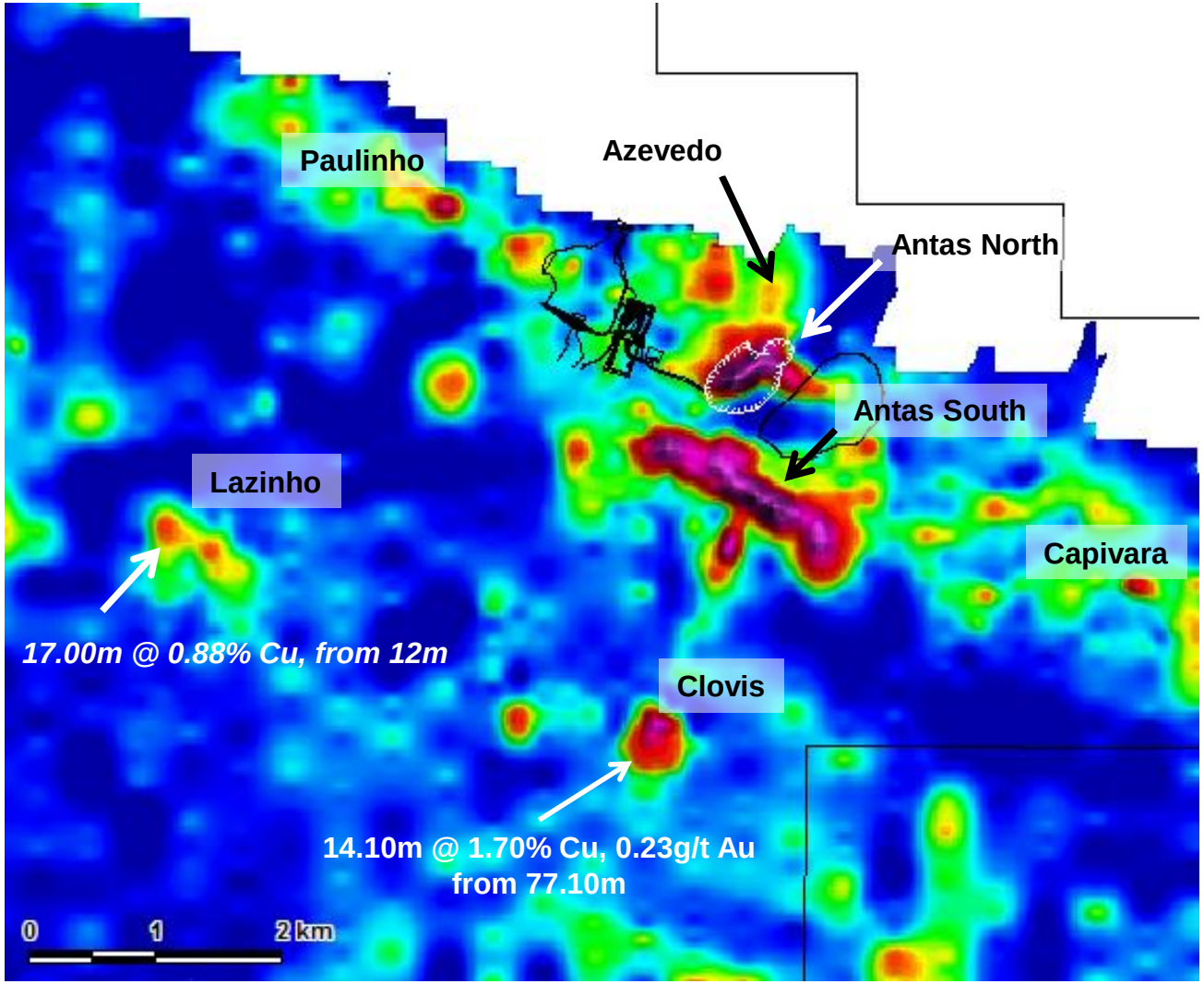
Remaining Resources Below Pit Shell:

- 1.9Mt @ 2.16% Cu & 0.45gpt Au
- Containing: 41,000t Cu & 27,000 oz Au

AVANCO COPPER

Antas Near Mine Potential

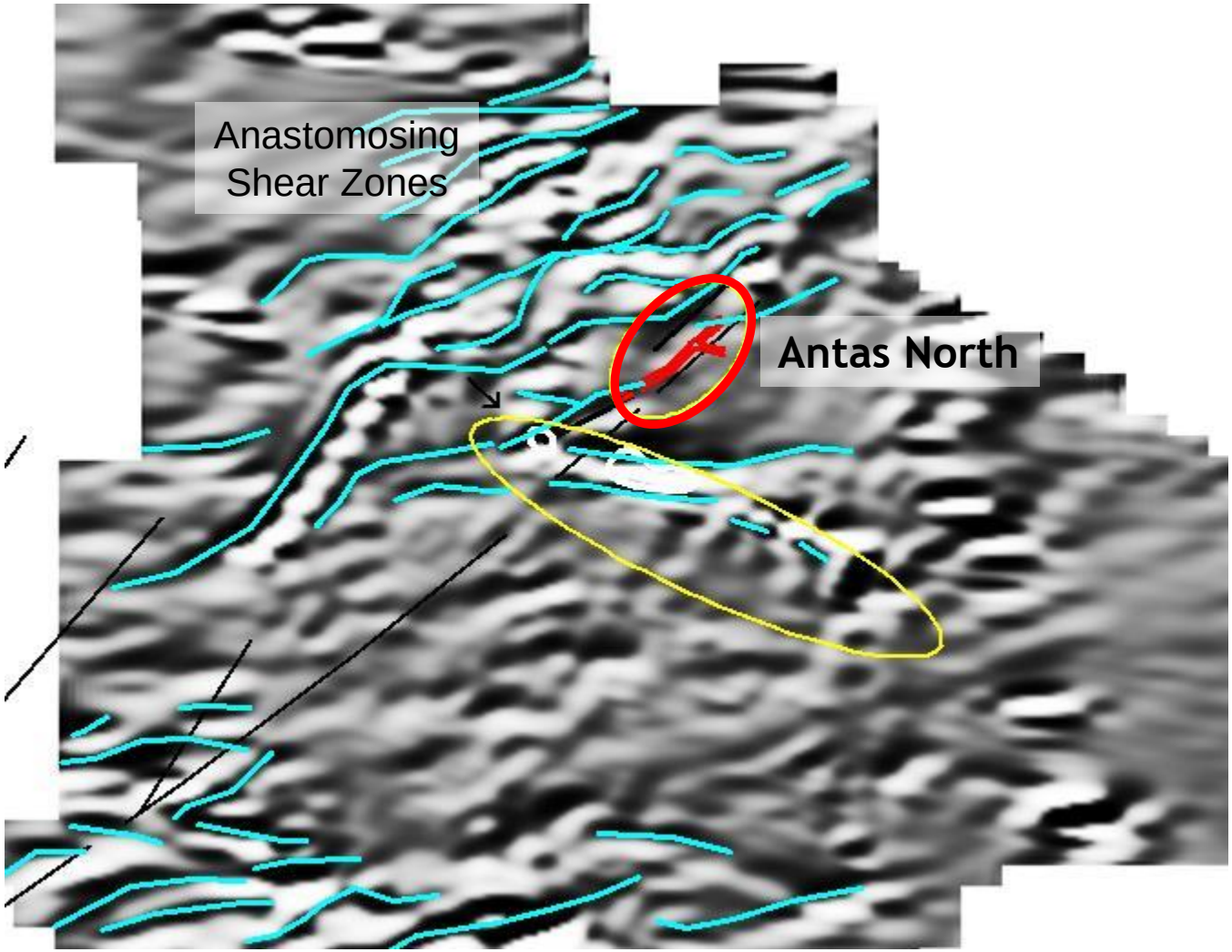
Within the Granted Mining Lease



AVANCO COPPER

Antas North Deposit

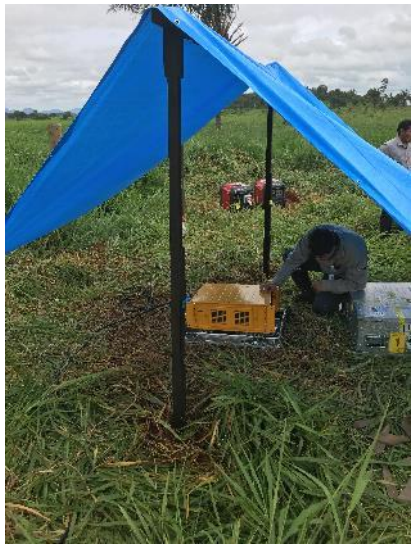
Structural Setting



AVANCO COPPER

Electromagnetic Equipment

Surface & Downhole Programme



Purchased a 2nd Ground EM $0.23m
Purchased downhole EM Probe $0.08m

Both units currently deployed around the Antas Mine

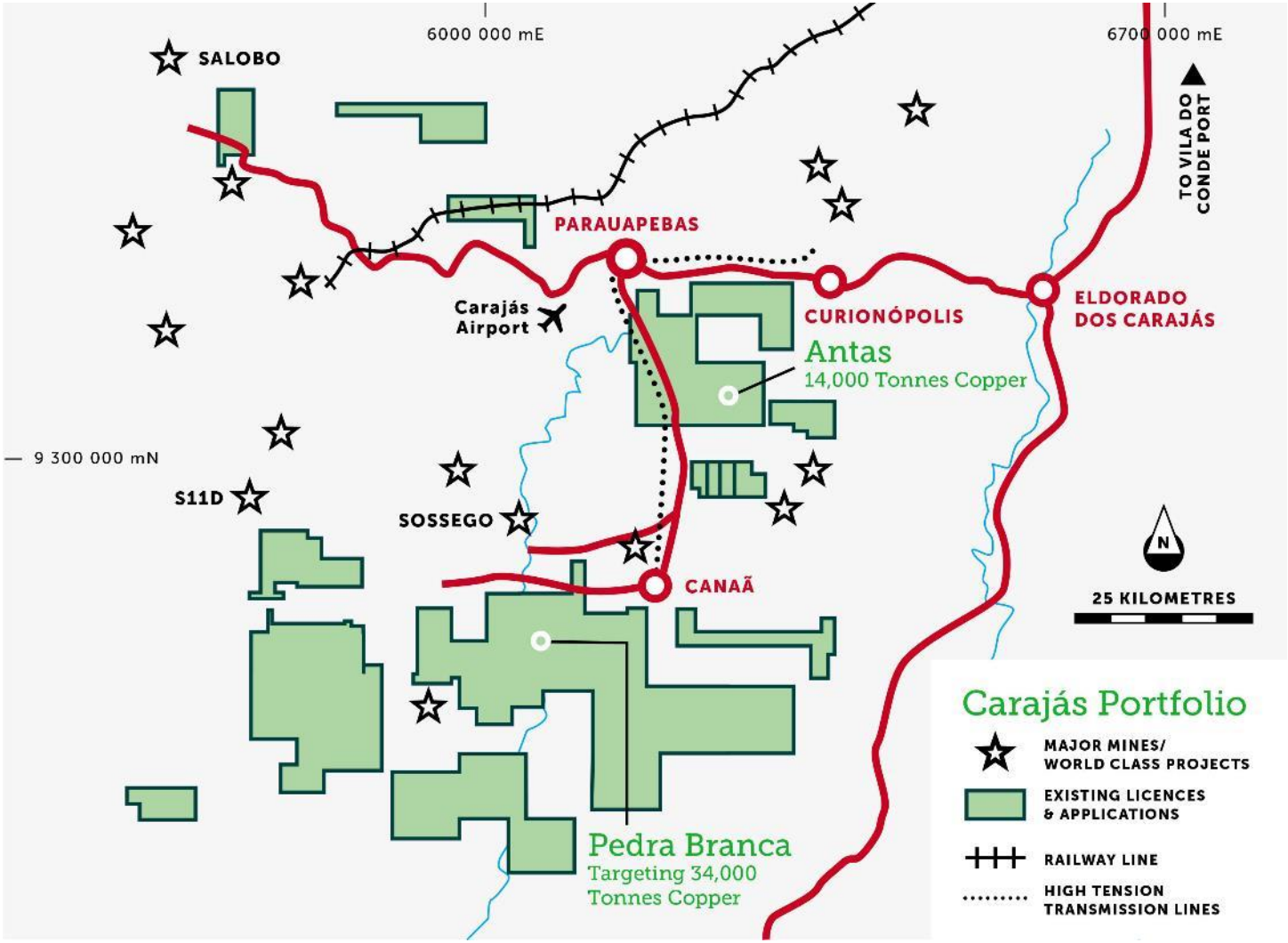
When all work is finished at the mine, one unit to continue with DHEM (waiting on winch)

Second unit to be deployed in regional exploration. Starting at the Pedra Branca shear

AVANCO COPPER

Carajás Portfolio

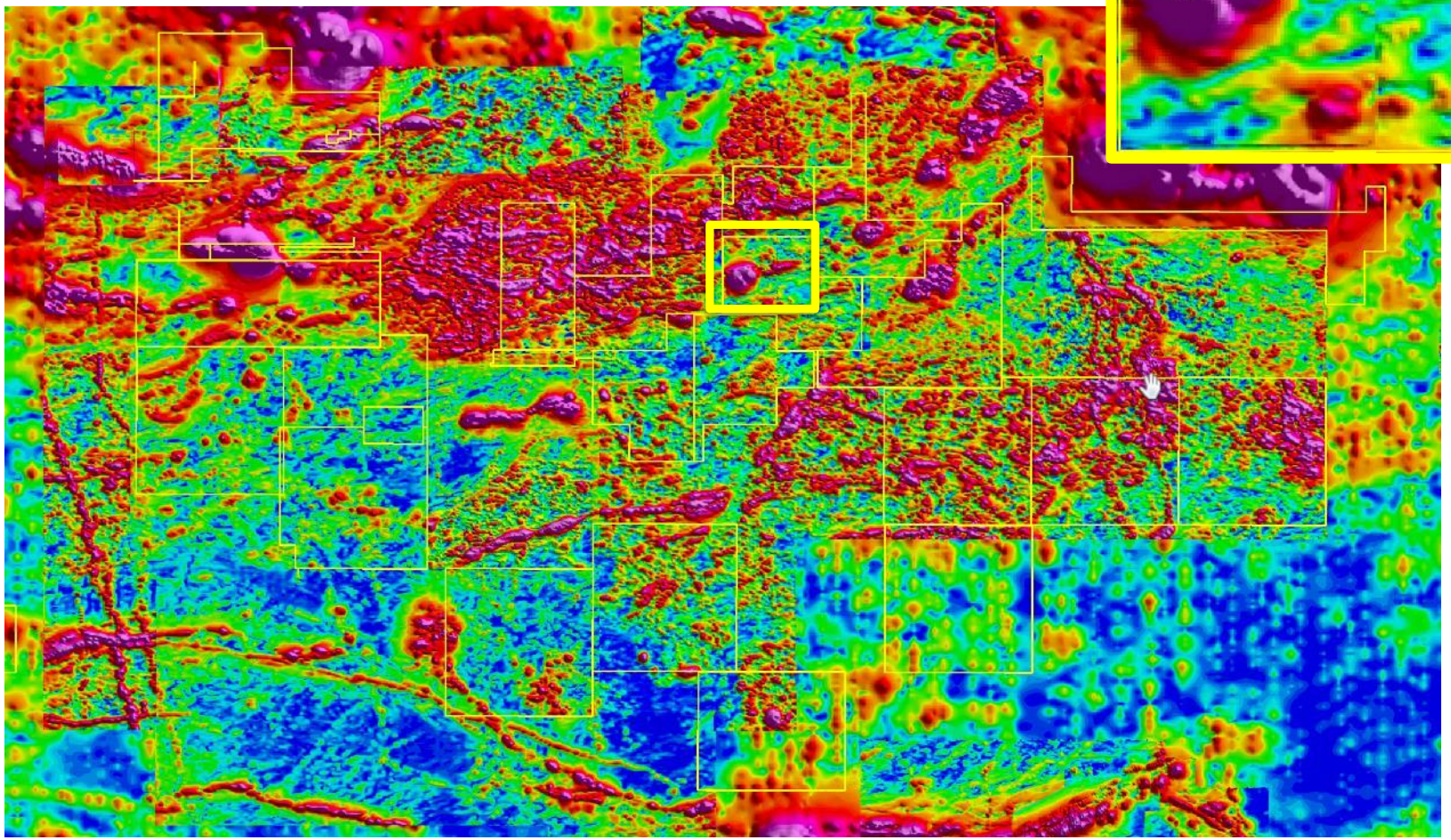
Pedra Branca



AVANCO COPPER

Pedra Branca Licence

Magnetic Analytical Signature Image



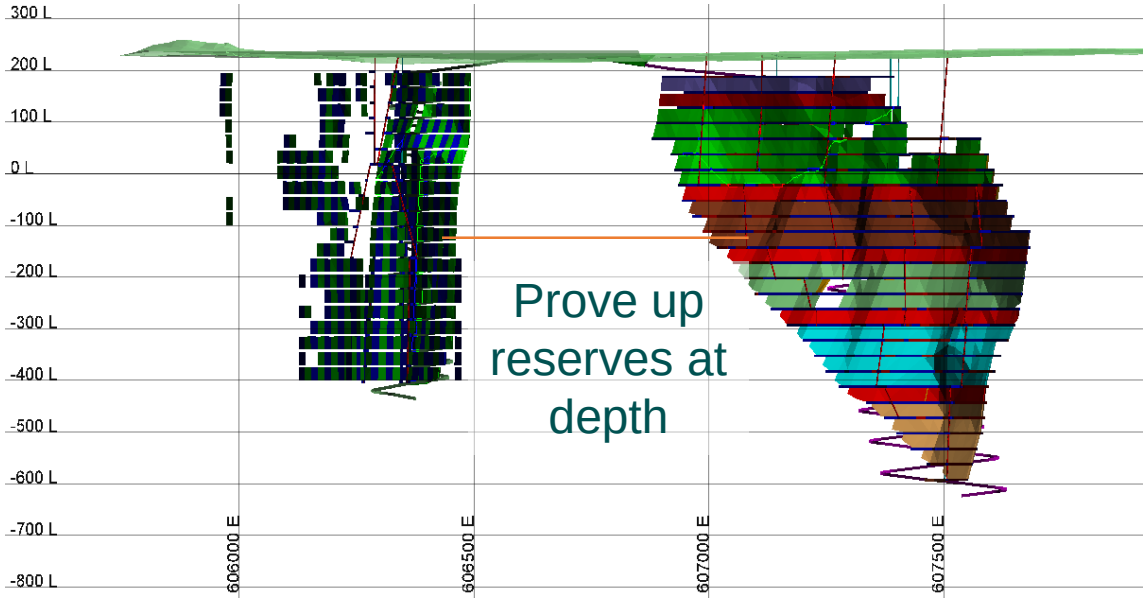
Pedra Branca

Reserve Definition/Growth Drilling Programme

Pedra Branca East DFS
Reserve Drilling $1.0m
5,000m of DDH drilling

Targeting improved JORC classification at depth

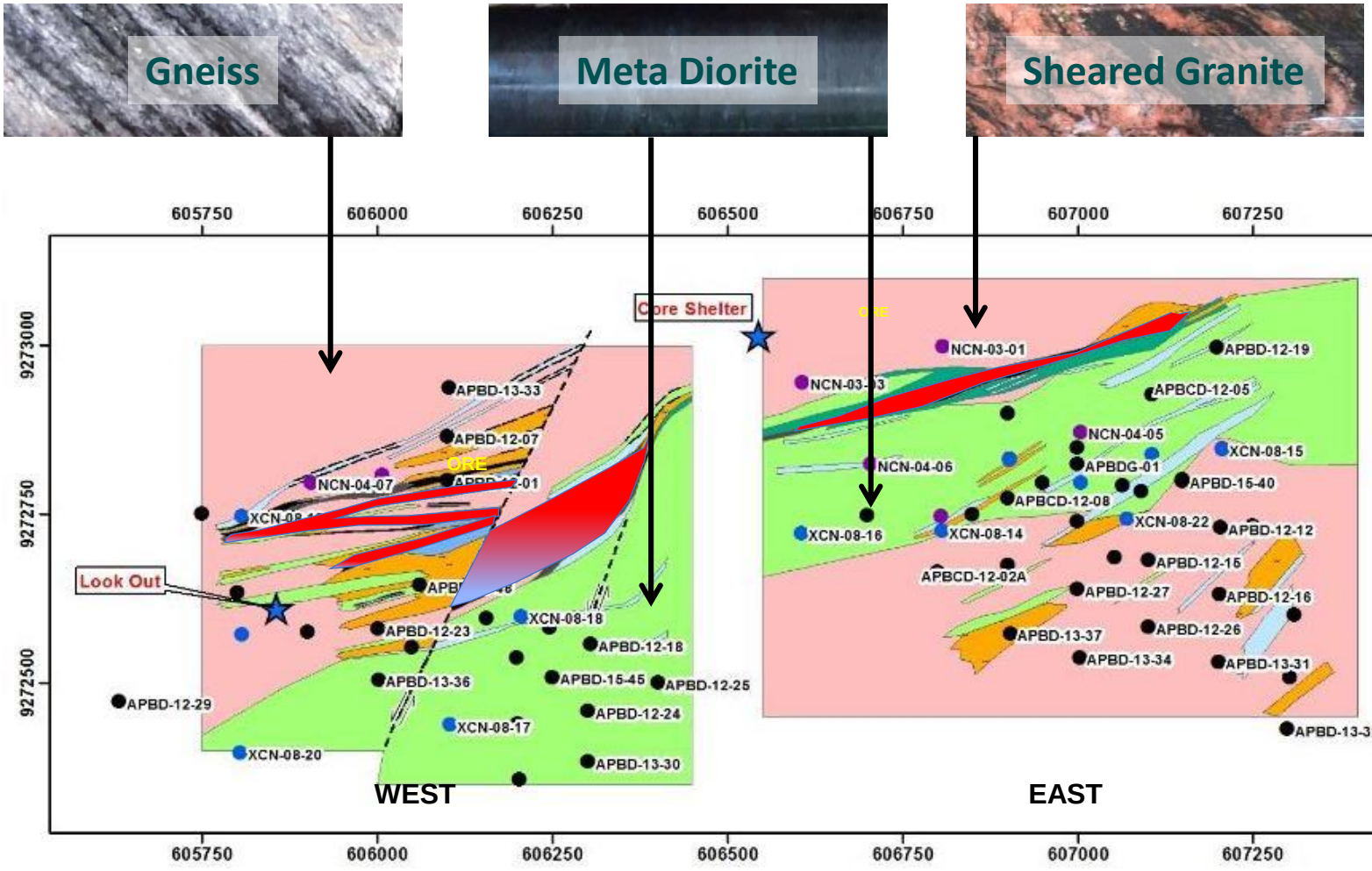
Timing: approx. 6 months
Target Outcome: increase PBE reserves to approx. 10mt



