ZAMIA METALS LIMITED

TARGETING GOLD & COPPER IN QUEENSLAND

EXPLORATION STRATEGY, JULY 2016 – JUNE 2017

June 2016

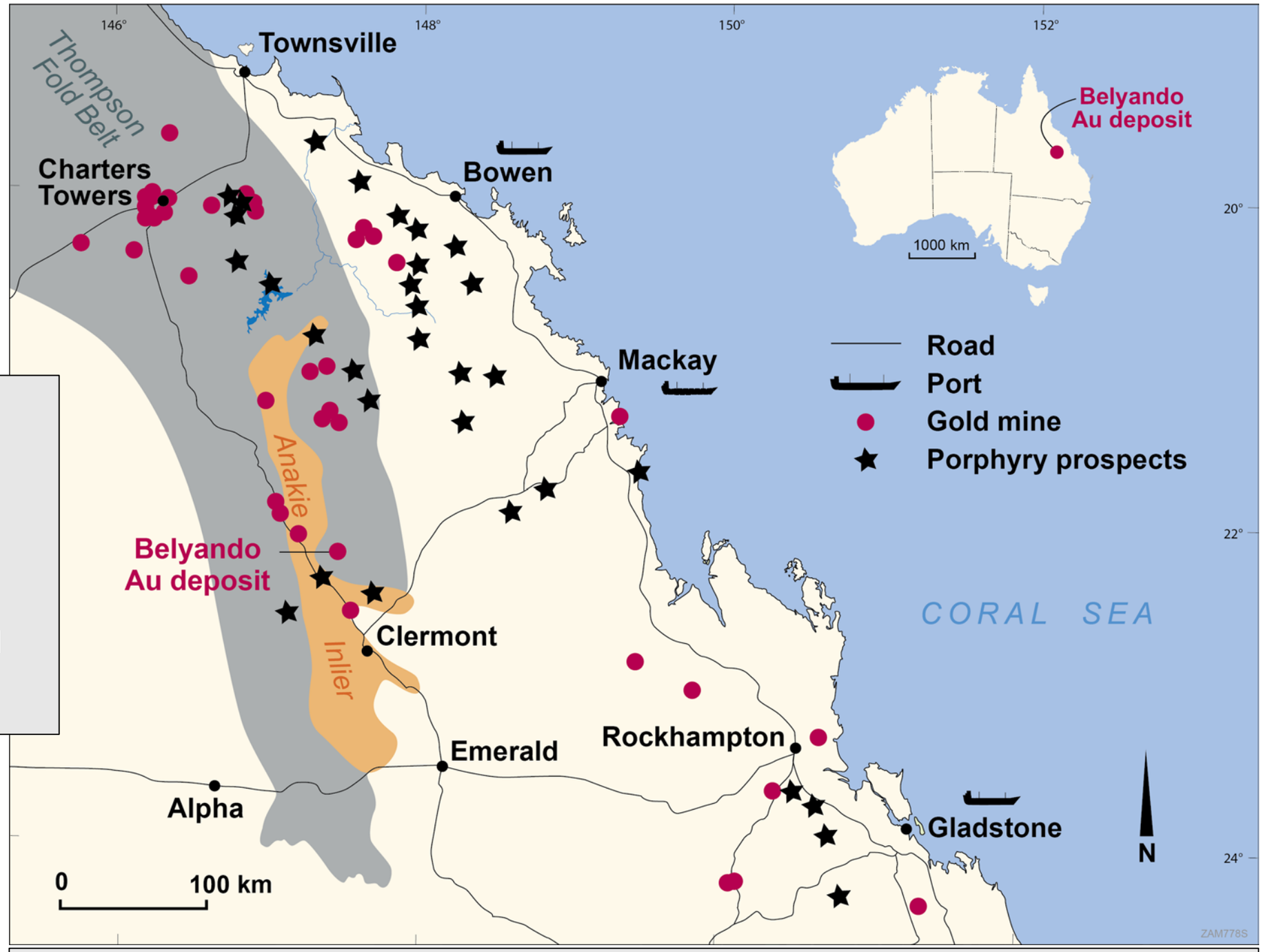
Introducing Zamia Metals Limited

- **Listed on ASX since 2008**
- **Package of Exploration Permits for Minerals (EPMs) in central Queensland**
- **Exploration success with discovery of Anthony porphyry molybdenum (Mo) deposit**
- **Focusing on a region with a long history of gold mining**
- **Targeting epithermal gold and porphyry copper-gold deposits**