AVANCO COPPER

Pedra Branca

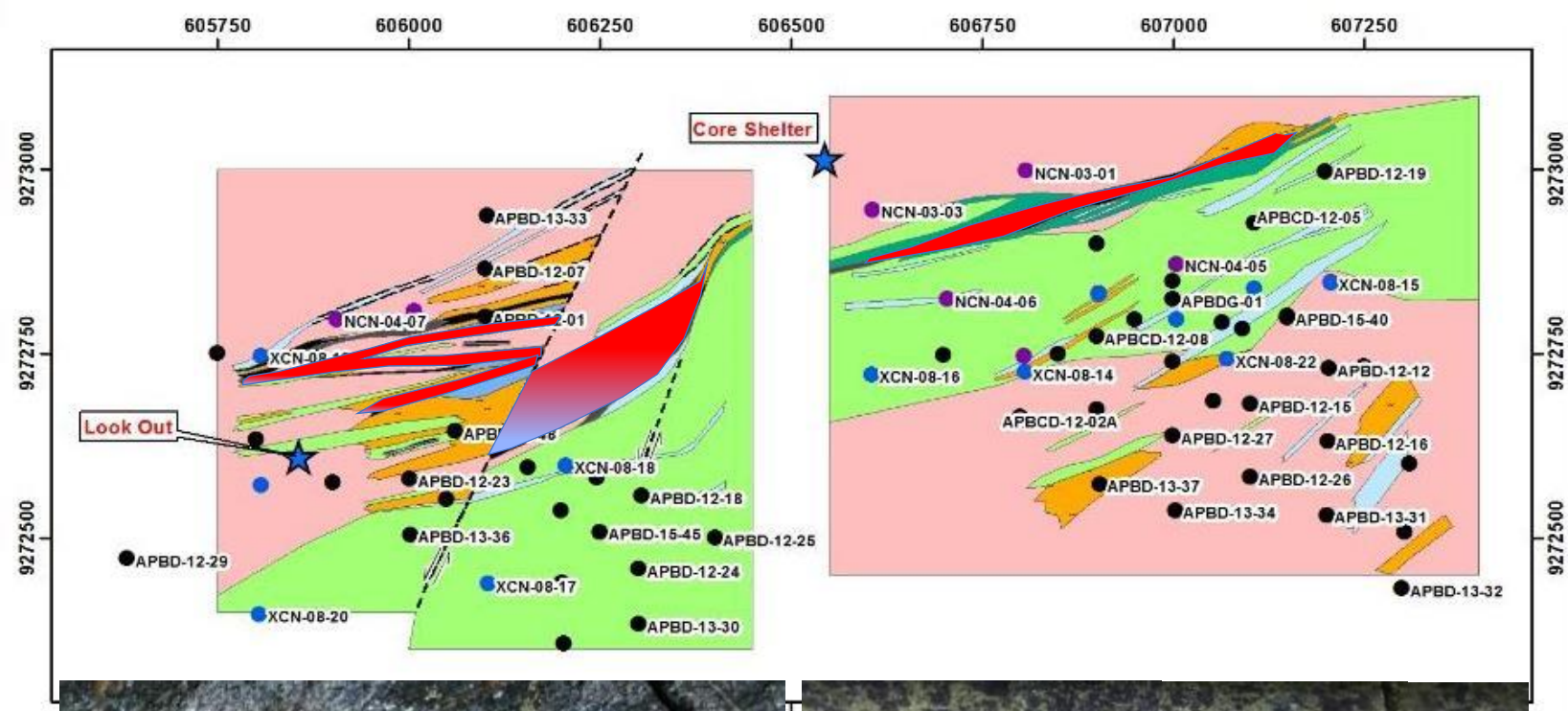
Geology – Host Rocks

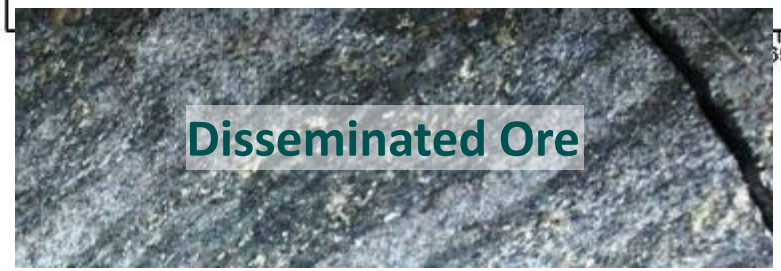


AVANCO COPPER

Pedra Branca

Geology – Ore Types

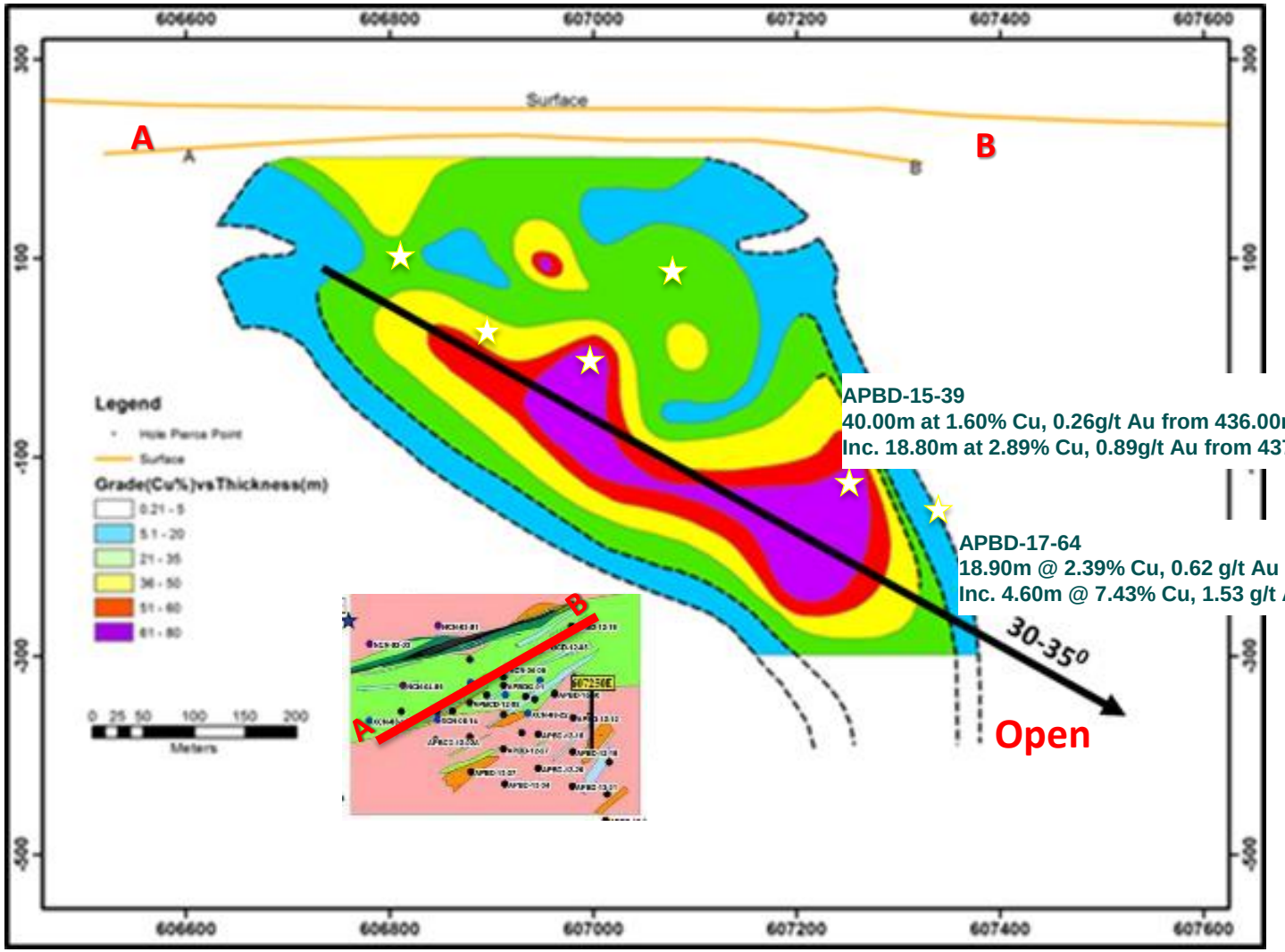




AVANCO COPPER

Pedra Branca East Deposit

Long Section - Upside



Pedra Branca

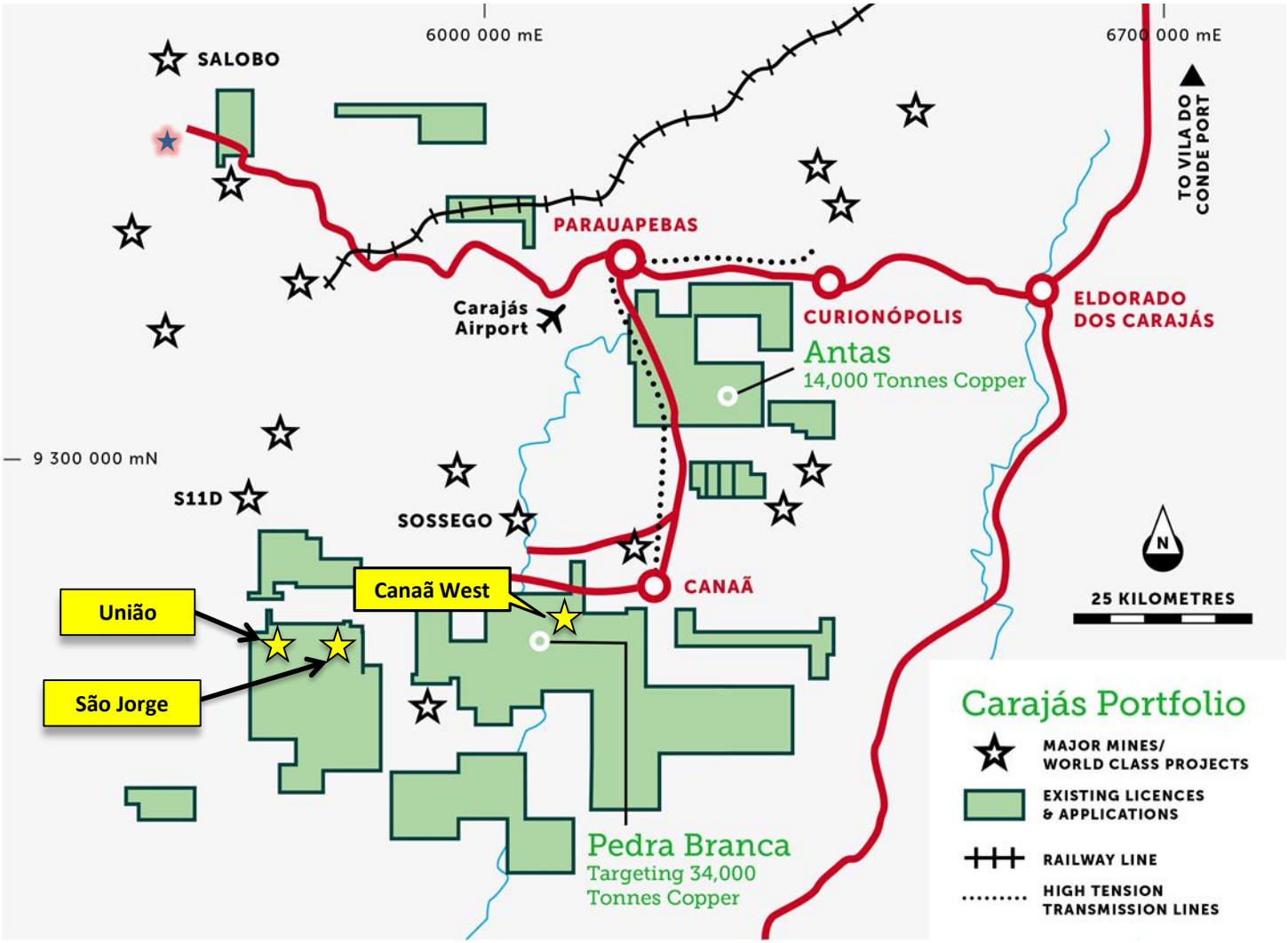
JORC Mineral Resources

At 0.9% Cu cut-off

DEPOSIT	Category	Million Tonnes	Cu (%)	Au (ppm)	Copper Metal (T)	Gold Metal (Oz)
PB East	Measured	1.98	2.7	0.7	53,000	43,000
	Indicated	5.72	2.8	0.7	161,000	123,000
	Inferred	2.78	2.7	0.6	75,000	55,000
	Total	**10.48**	**2.8**	**0.7**	**289,000**	**221,000**
PB West	Indicated	4.46	2.04	0.61	91,000	87,000
	Inferred	2.74	1.72	0.56	47,000	49,000
	Total	**7.19**	**1.92**	**0.59**	**138,000**	**136,000**
Pedra Branca	**Total**	**17.67**	**2.44**	**0.65**	**427,000**	**357,000**

AVANCO COPPER

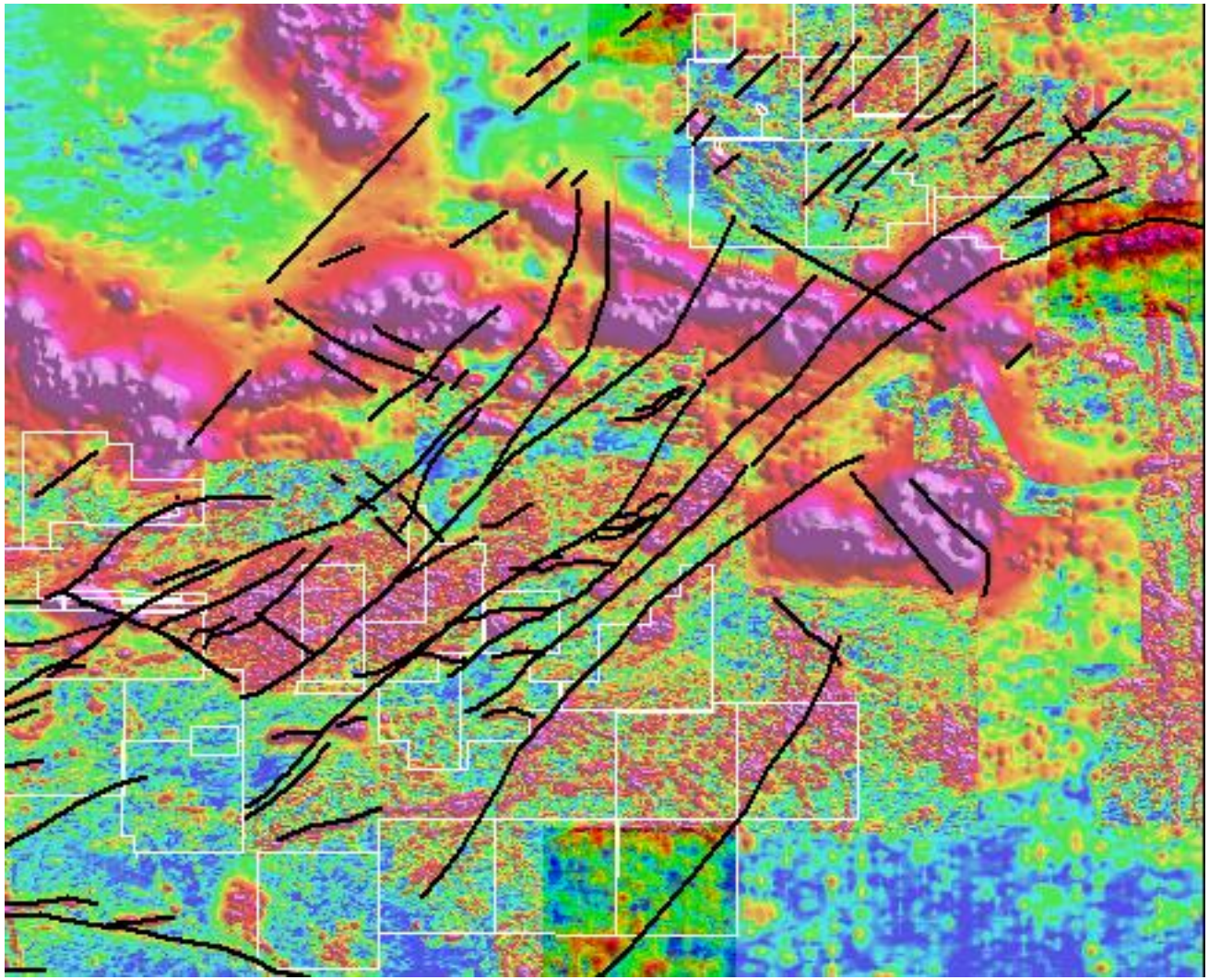
Regional Exploration



AVANCO COPPER

Regional Exploration

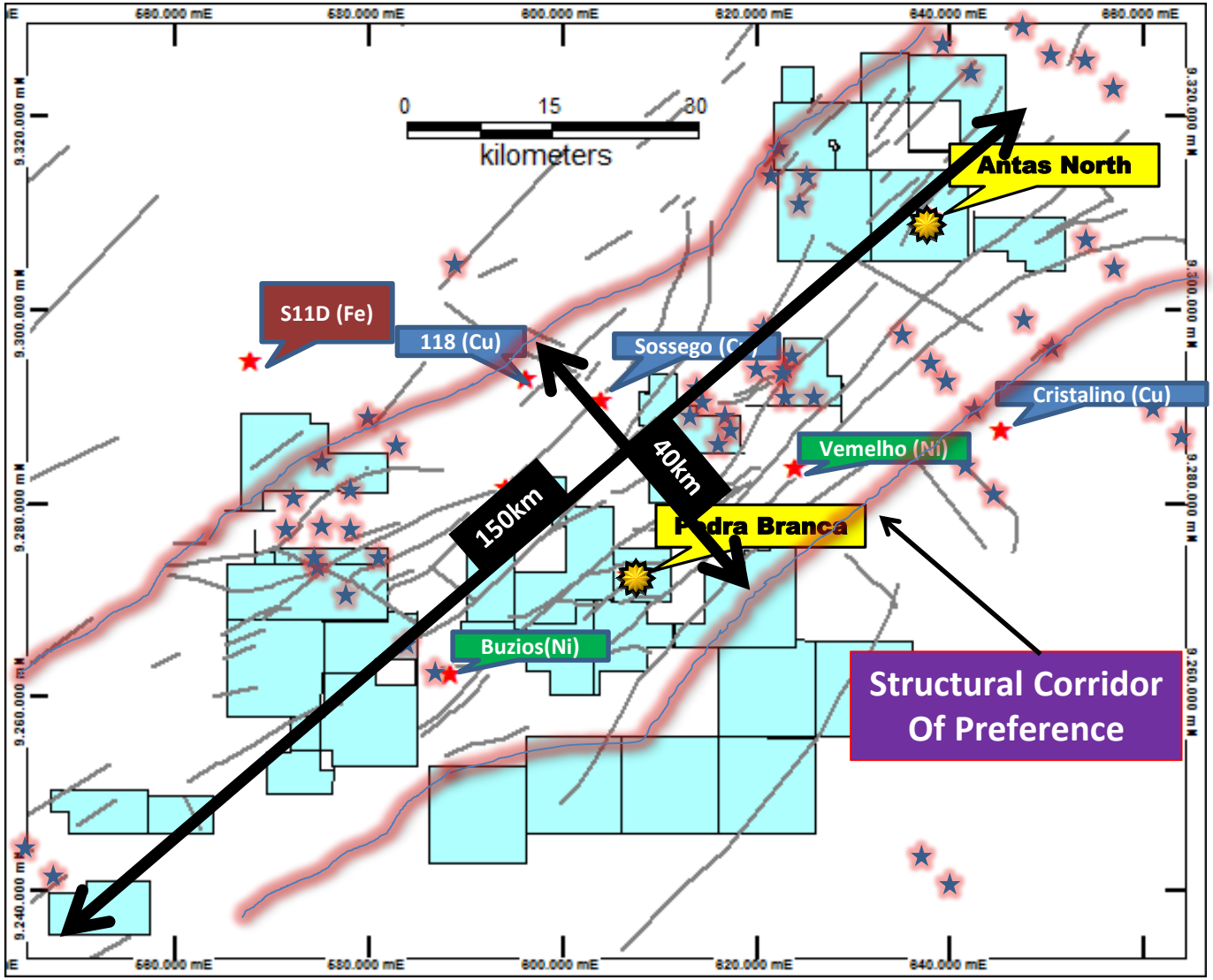
Structural Interpretation over Magnetic Analytical Signal



AVANCO COPPER

Regional Exploration

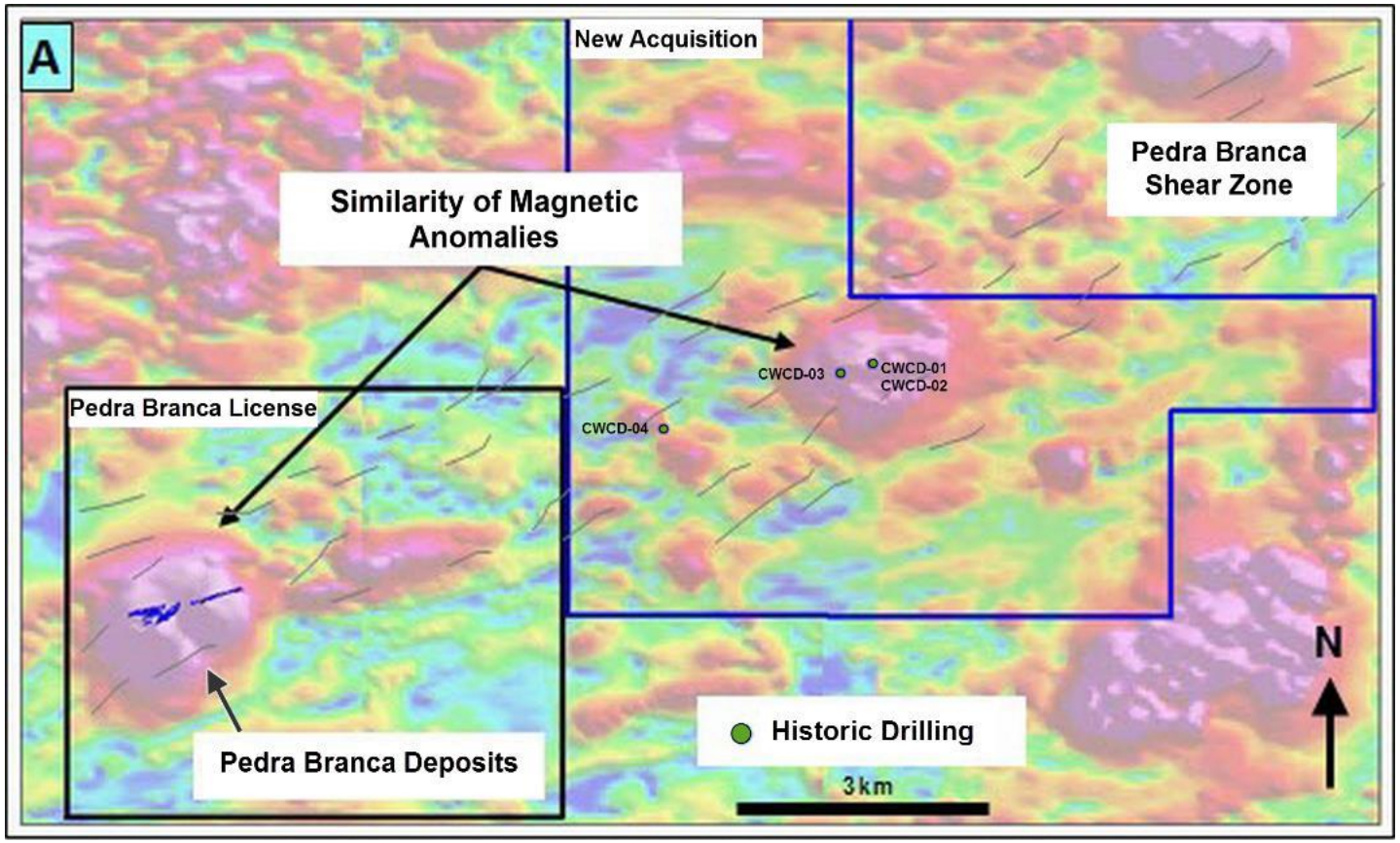
Structural Focus



AVANCO COPPER

Regional Exploration

Canaã West

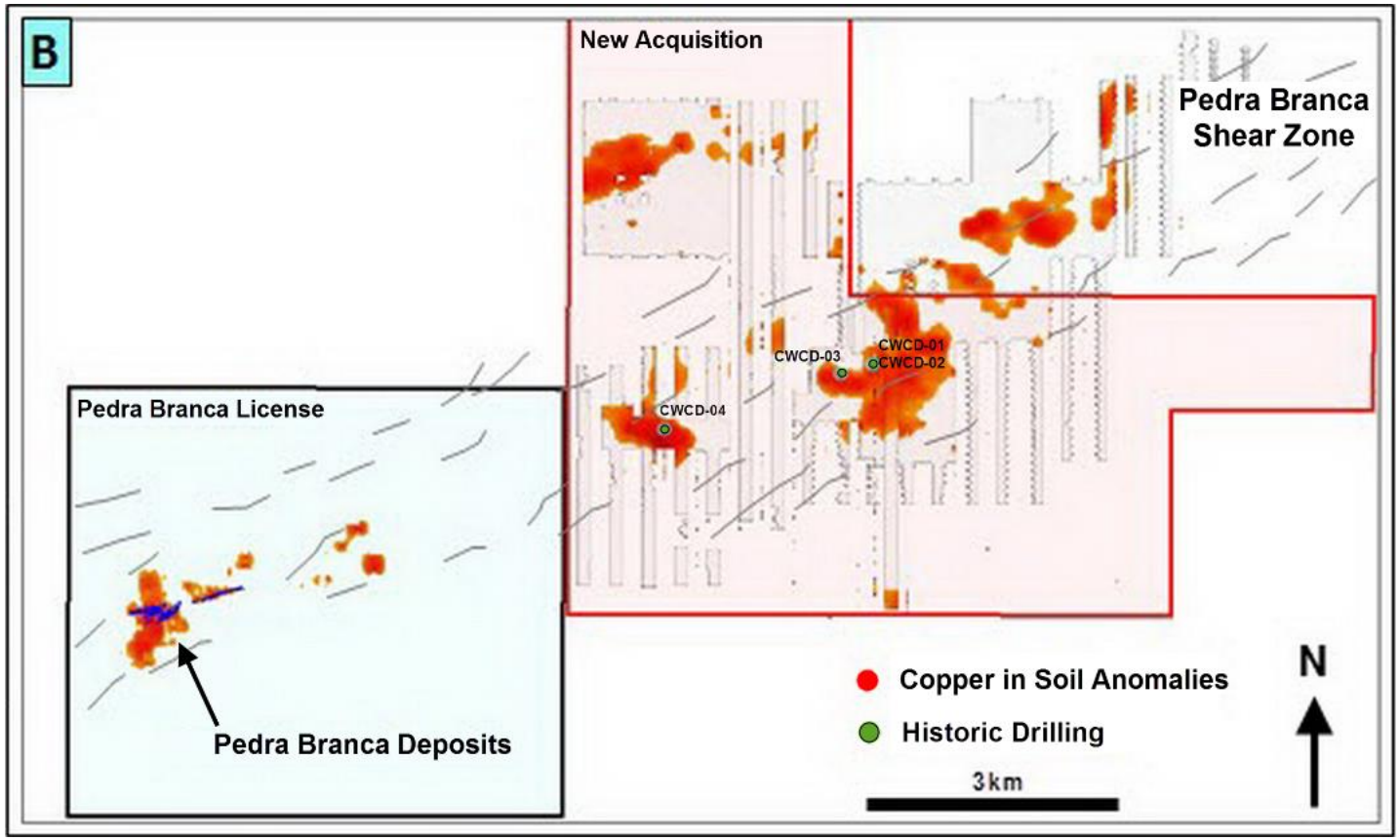


Covering the extension of the same shear zone that hosts Pedra Branca (located within the regional prospective structural corridor that is the primary focus of exploration), the licence contains an almost identical “bullseye” magnetic anomaly to Pedra Branca

AVANCO COPPER

Regional Exploration

Canaã West



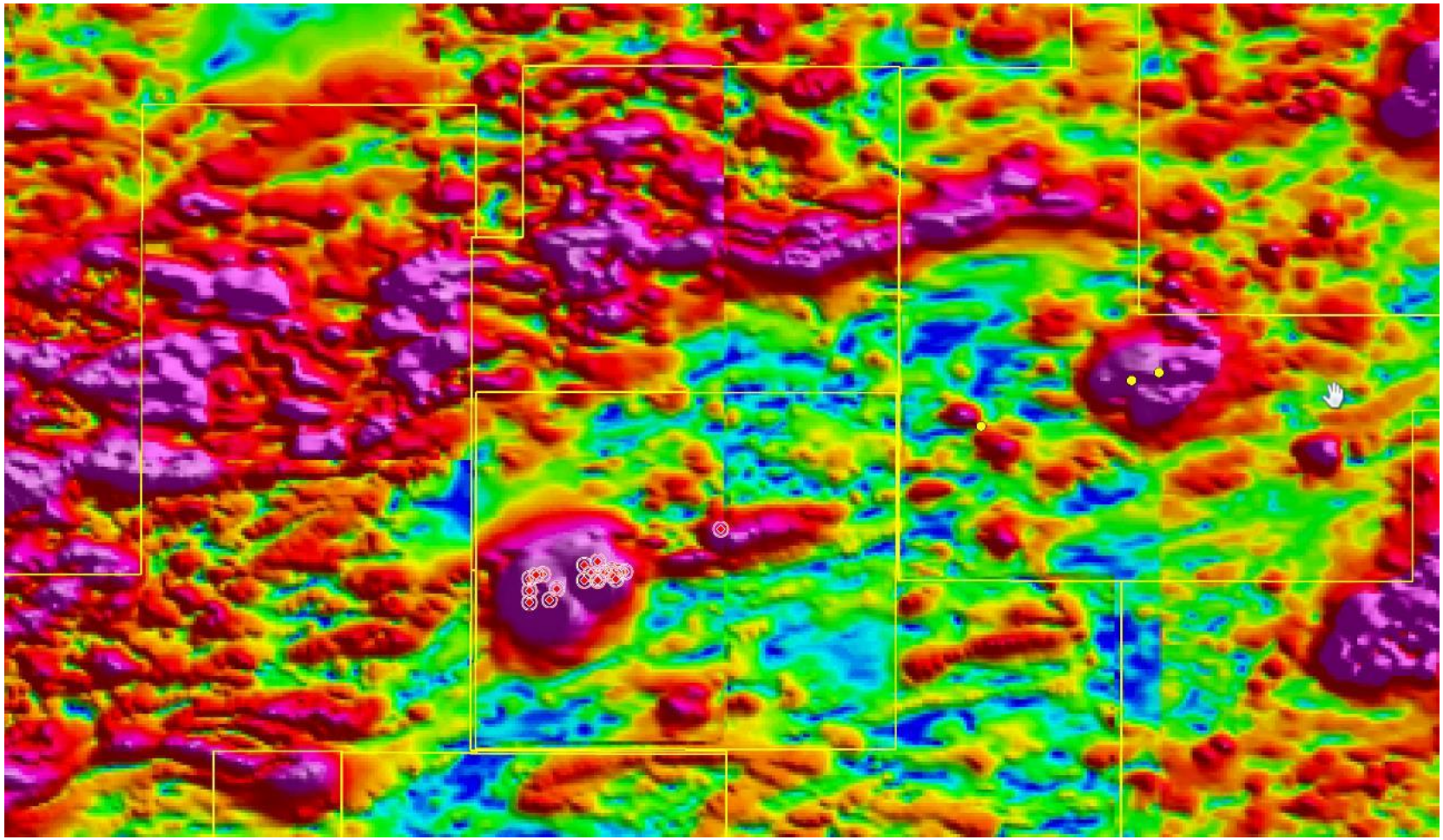
Three copper-in soil anomalies identified, the largest (1,500m by 900m) associated with the bullseye magnetic target, much larger than the soil anomaly at Pedra Branca

4 diamond holes were drilled to test the potential for a very large world class IOCG deposit. with 2 out of 3 holes on the main anomaly intersecting copper/gold mineralisation