Zamia has identified and prioritised exploration targets within its mineral tenements and is seeking funding to advance those targets towards discovery and resource delineation

The Target Region - Central Queensland

- **Numerous operating & dormant gold mines**
- **Good infrastructure - roads, power, water**
- **No major environmental issues**



Location map. Zamia's focus is the area north of Clermont

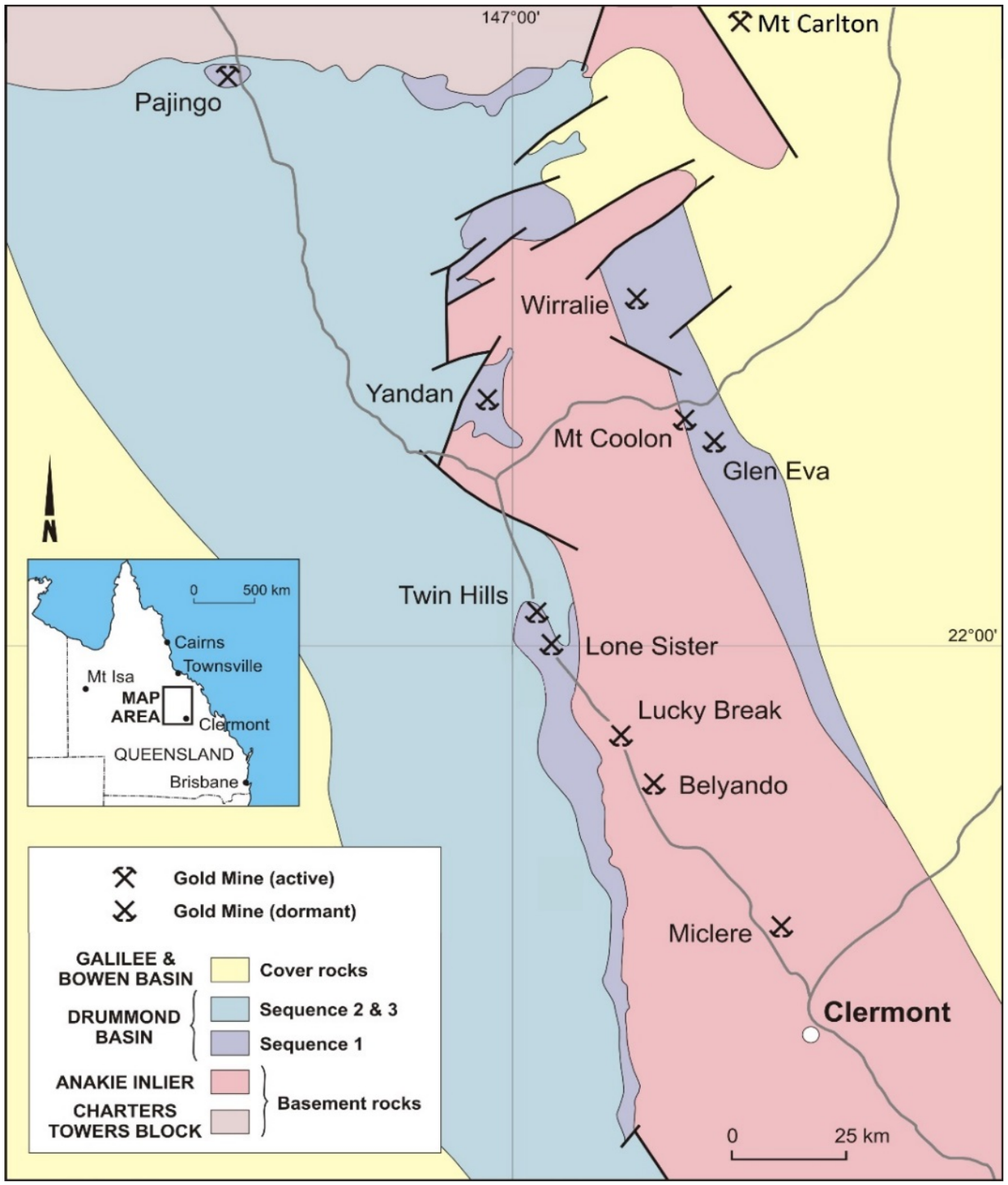
An Established Gold Province

The Charters Towers to Clermont belt in Central Queensland has been a significant gold producing area since the 1860s when gold was discovered at Clermont. Significant epithermal gold deposits:

- **Charters Towers district: Production 6.6 Moz**
- **Pajingo: Production + resource 3 Moz**
- **Mount Carlton: > 1 Moz**
- **Wirralie: Production 320,000 oz**
- **Yandan: Production 350,000 oz**
- **Mount Coolon: Production 290,000 oz**
- **Twin Hills: Resource 390,000 oz**

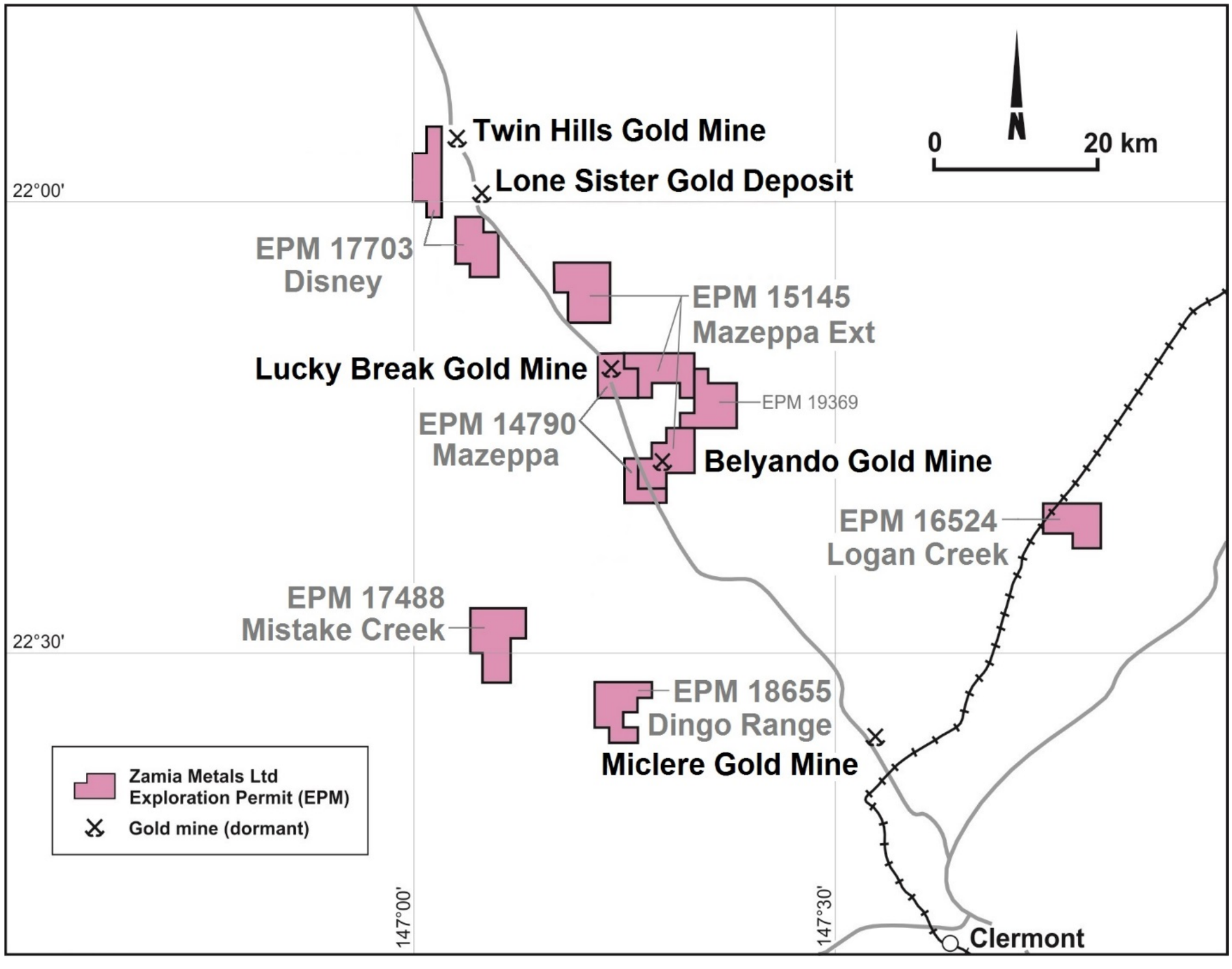
Zamia's discovery of the Anthony molybdenum deposit demonstrates the potential of the region to host significant porphyry systems