AVANCO COPPER

Regional Exploration

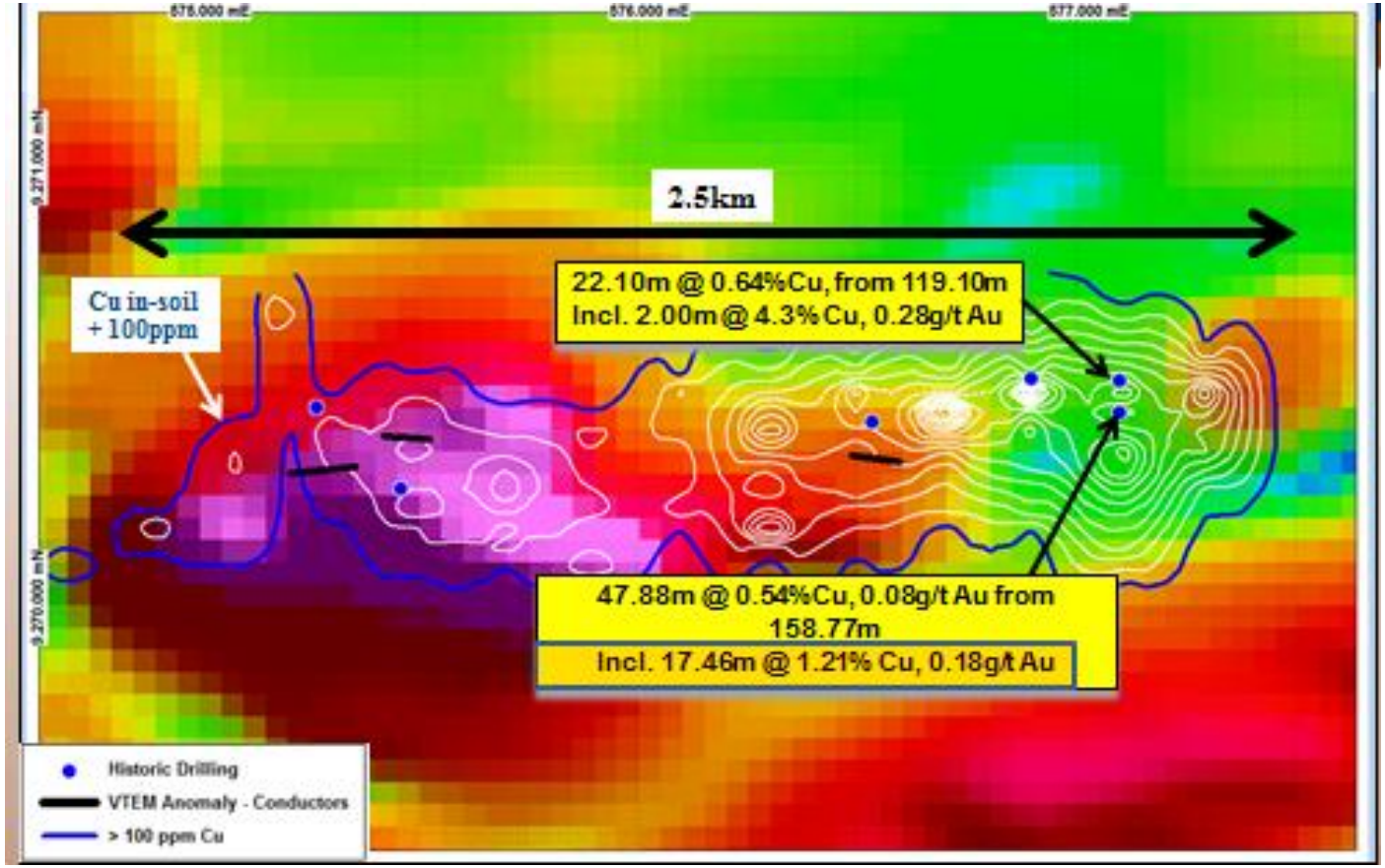
Pedra Branca East Extension



AVANCO COPPER

Regional Exploration

São Jorge



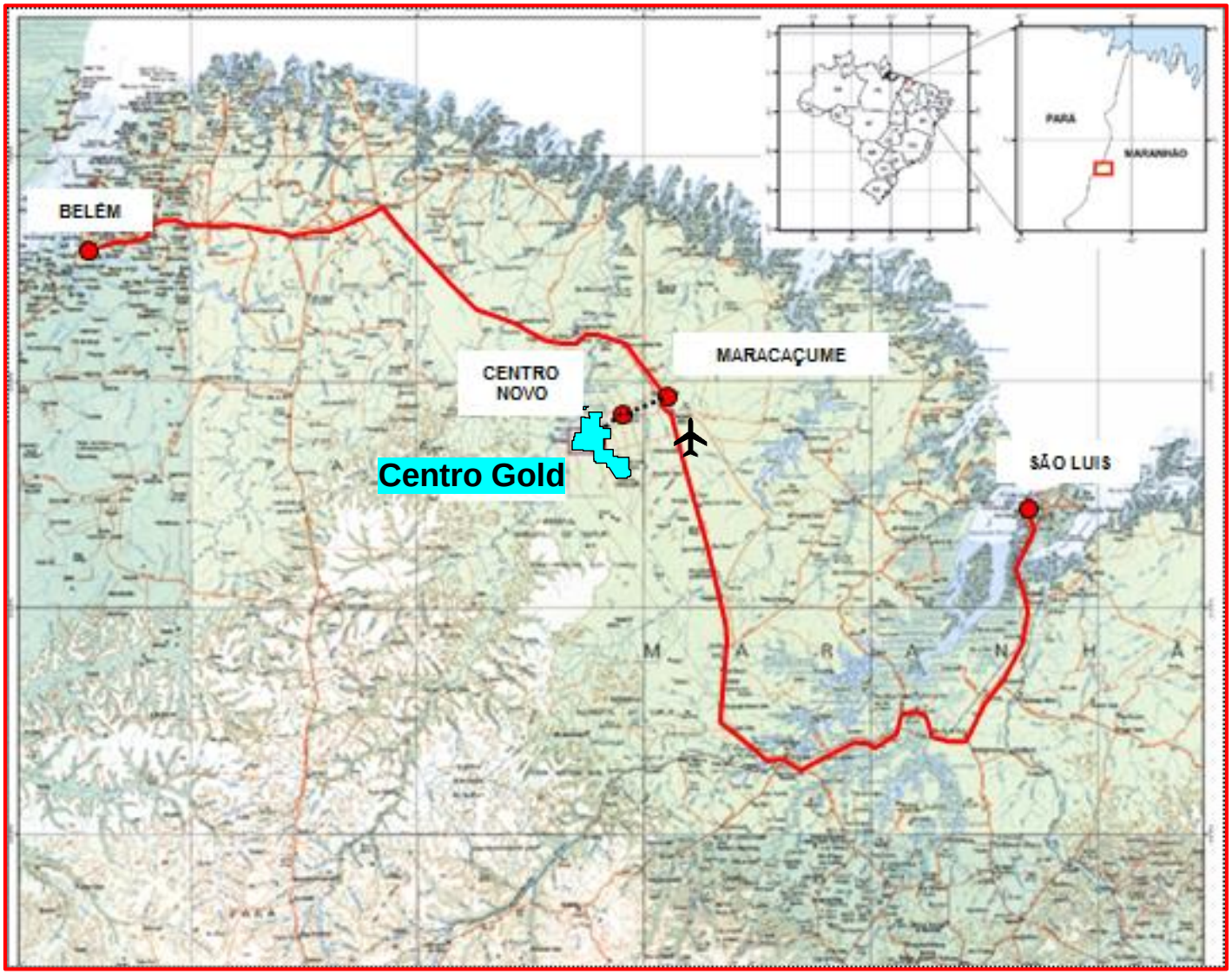
AVANCO COPPER

THE AUSTRALIAN COPPER COMPANY IN BRAZIL

AVANCO COPPER

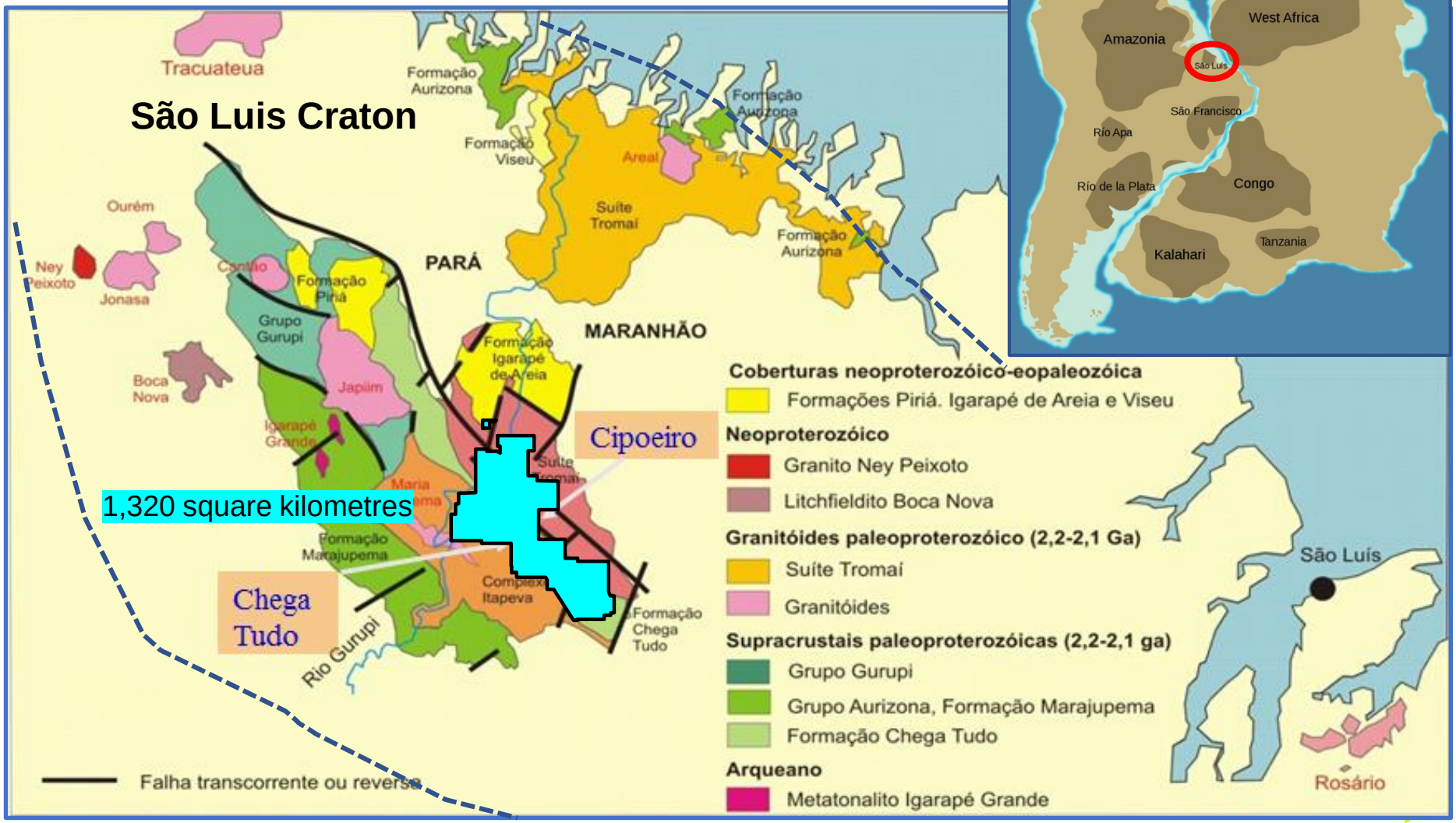
Centro Gold Project

Location



AVANCO COPPER

Tectonic setting

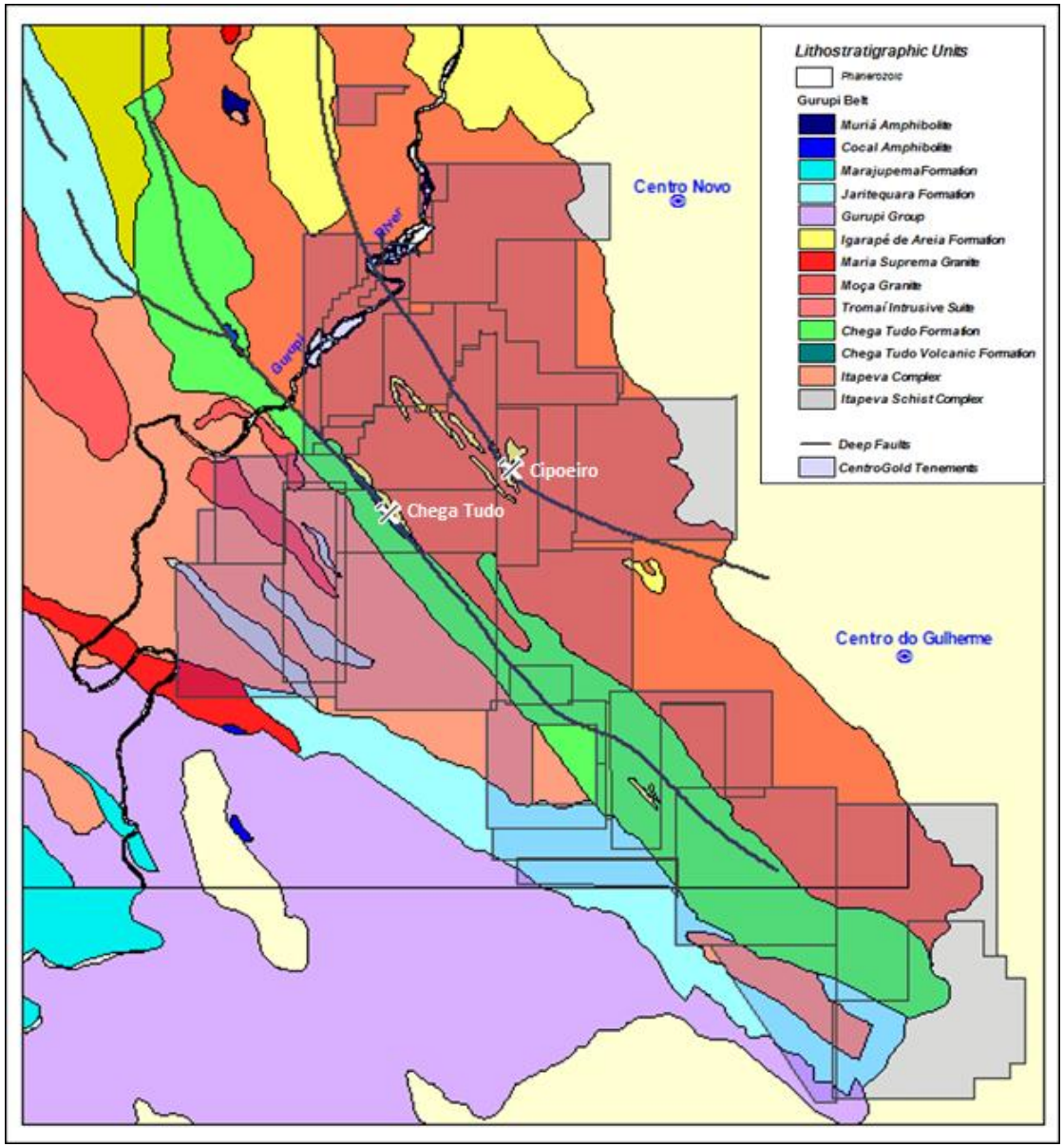


AVANCO COPPER

Gold Deposits

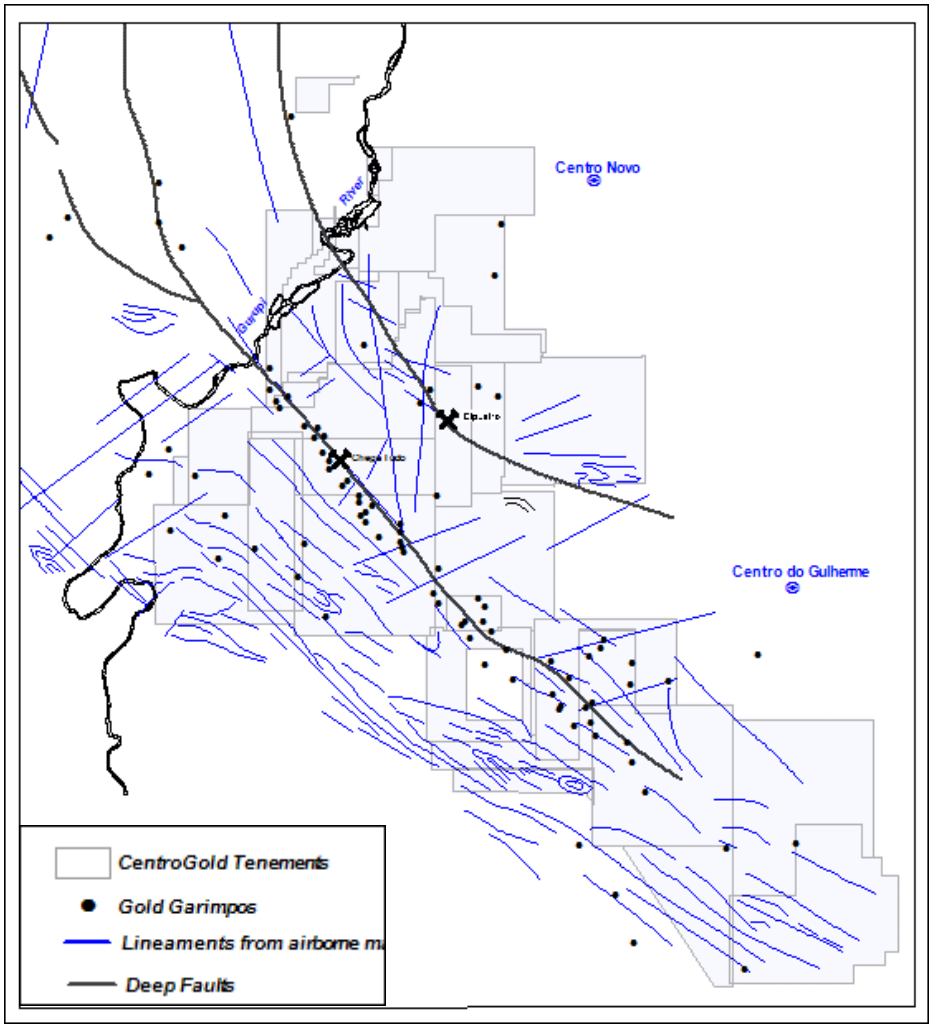
AVANCO COPPER

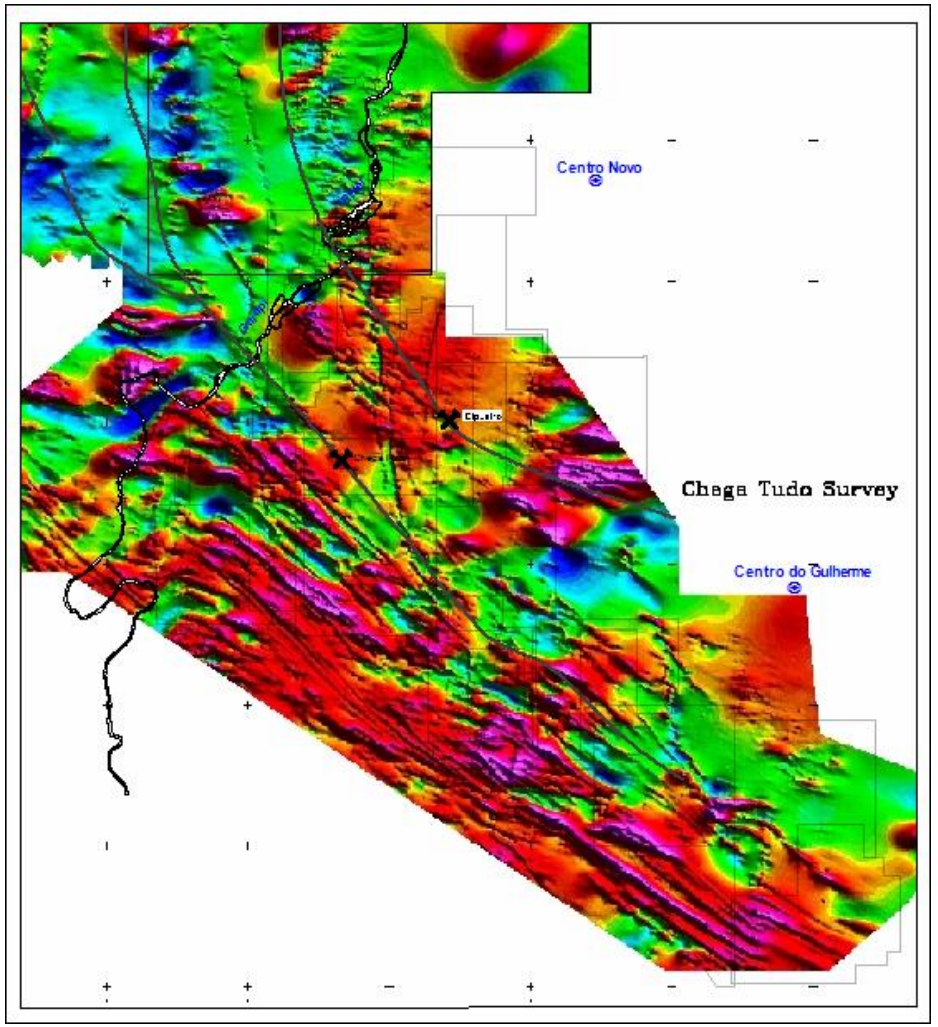
Regional Geology



AVANCO COPPER

Airborne Magnetic Image



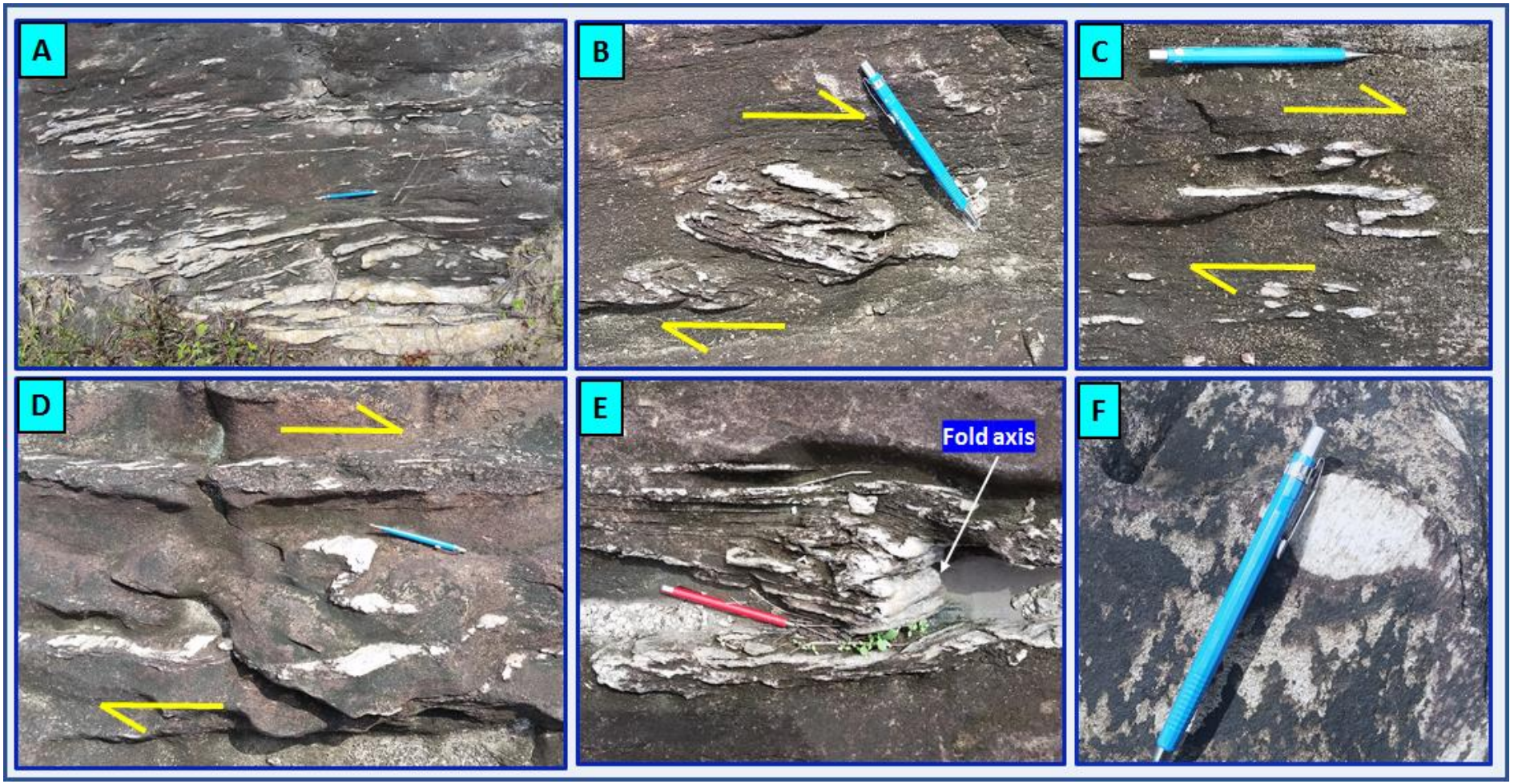


AVANCO COPPER

Structures

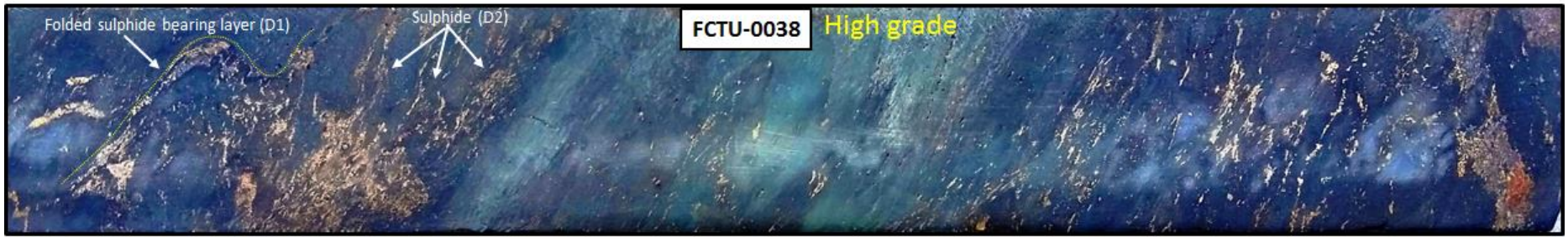
AVANCO COPPER

Structures

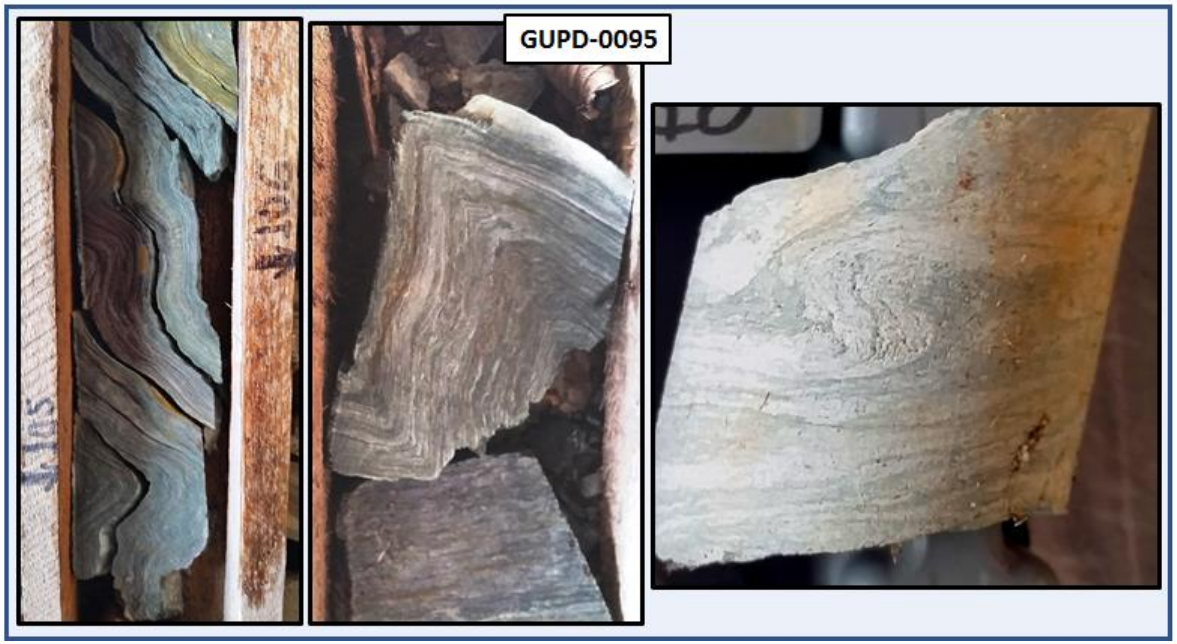


AVANCO COPPER

Structures


Folded sulphide bearing layer (D1)
Sulphide (D2)
FCTU-0038
High grade


FCTU-0038


GUPD-0095

Cipoeiro – Mineral Resource Estimate

Blanket Zone April 2017 Mineral Resource Estimate. (1.0 g/t cut-off)

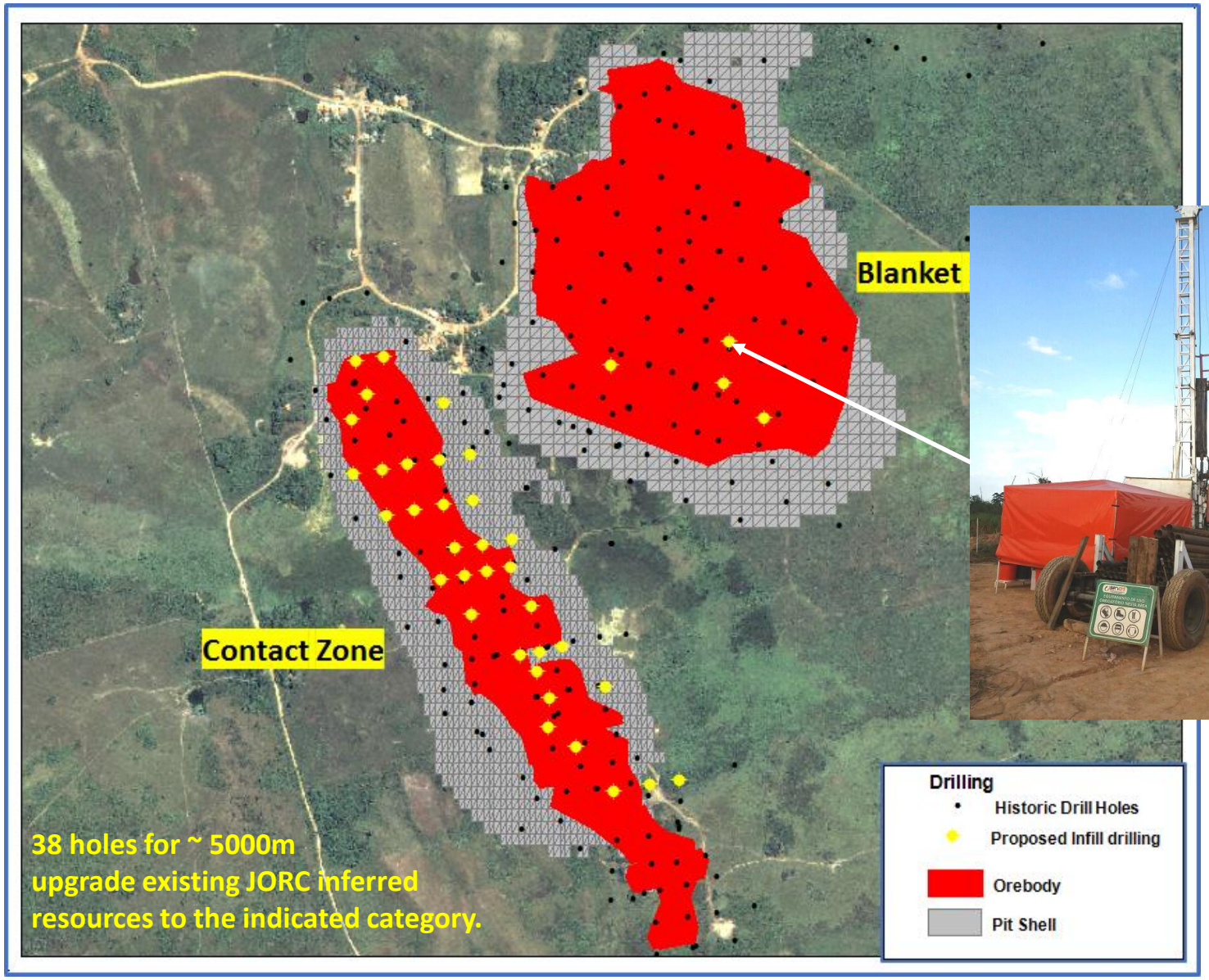
Type	Indicated		Inferred		Total		Total
	Tonnes t	Au g/t	Tonnes t	Au g/t	Tonnes t	Au g/t	Au Oz
Colluvium	7,000	1.5	50,000	1.7	57,000	1.7	3,000
Oxide	890,000	1.6	137,000	1.9	1,027,000	1.7	55,000
Transition	142,000	1.5	3,000	1.3	145,000	1.5	7,000
Fresh	9,797,000	1.7	1,168,000	2.3	10,965,000	1.8	628,000
Total	**10,835,000**	**1.7**	**1,359,000**	**2.2**	**12,195,000**	**1.8**	**694,000**

Contact Zone April 2017 Mineral Resource Estimate. (1.0 g/t cut-off)

Type	Indicated		Inferred		Total		Total
	Tonnes t	Au g/t	Tonnes t	Au g/t	Tonnes t	Au g/t	Au Oz
Colluvium	119,000	1.3	215,000	1.5	333,000	1.4	15,000
Oxide	230,000	1.9	212,000	1.7	443,000	1.8	26,000
Transition	35,000	1.6	20,000	3.1	55,000	2.1	4,000
Fresh	1,741,000	2.6	5,466,000	2.3	7,207,000	2.4	548,000
Total	**2,124,000**	**2.5**	**5,913,000**	**2.2**	**8,038,000**	**2.3**	**592,000**

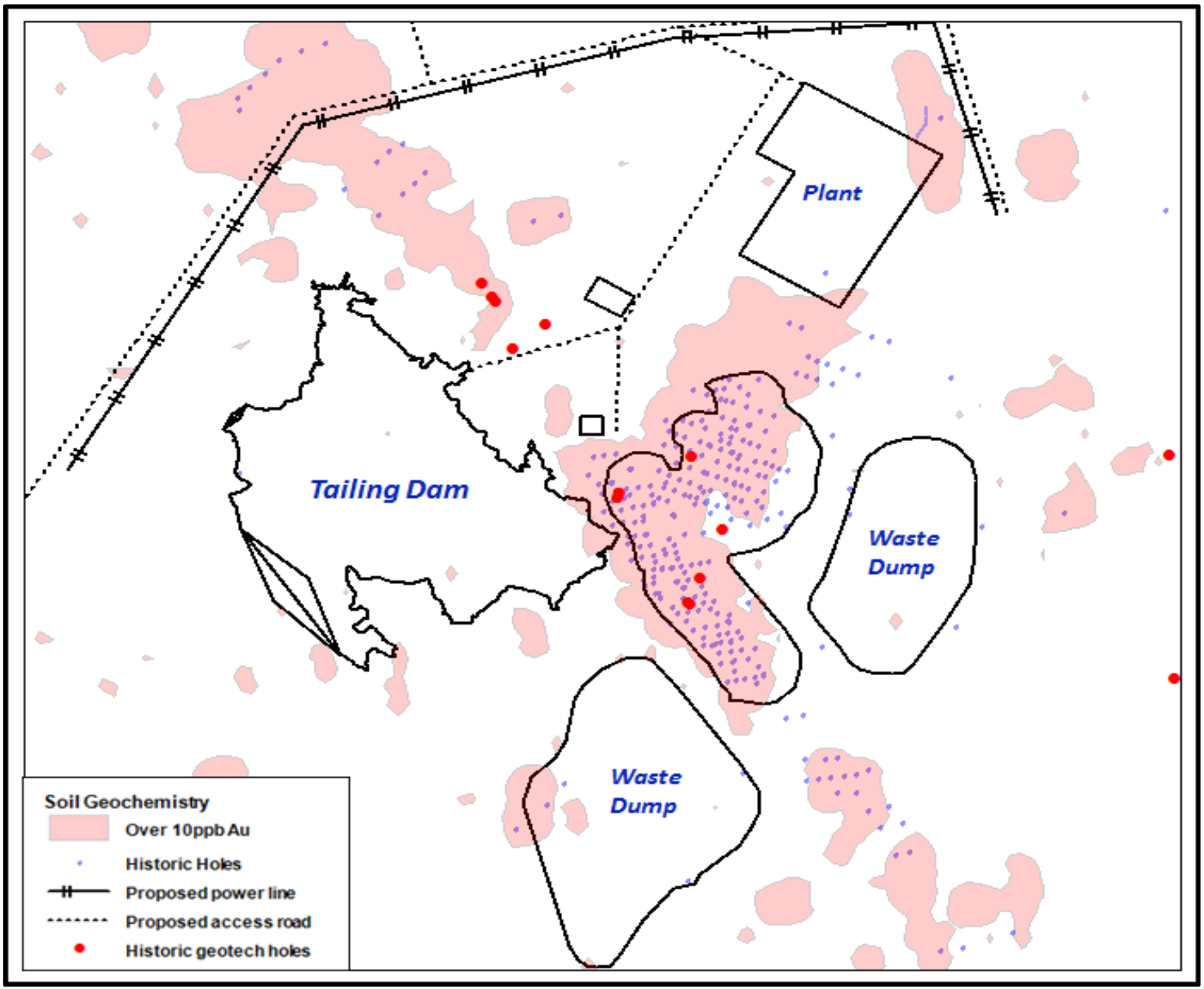
AVANCO COPPER

Cipoeiro – Infill Resource Drilling Programme



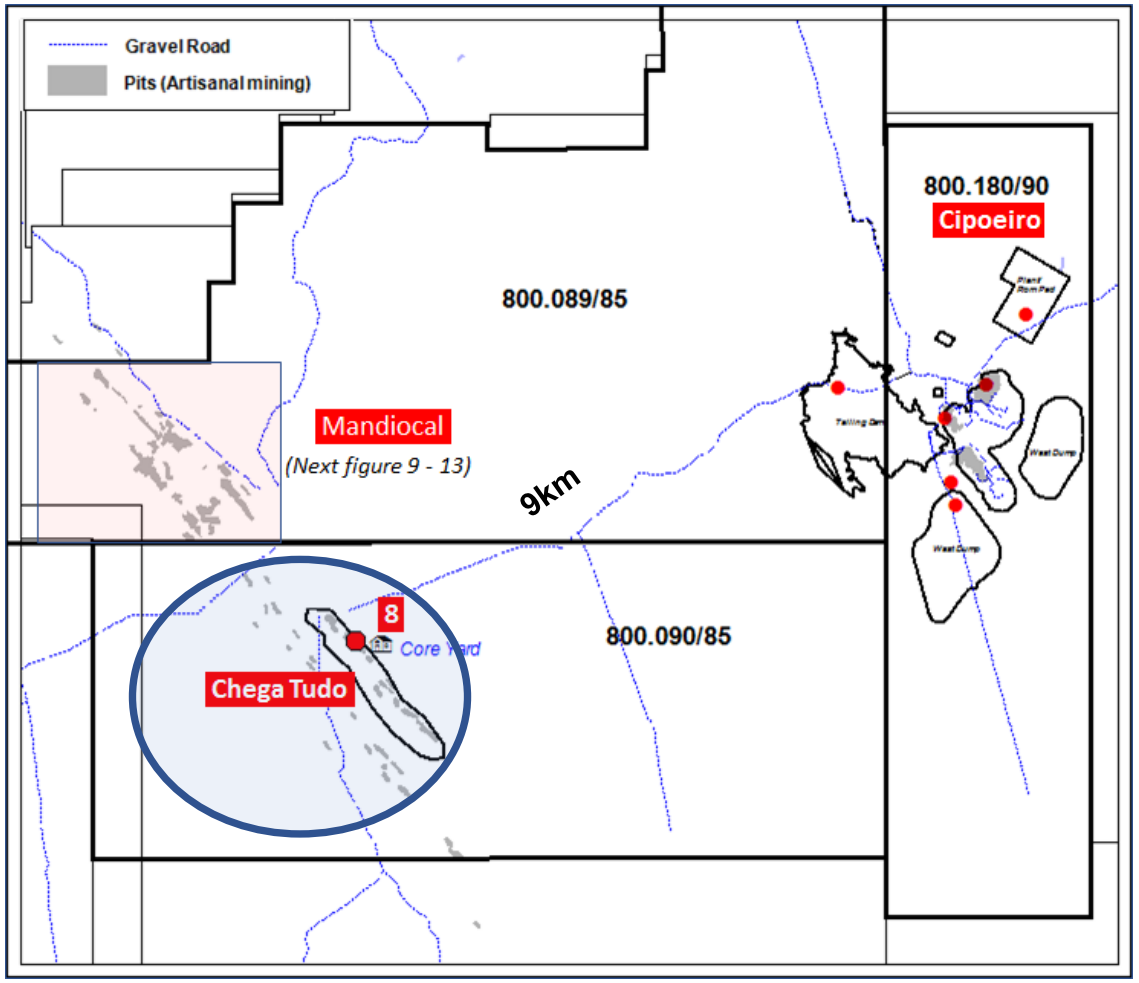
AVANCO COPPER

Mine Site layout



AVANCO COPPER

Chega Tudo Deposit

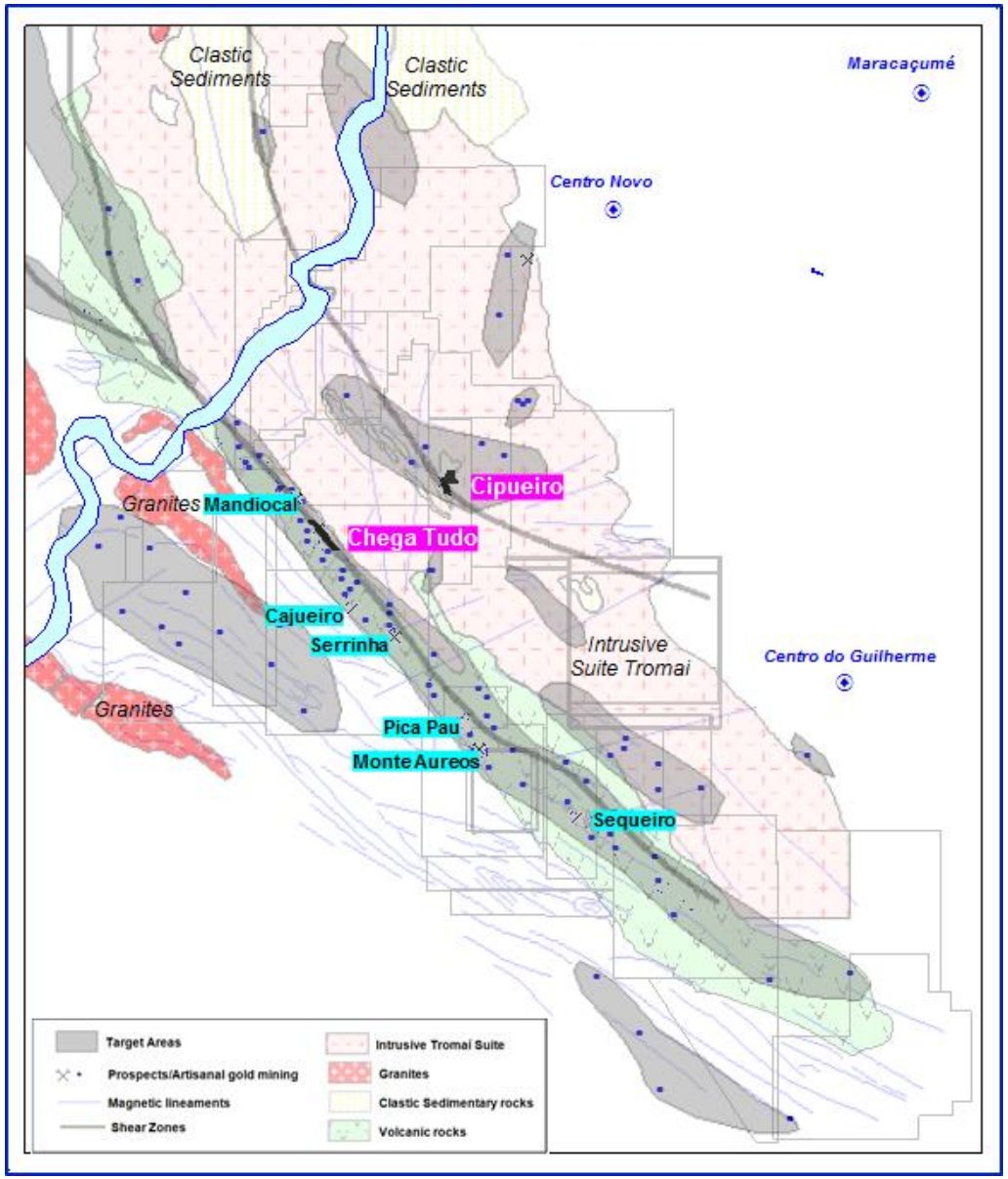


Foreign Estimate (CIM Code, reported under NI43-101): **~1Moz**

- Resource is coming in a couple of weeks
- Estimate on grade, using more realistic wireframes is ~1.4g/t.
- It takes the project to >2M ounces
- include CT in the Scoping Study

AVANCO COPPER

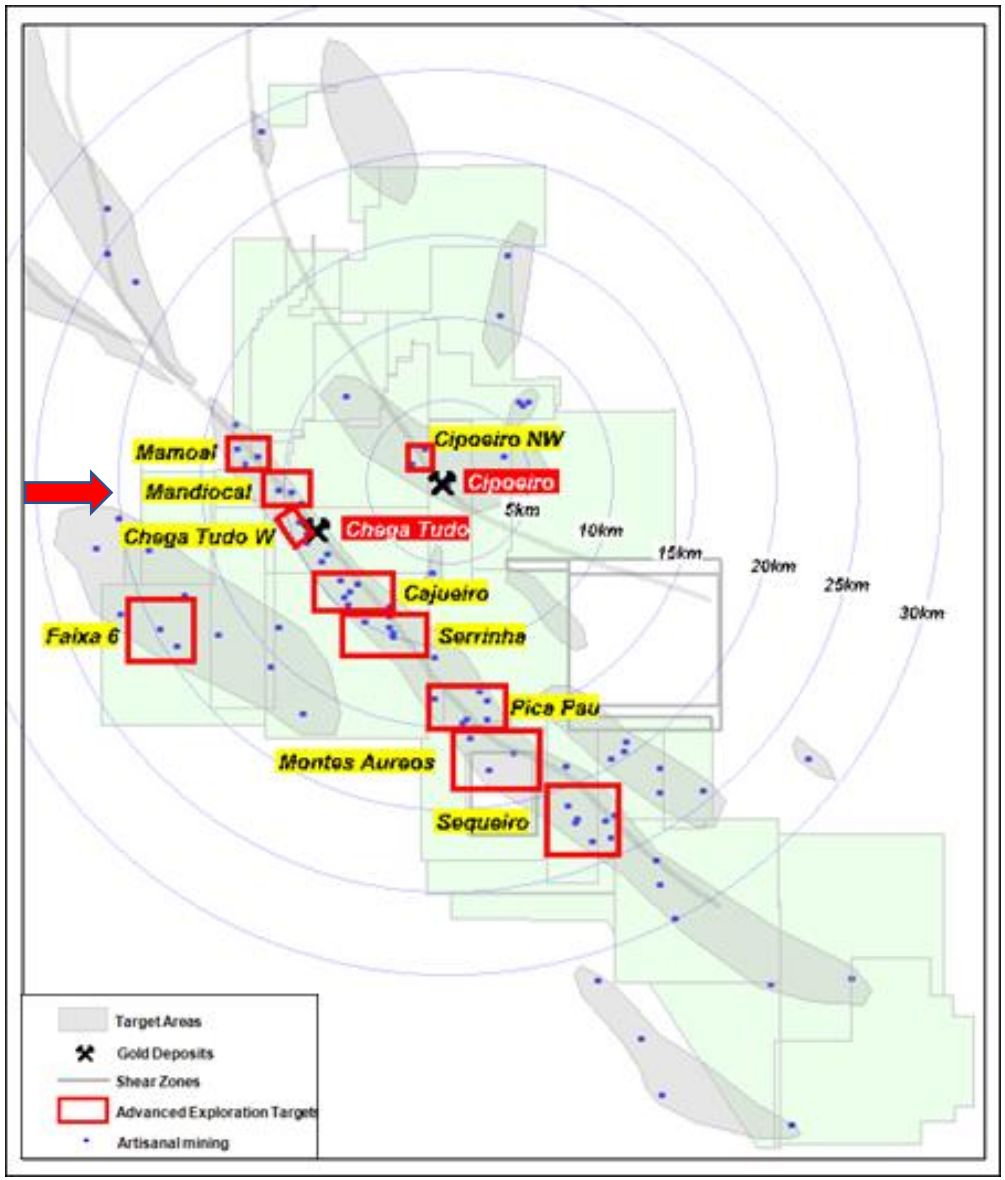
Exploration - Targets Areas



- Encompasses three main well-defined target trends characterized by a series of important artisanal mining workings and coincident with shear zones

AVANCO COPPER

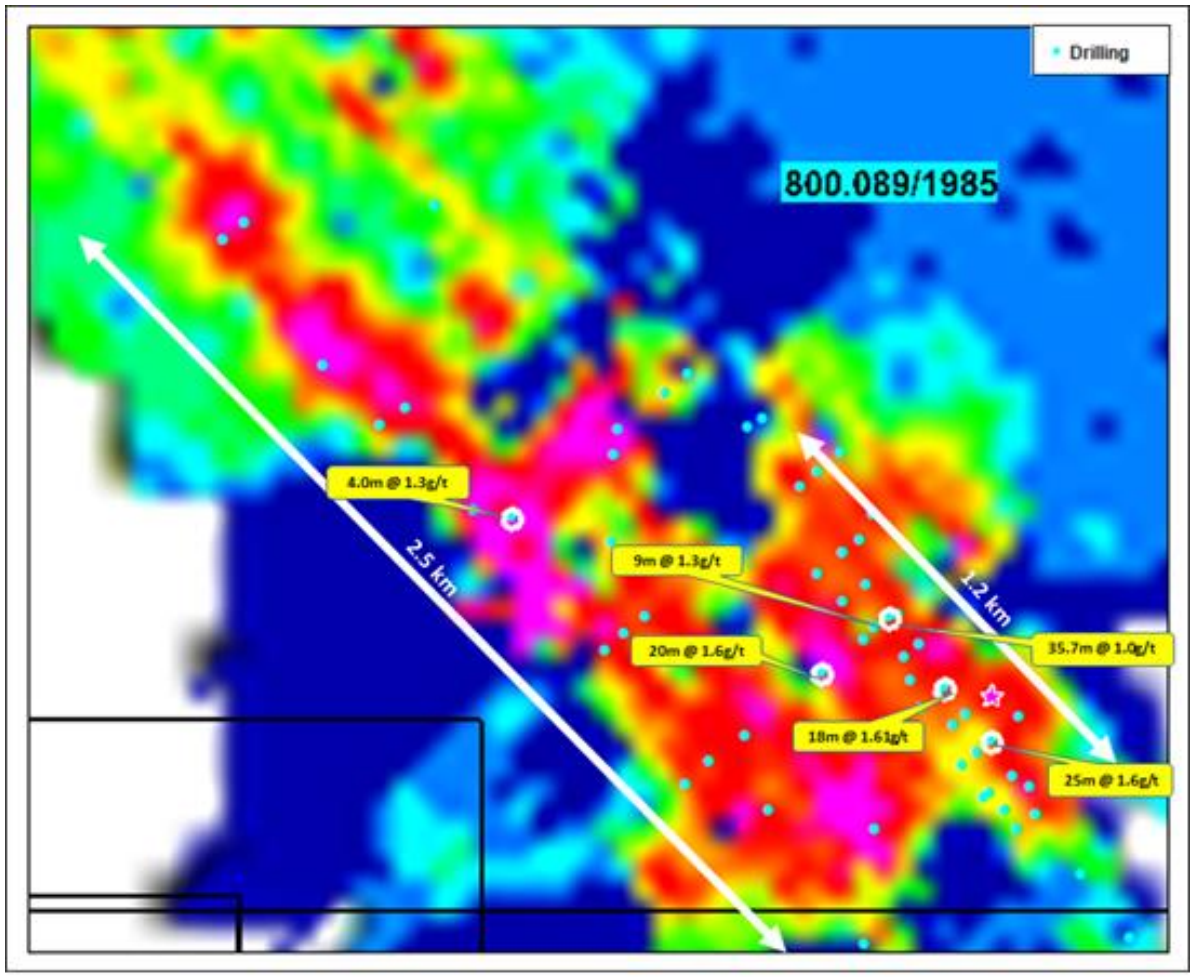
Potential Targets



- 9 advanced gold targets on these trends within a maximum 25 km radius of the Cipoeiro Deposit
- Two with strong potential for a new discovery/resource in short term

AVANCO COPPER

Priority Targets - Mandiocal

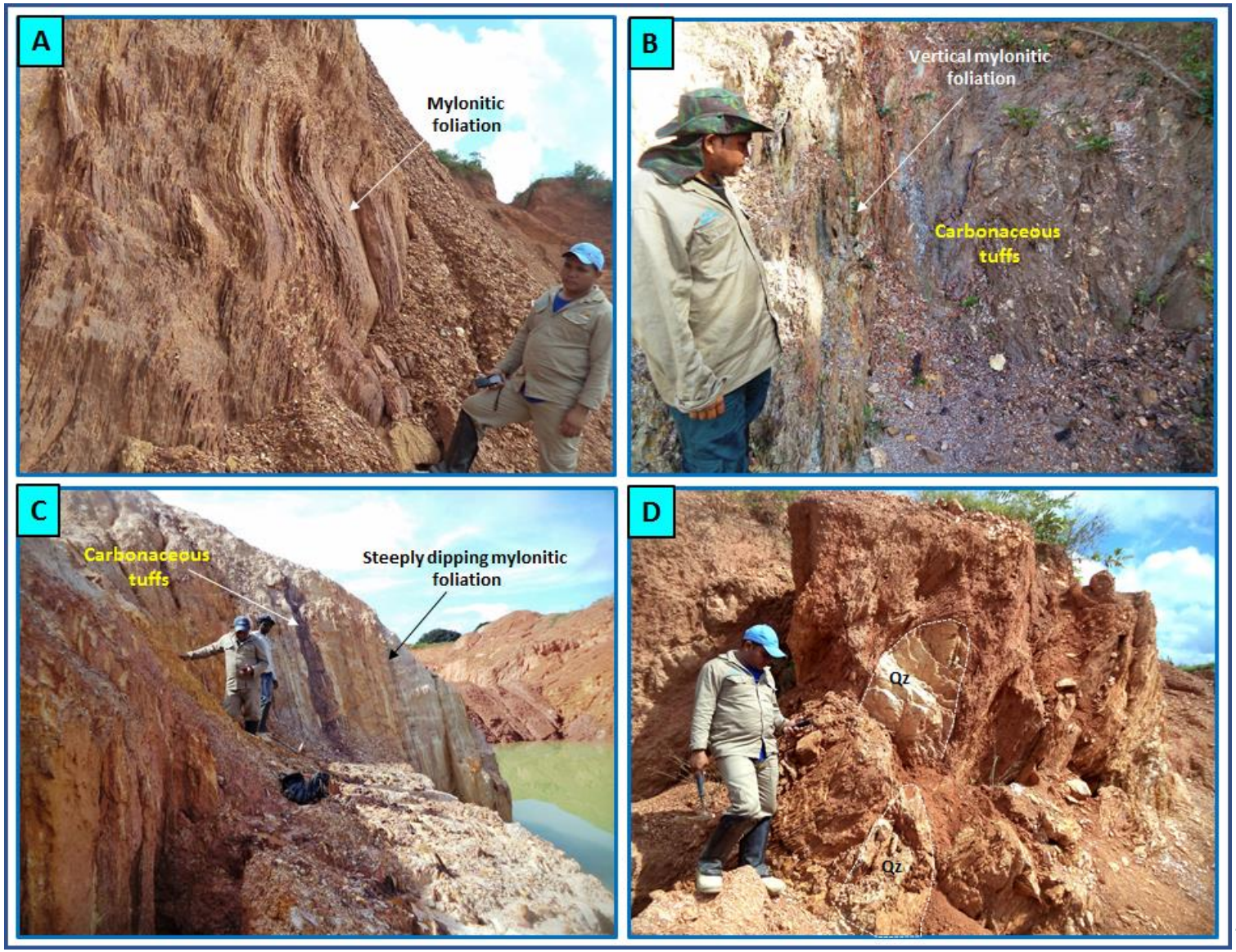


Mandiocal soil geochemical anomaly and selected historic drill results

- Exploration licence extended expiring on April 27, 2018, located immediately North of Chega Tudo Deposit
- Two closely spaced NW-striking parallel gold anomalies (+100 ppb); 2.5 km long by 300m wide (in the West) and 1.2 km long by 300m wide (in the East).
- Significant intersection in historic drilling
- High grade gold from individual core samples ranged from 5.14 g/t Au to 31.4g/t Au.

AVANCO COPPER

Mandiocal



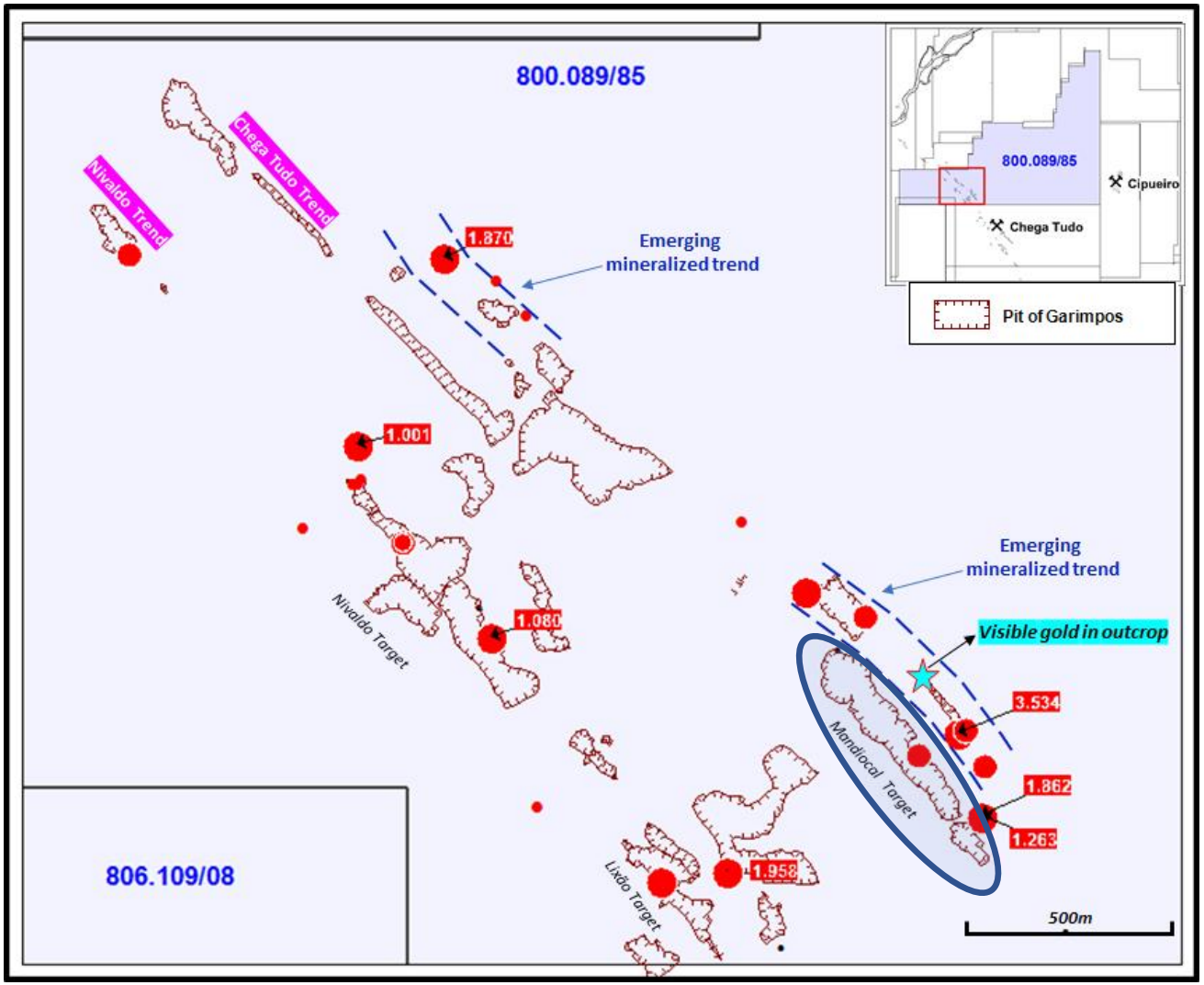
AVANCO COPPER

Madiocal

Shallow-dipping extensional veins associated with a dextral shear zone.

AVANCO COPPER

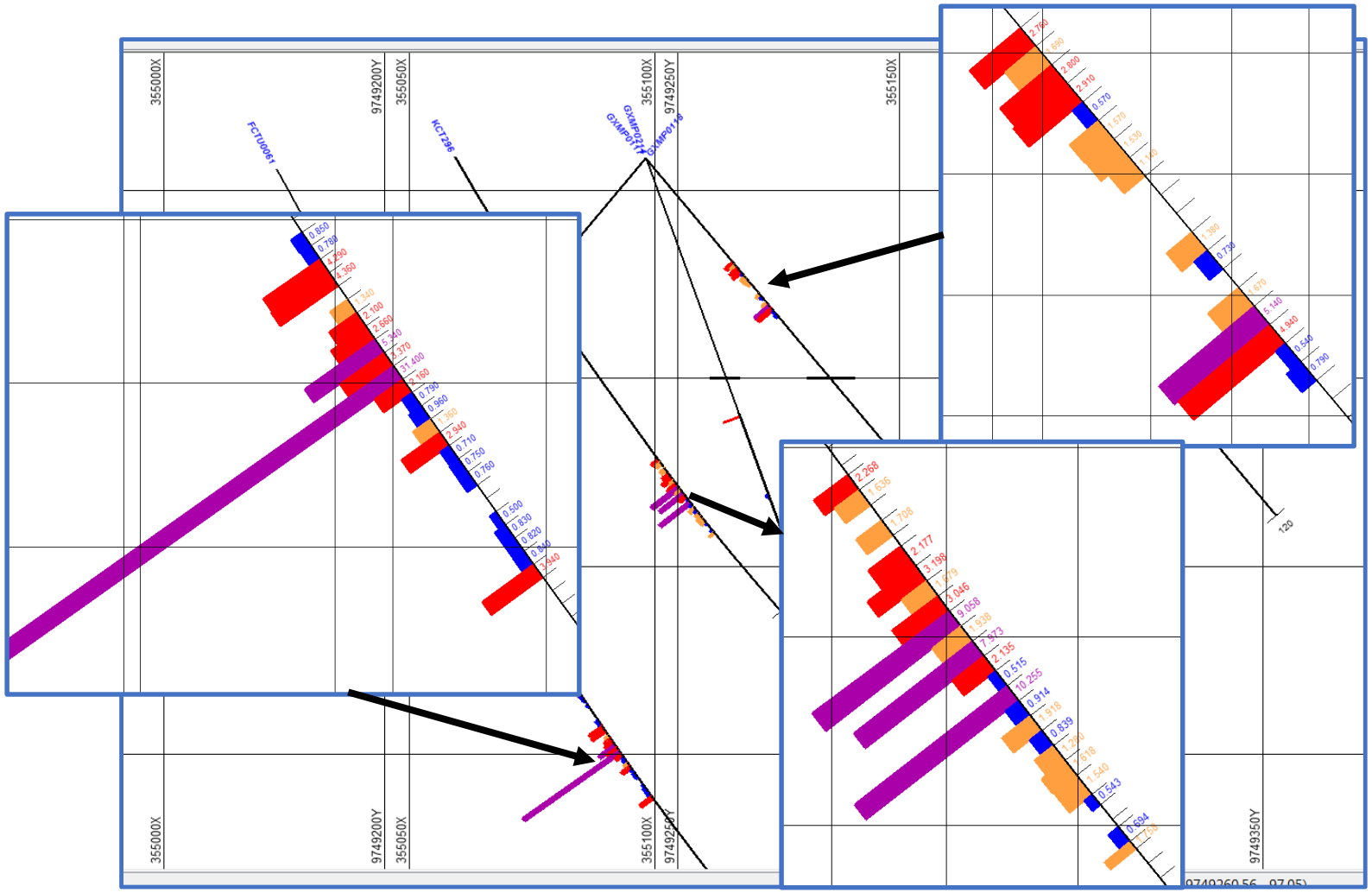
Mandiocal



- New targets could emerge with the follow up
- Potential - 150-300k oz
- 1.4km along NW extension of Chega Tudo Deposit