Geological Setting



- **Anakie Inlier: A north-trending basement ridge of Neoproterozoic to Cambrian metamorphic rocks**
- **Drummond Basin: A Devonian to Carboniferous volcano-sedimentary sequence with the Silver Hills Volcanics (dacite – andesite) at the base**
- **Devonian to Carboniferous intrusive complexes of granite to diorite composition with high level porphyry & breccia bodies**
- **Drummond Basin flanked by basin sequences of Permian to Mesozoic age**
- **Extensive black soil obscures bedrock**

Zamia's Exploration Permits



Targeting Porphyry-style Deposits

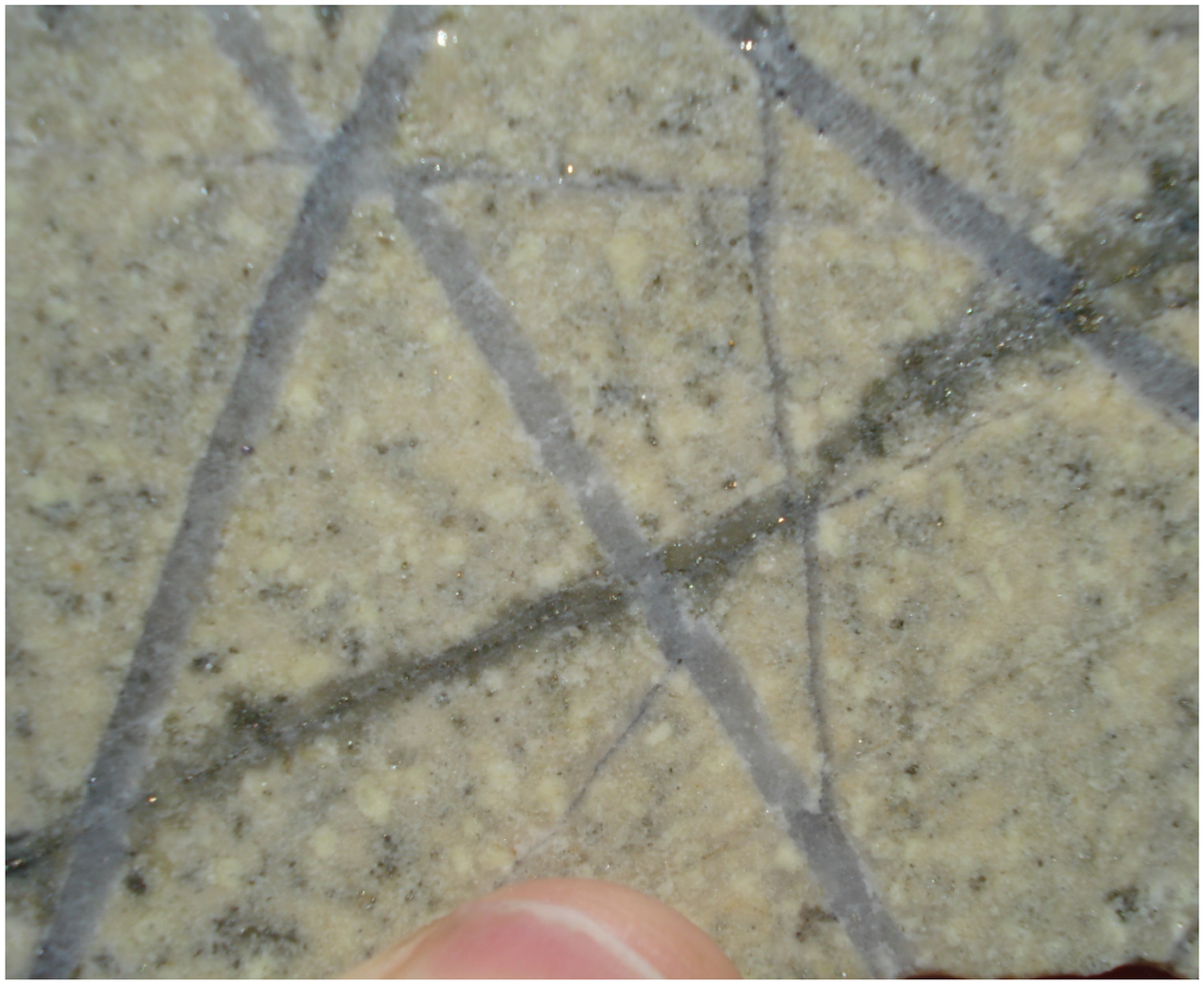
The Anthony molybdenum deposit, discovered by Zamia, is a typical porphyry system -

- **High level porphyry & breccia intrusions**
- **Stockwork vein mineralisation**
- **Large tonnage**
- **Characteristic alteration patterns**
- **A large geochemical halo**