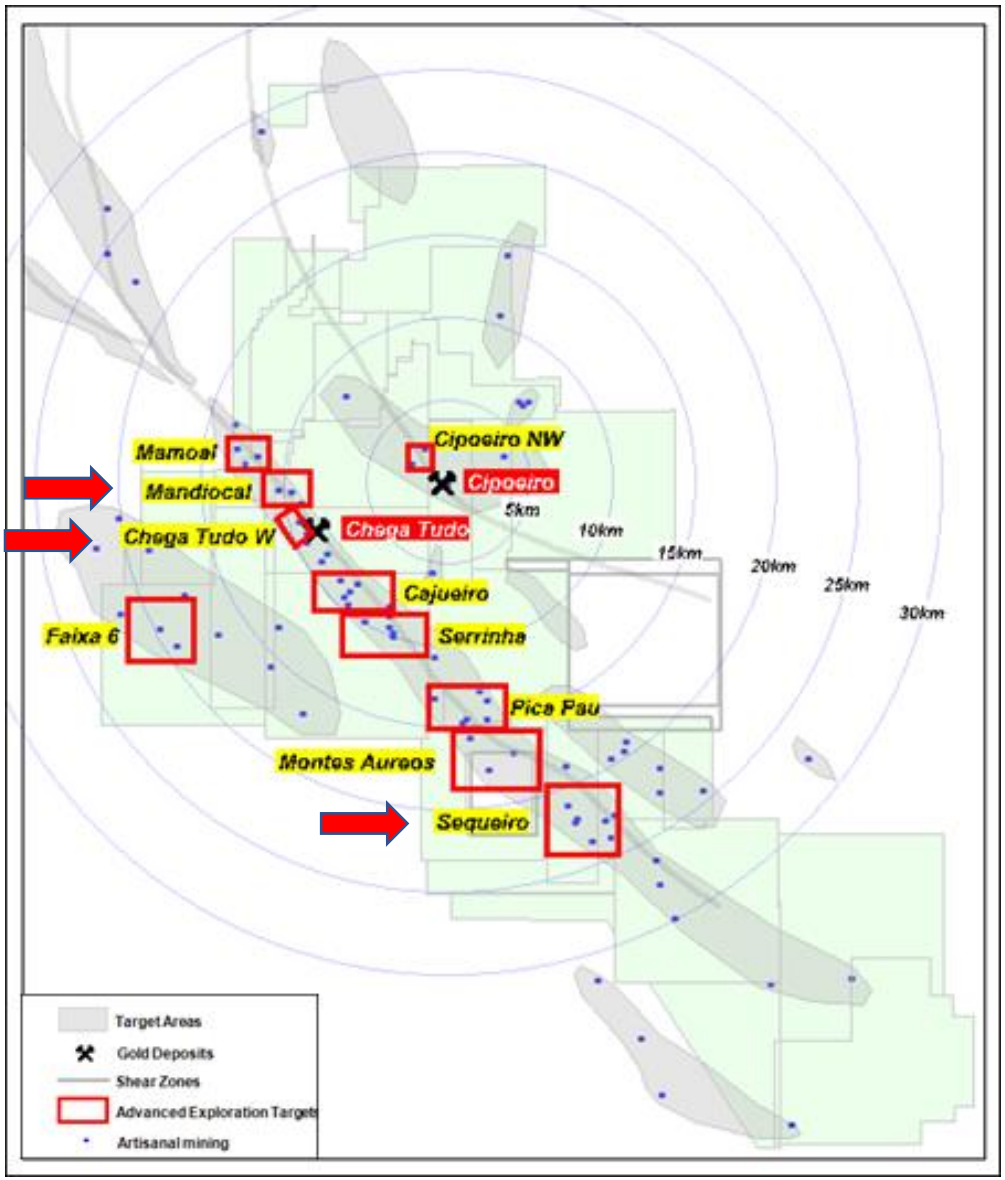
AVANCO COPPER

Mandiocal

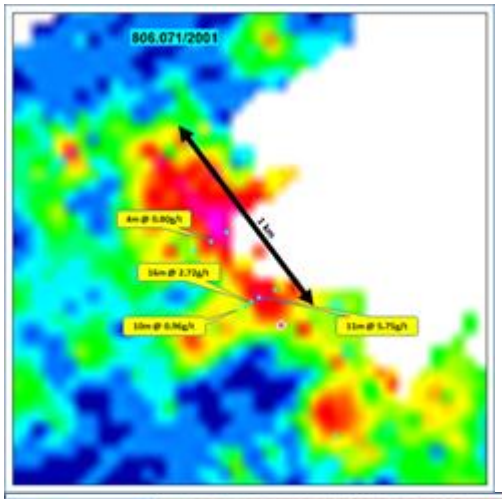


AVANCO COPPER

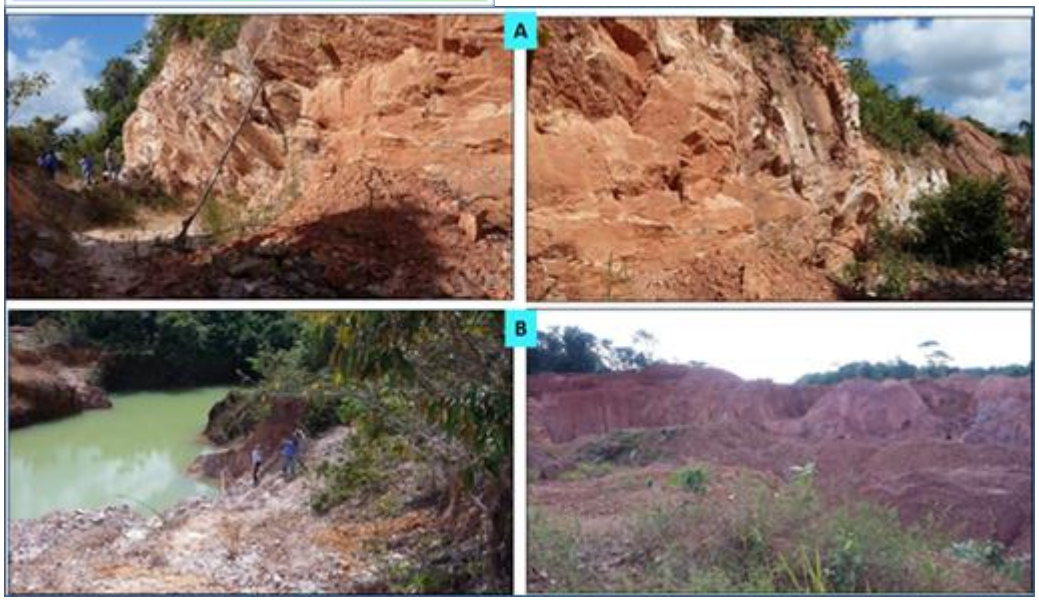
Potential Targets



Sequeiro Target



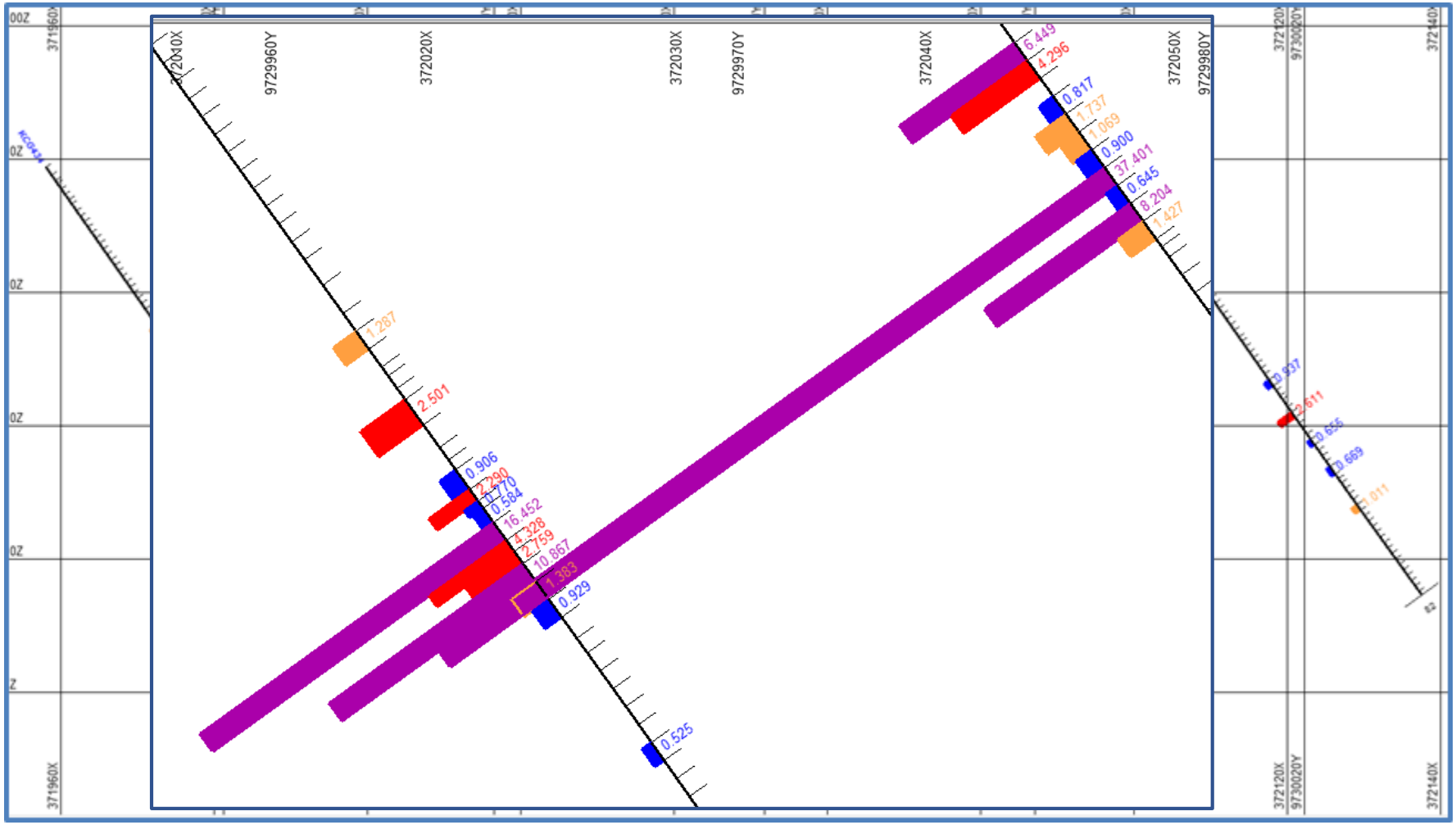
Sequeiro soil geochemical anomaly and selected historic drill results.



- Licence 806.071/2001 is a license extension requested
- Potential for high grade gold mineralisation.
- Significant intersection such as 11m @ 5.75g/t Au and 16m @ 2.72g/t Au
- 9 holes for 800.2m completed

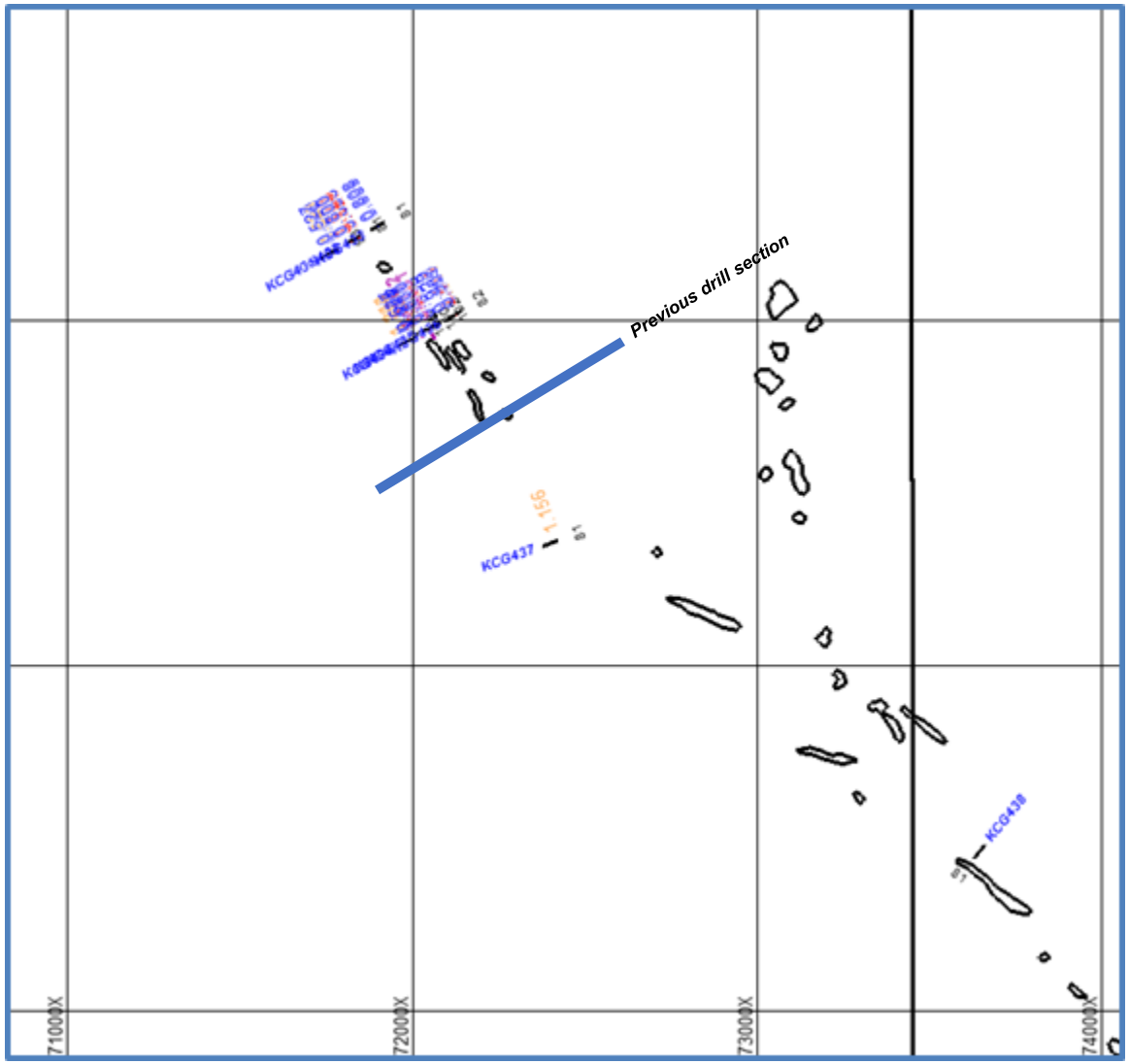
AVANCO COPPER

Sequeiro Target



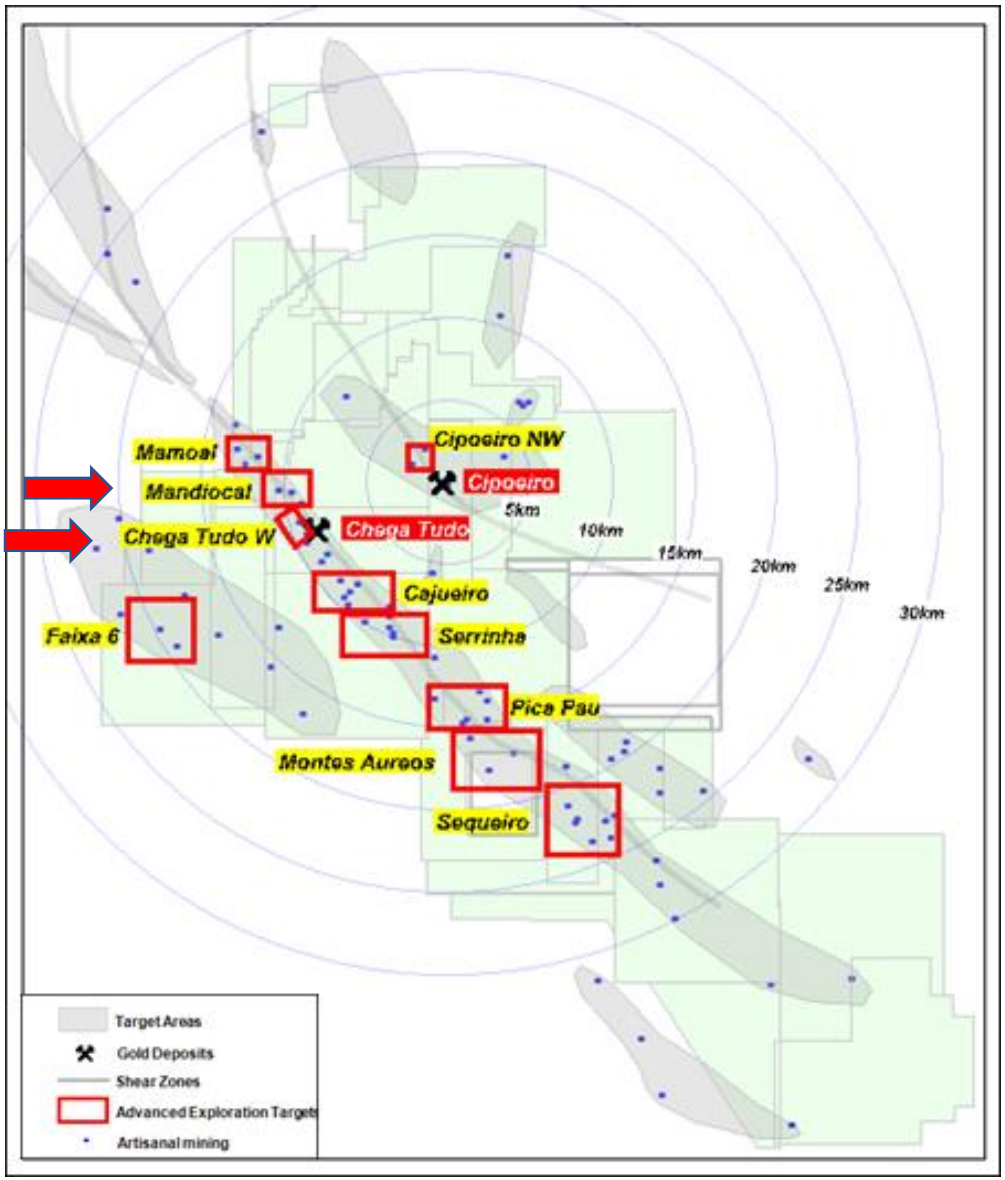
AVANCO COPPER

Sequeiro Target



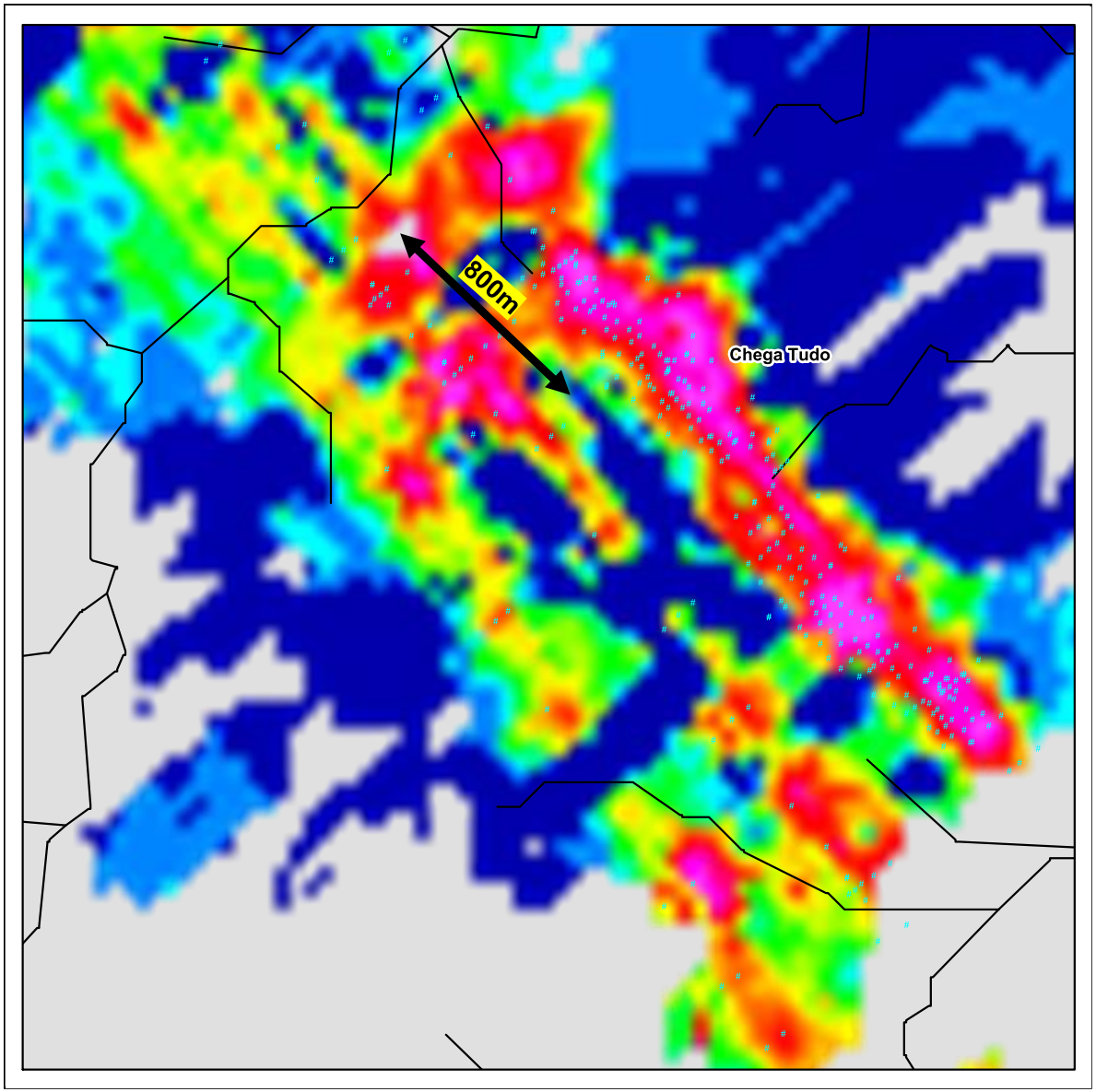
AVANCO COPPER

Potential Targets



AVANCO COPPER

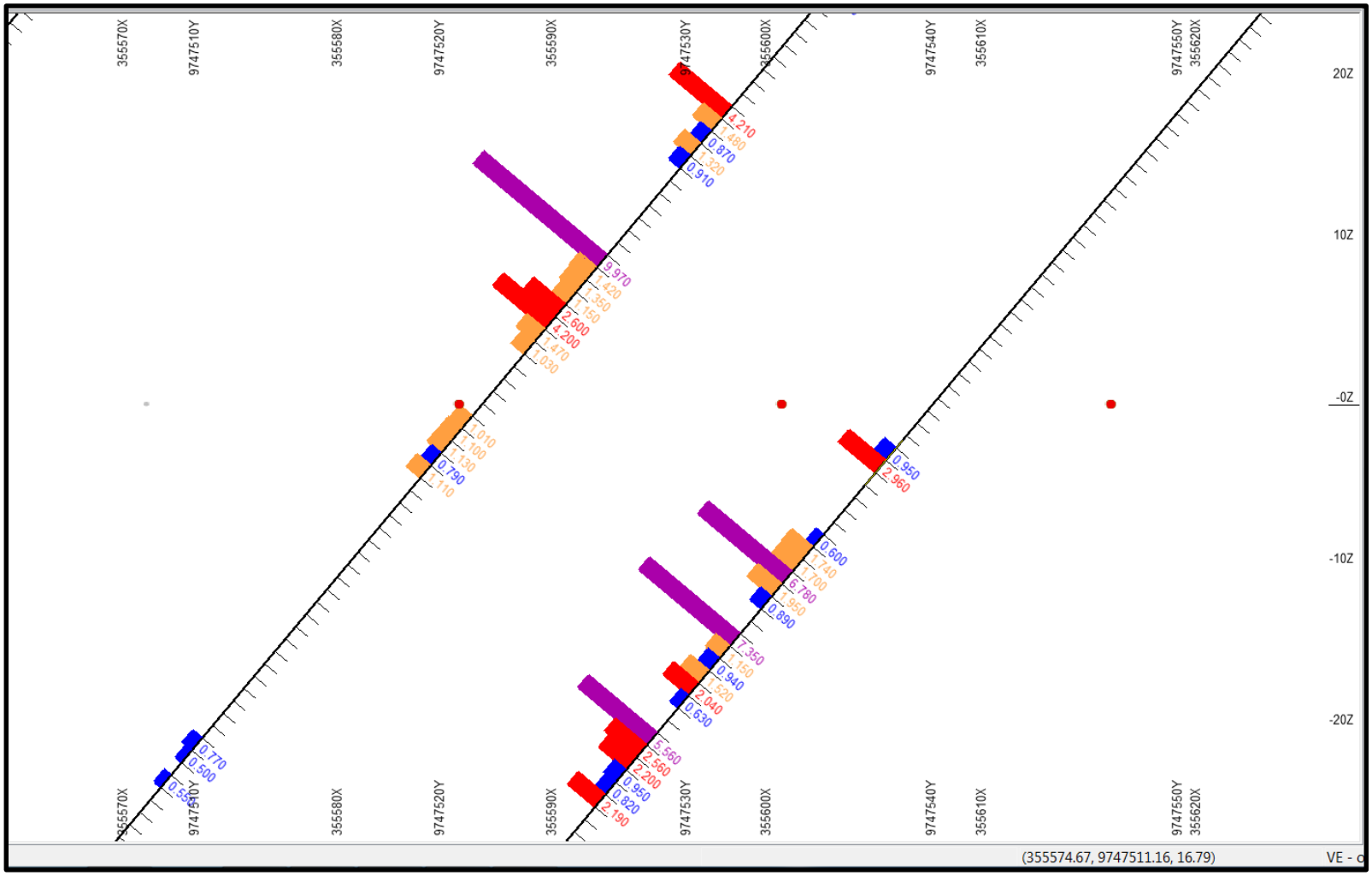
Chega Tudo W



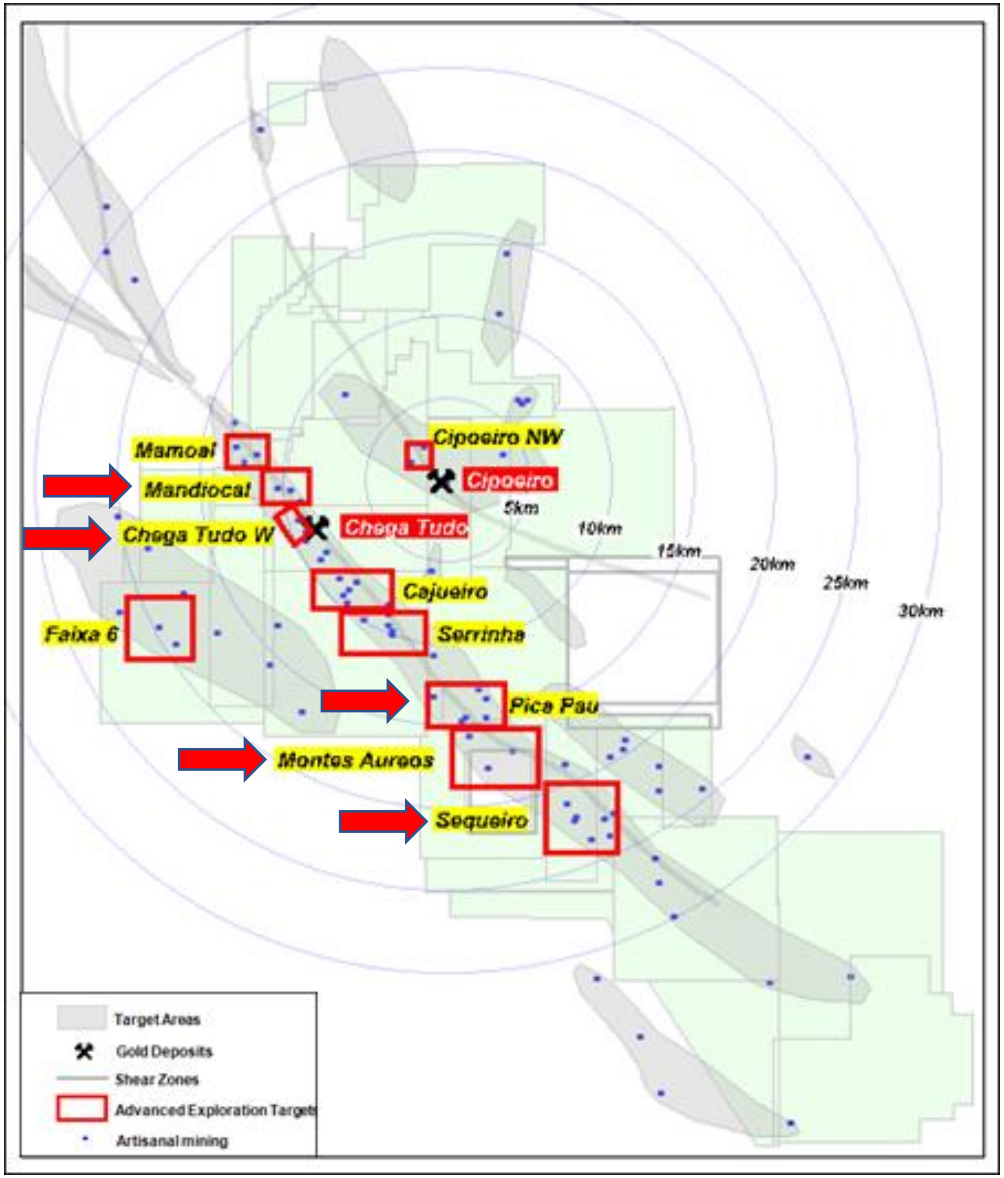
- NW-striking gold anomaly (+100 ppb) parallel to Chega Tudo trend; 0.8 km long by 300m wide
- Significant intersection in historic drilling

AVANCO COPPER

Chega Tudo W

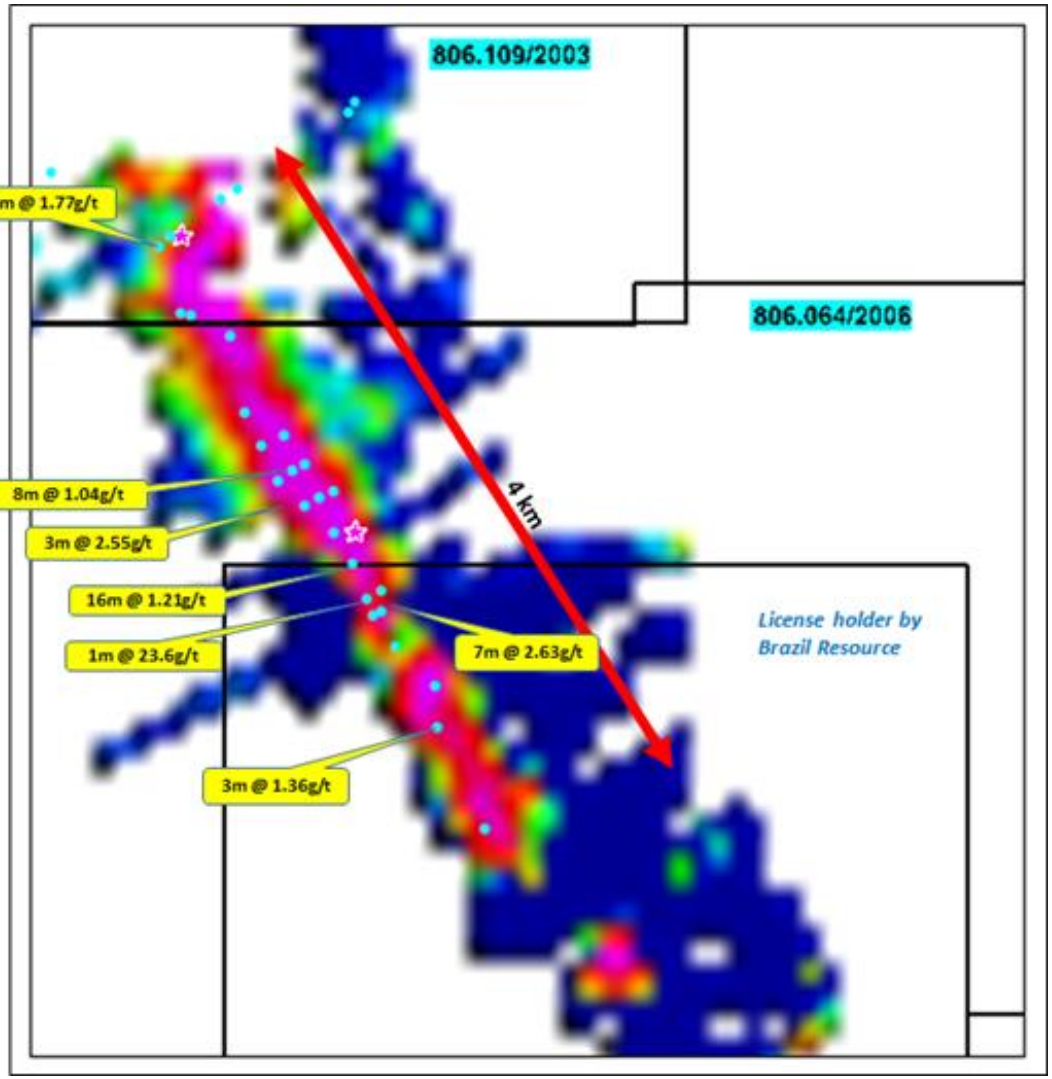

355570X
9747510Y
355580X
9747520Y
355590X
9747530Y
355600X
9747540Y
355610X
9747550Y
355620X
20Z
10Z
-0Z
-10Z
-20Z
(355574.67, 9747511.16, 16.79)

Potential Targets



AVANCO COPPER

Montes Aureos – Pica Pau Target



- Covers two exploration licence.
- License in the south is owned by Brazil Resource
- The most significant gold-in soil anomaly of the project (+ 100ppb)
- 4km long by x 0.3km wide, NW-striking gold anomaly (+ 100 ppb)
- High grade gold from individual core samples such as 25g/t Au (hole MAMD1), 10.15g/t Au, 25g/t Au (hole MAMD6) and 9.4g/t Au (hole GRUD0200).

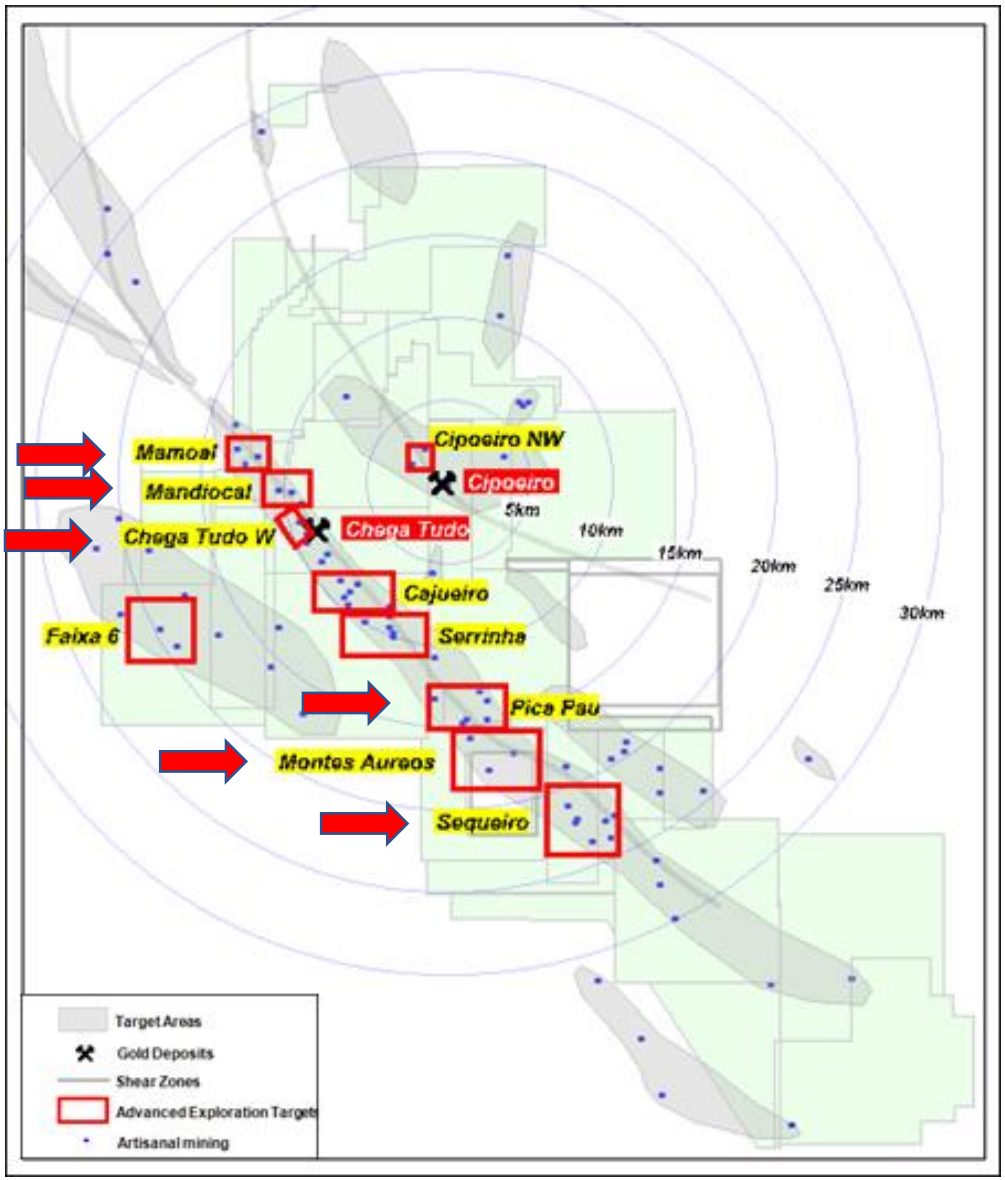
AVANCO COPPER

Montes Aureos Target

View of Montes Aureos pit. Note the excavator on the left for scale (circled). Dark material is carbonaceous zones

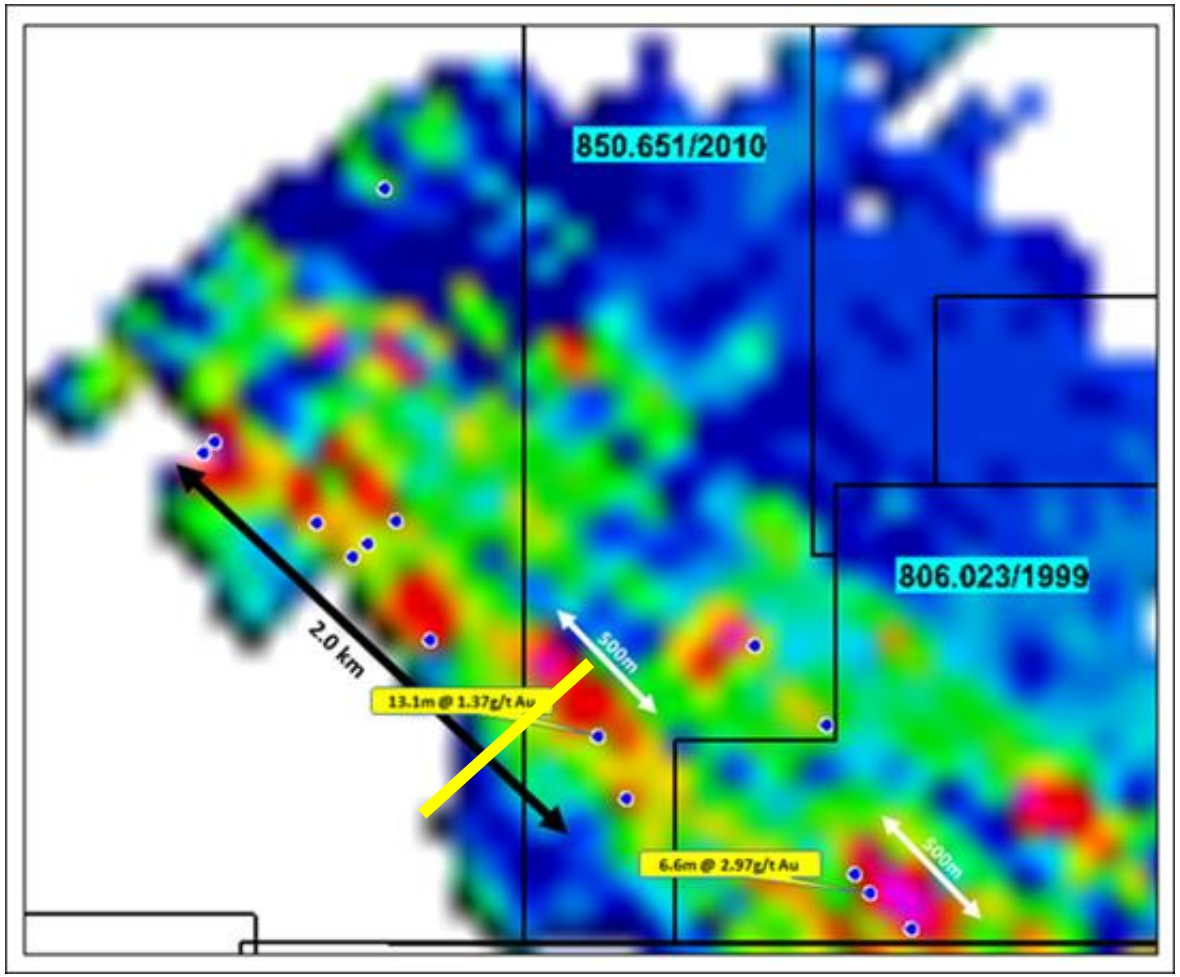
AVANCO COPPER

Potential Targets



AVANCO COPPER

Mamoal Target

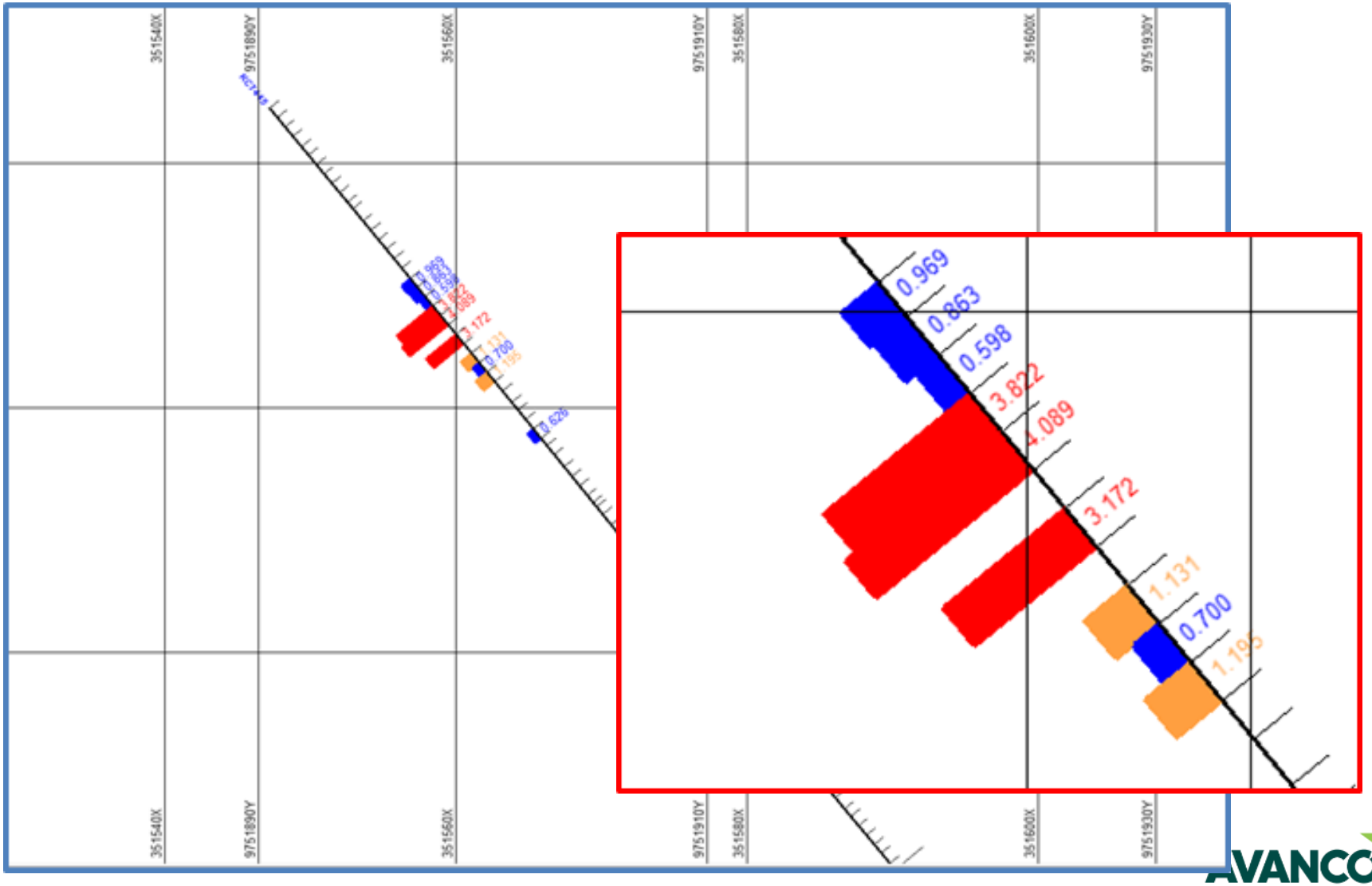


- Covers two licence.
- 7 holes drilled with significant intersection

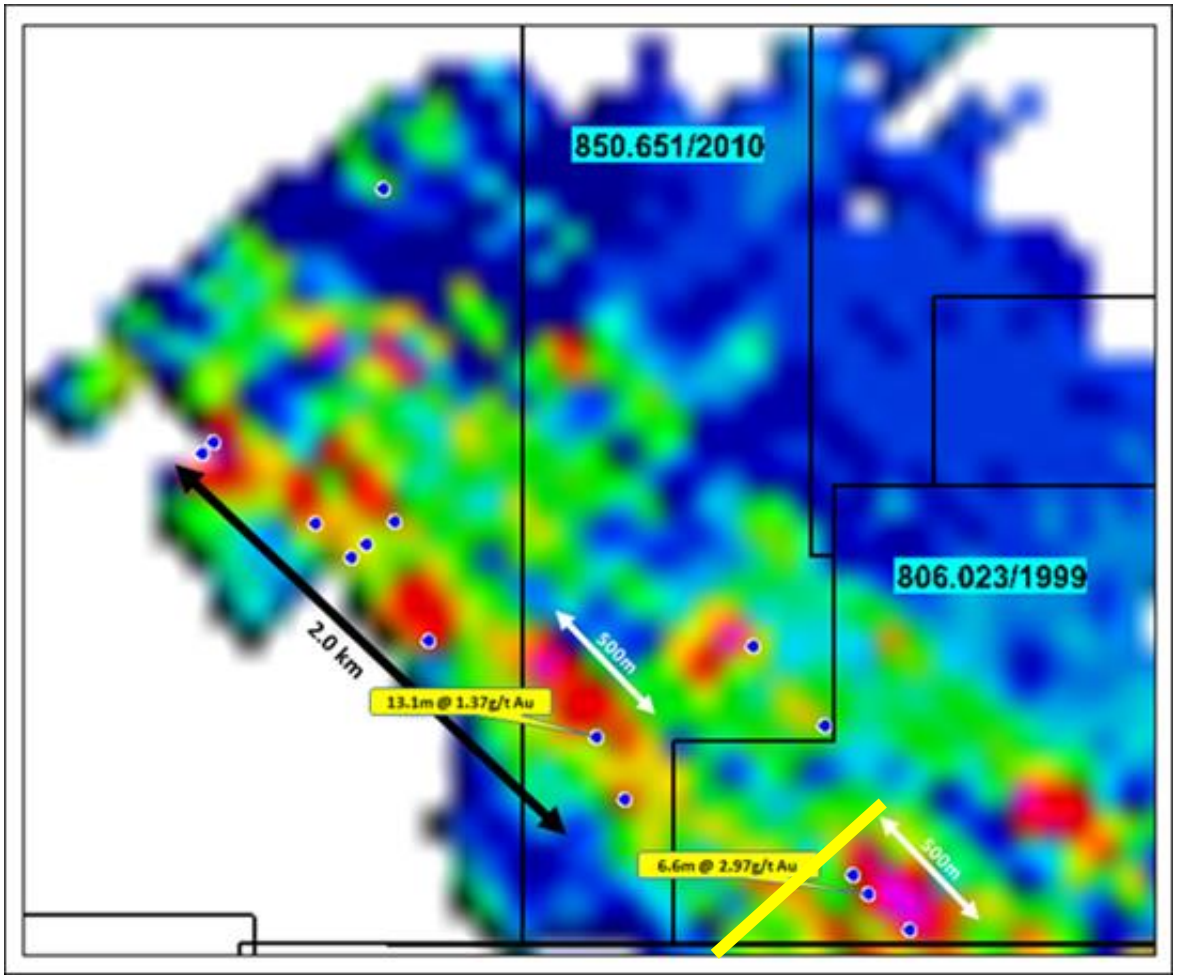
Mamoal soil geochemical anomaly and selected historic drill results.

AVANCO COPPER

Mamoal Target



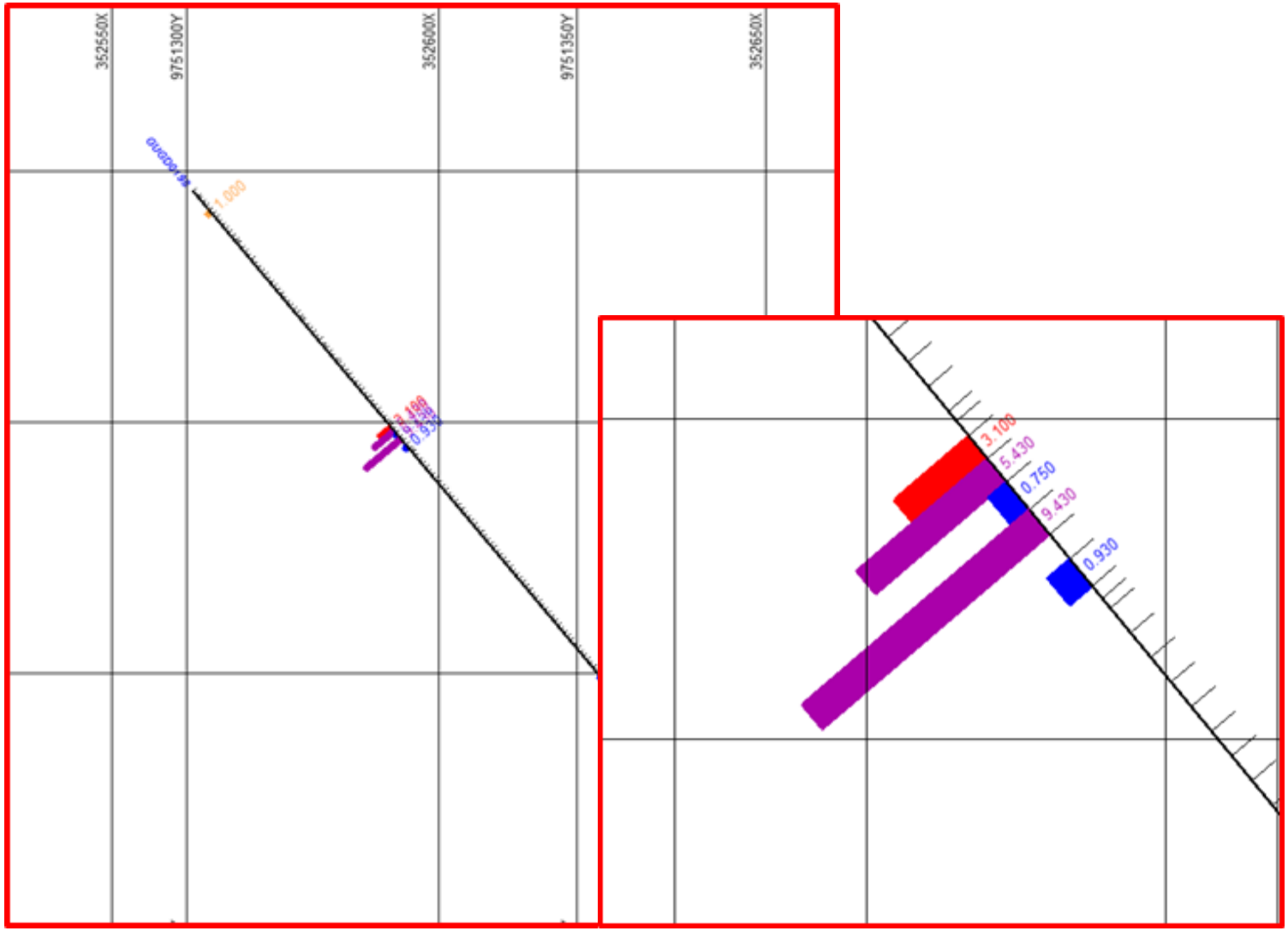
Mamoal Target



Mamoal soil geochemical anomaly and selected historic drill results.

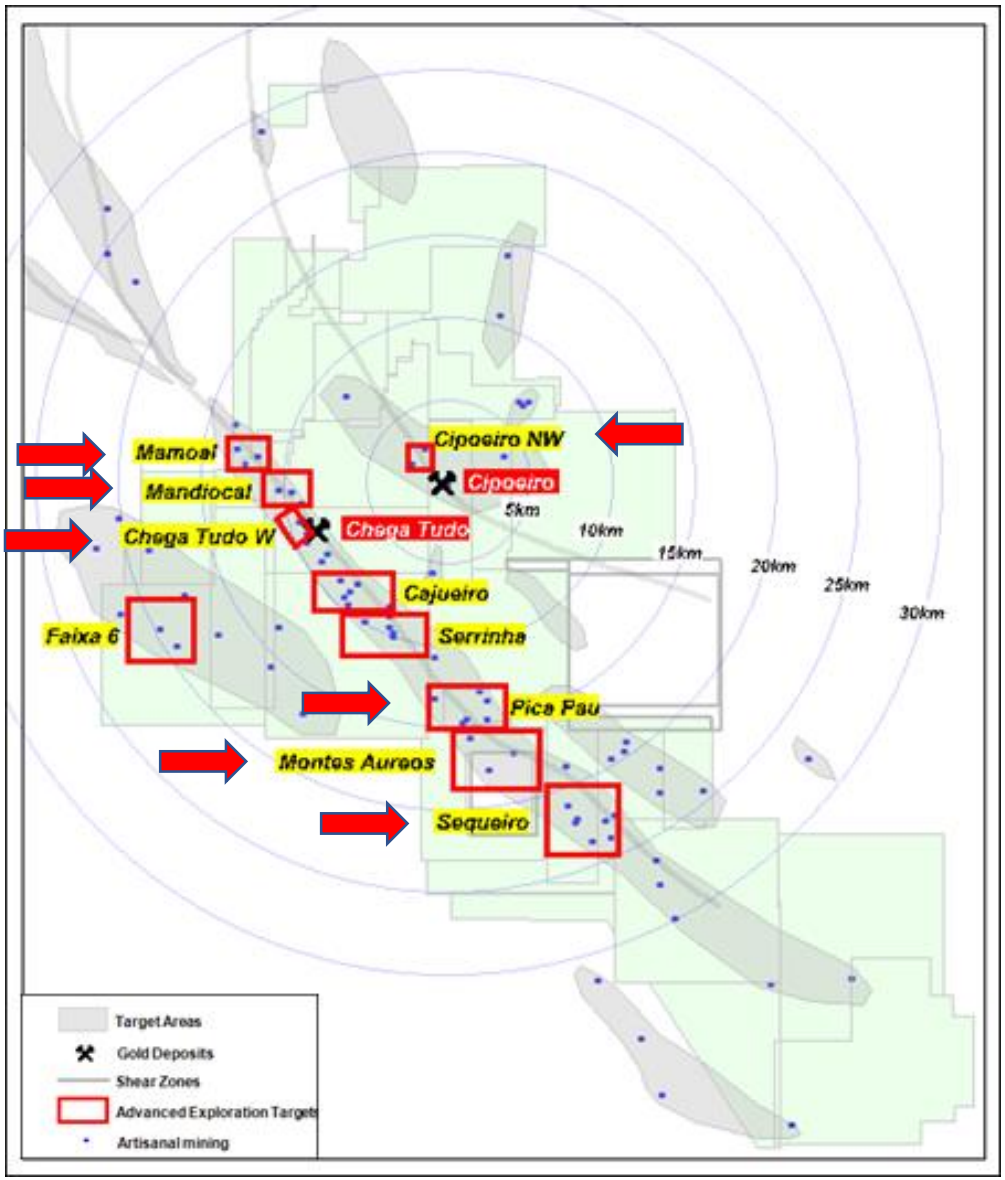
AVANCO COPPER

Mamoal Target



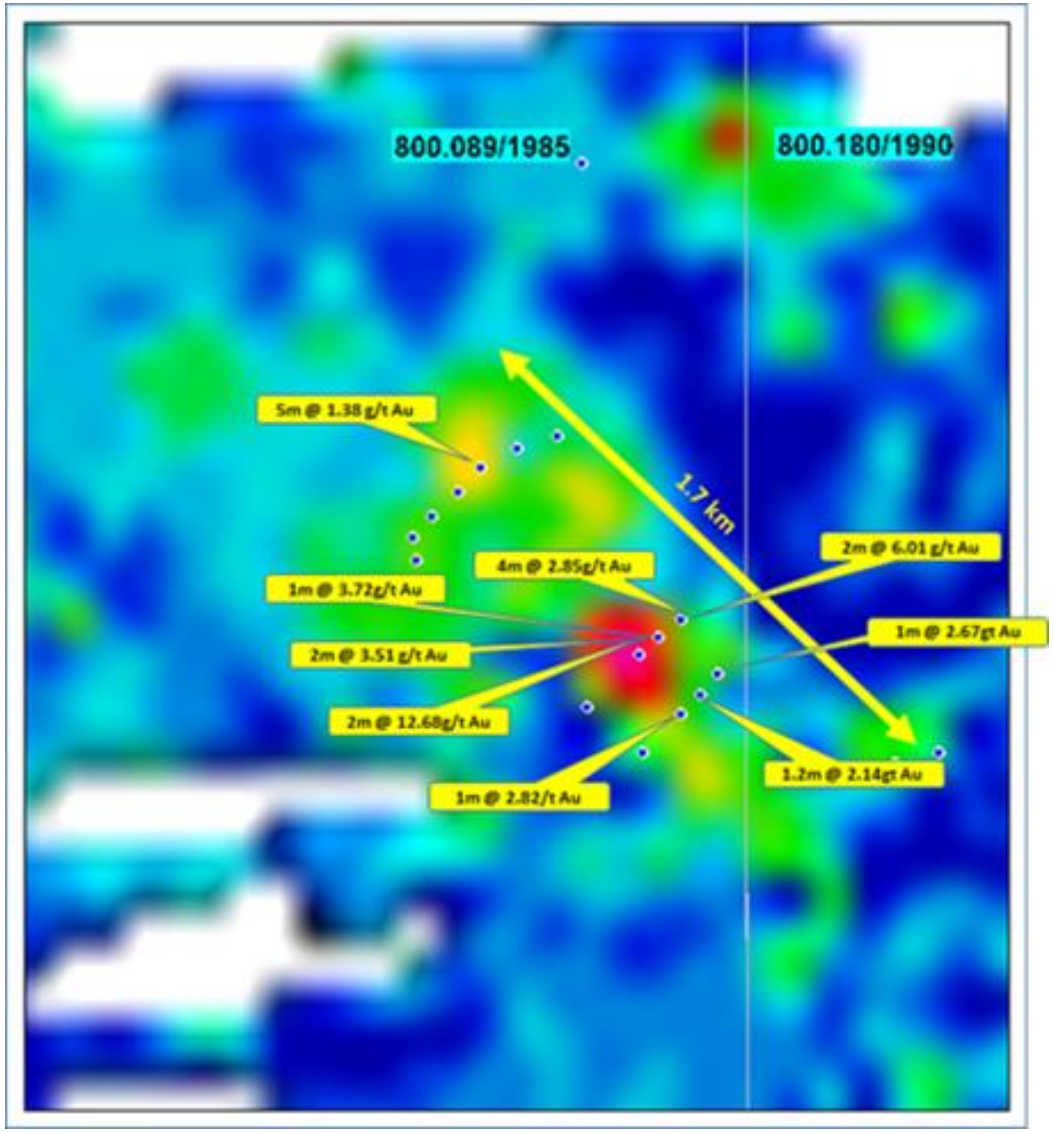
AVANCO COPPER

Potential Targets



AVANCO COPPER

Cipoeiro NW Target

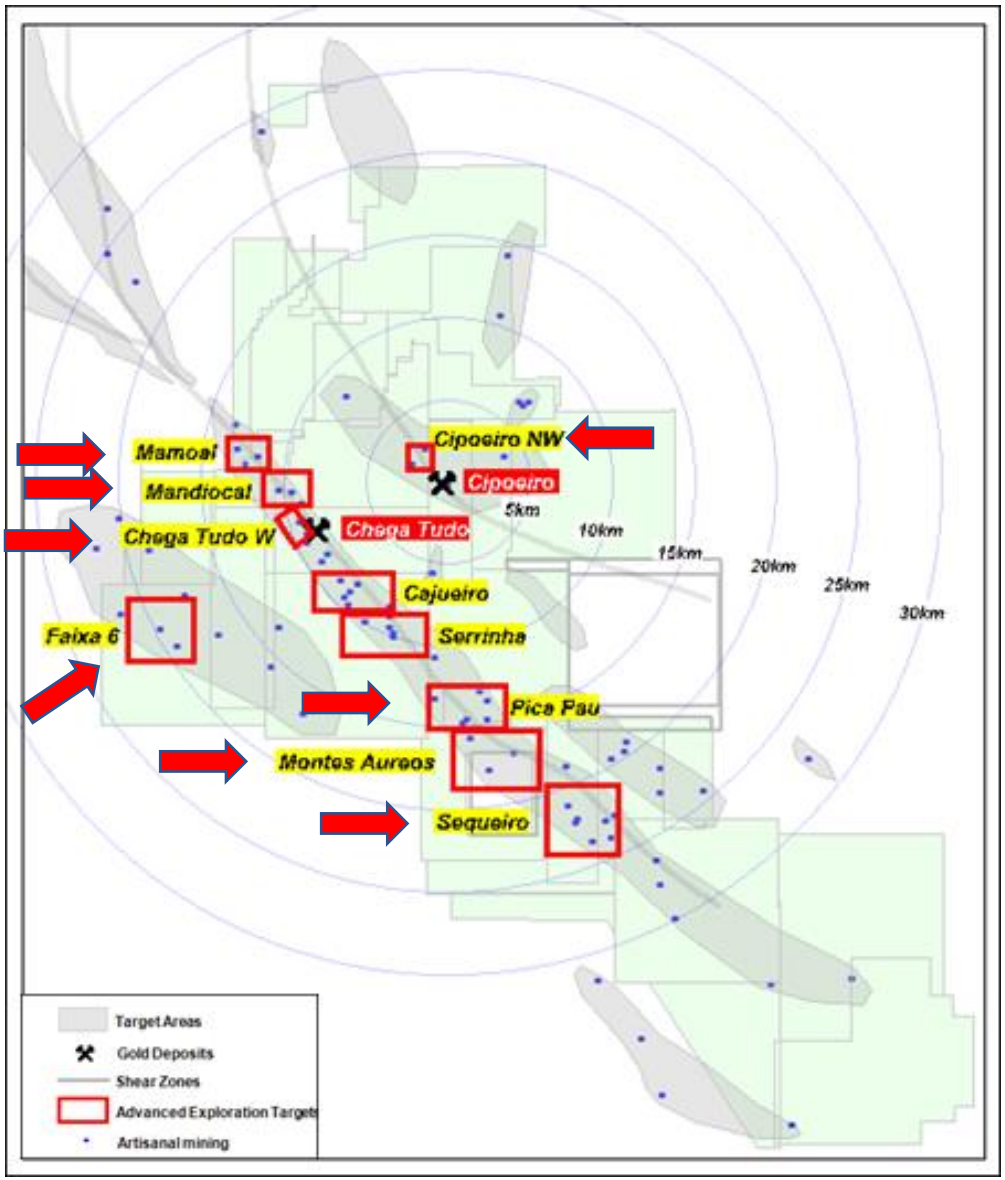


Cipoeiro NW soil geochemical anomaly and selected historic drill results.

- Covers two licences. Same license as Mandiocal and another one is a Exploitation application (Cipoeiro).
- Holes drilled with significant intersection

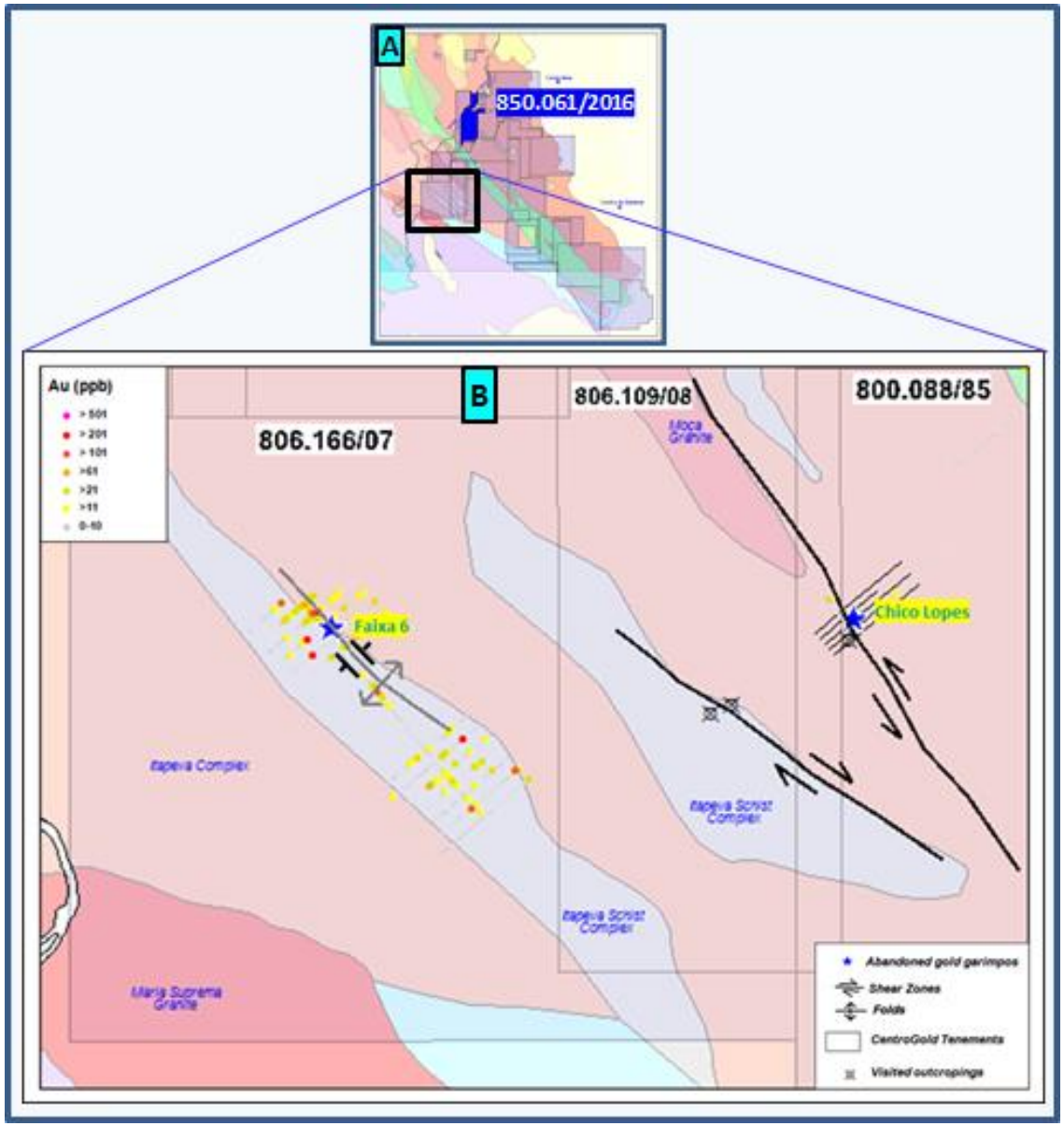
AVANCO COPPER

Potential Targets

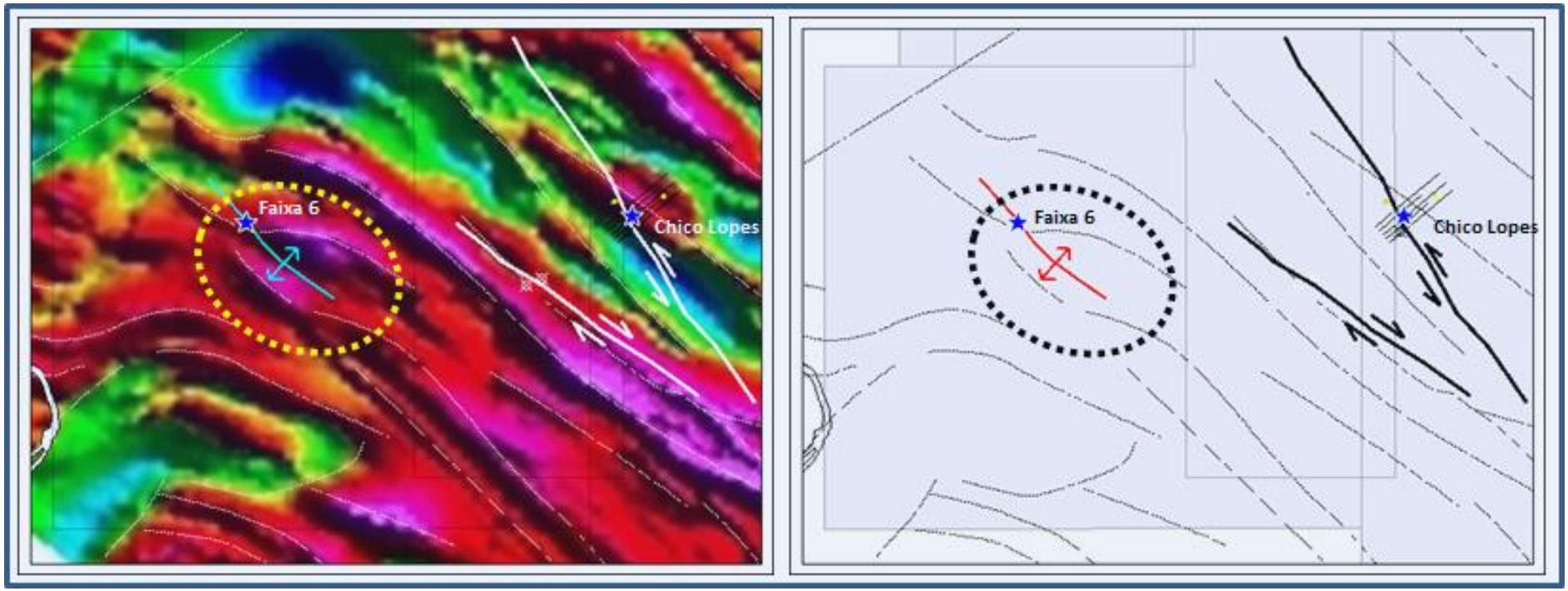


AVANCO COPPER

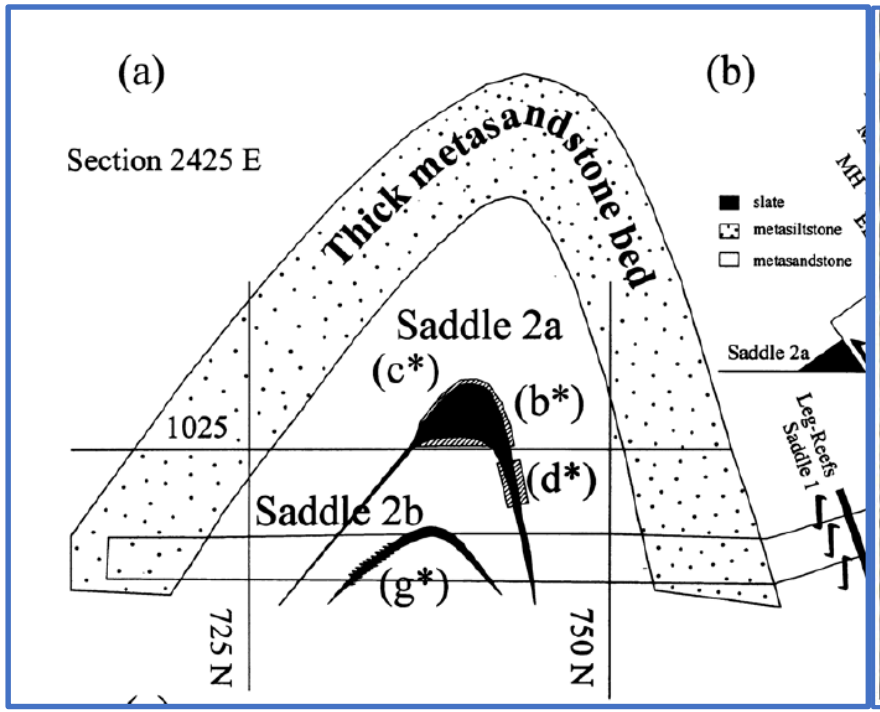
Faixa 6 Target



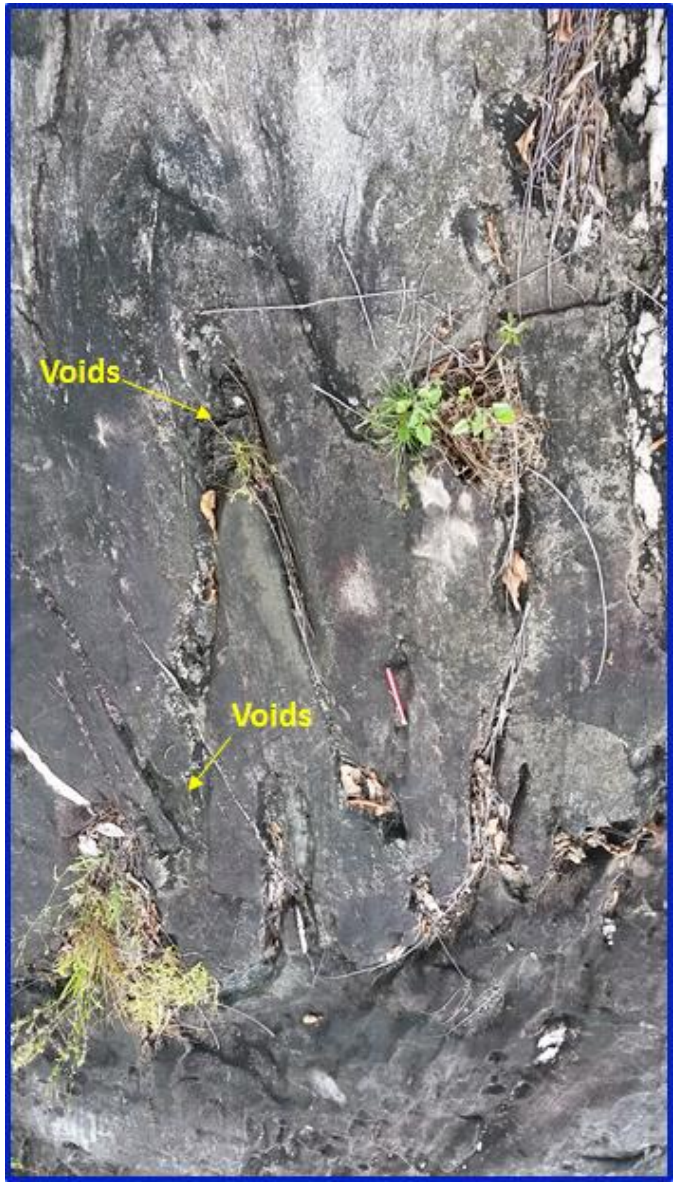
Faixa 6 Target



Faixa 6 Target



Faixa 6 Target



AVANCO COPPER

THE AUSTRALIAN COPPER COMPANY IN BRAZIL

AVANCO COPPER

Advance with us

avancoresources.com

Thanks

Contact:

Nicholas Bias, Head of Corporate Affairs

+61 497 888 227 / +44 (0)7771 450 679

nbias@avancoresources.com