The Anthony discovery demonstrates regional prospectivity for large porphyry-style deposits

Porphyry deposits, even when buried to depths of hundreds of metres, make excellent mining targets -

- **Large size**
- **Can be bulk mined by block caving**
- **Simple mineralogy & processing**

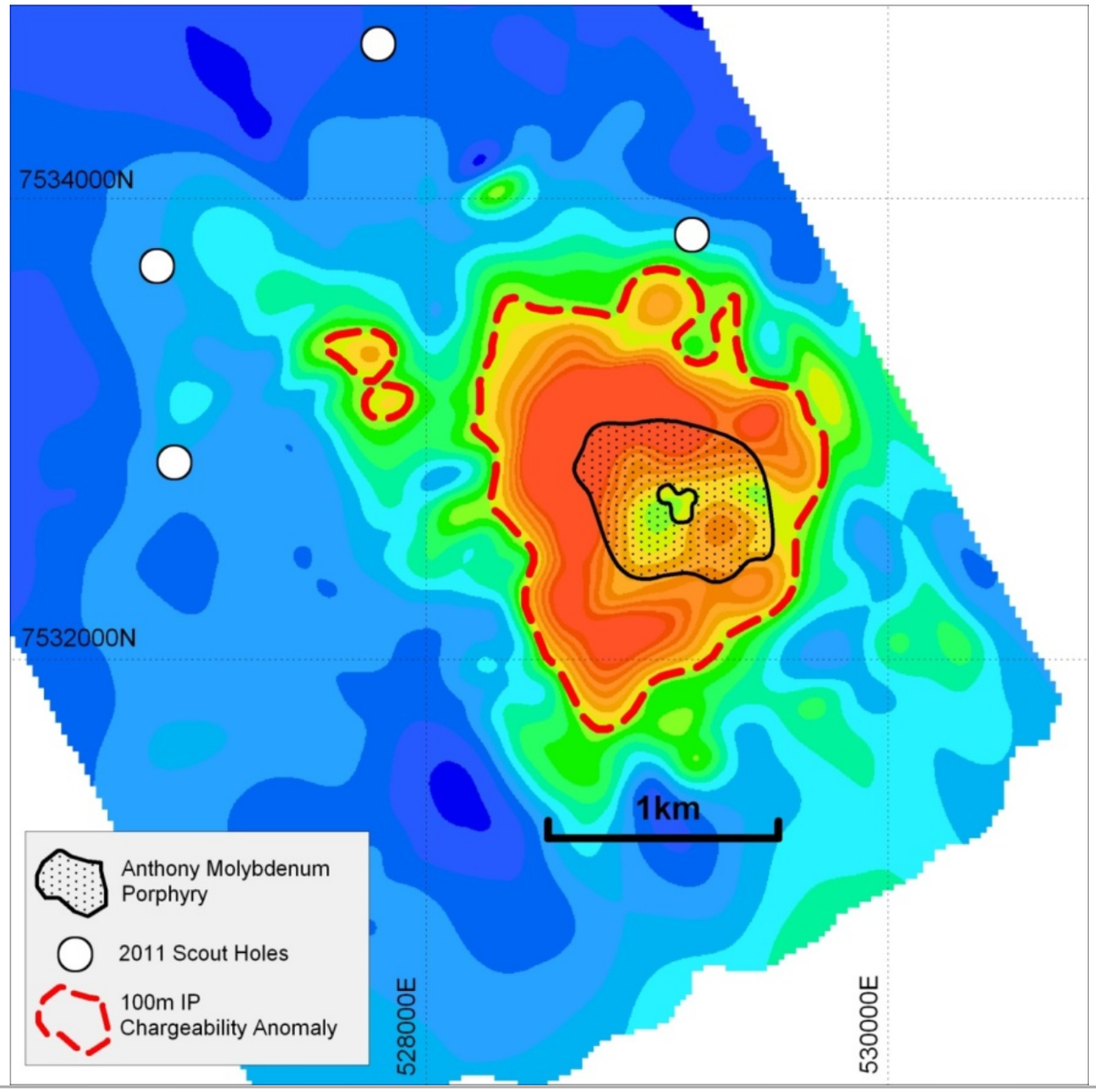


Anthony drill core showing characteristic sulphide stockwork veining in an altered porphyry intrusion

Exploration Strategy

Zamia has identified numerous targets for epithermal gold and porphyry copper-gold (Cu-Au)

Zamia is now at a stage where it needs to apply significant funding to test these targets

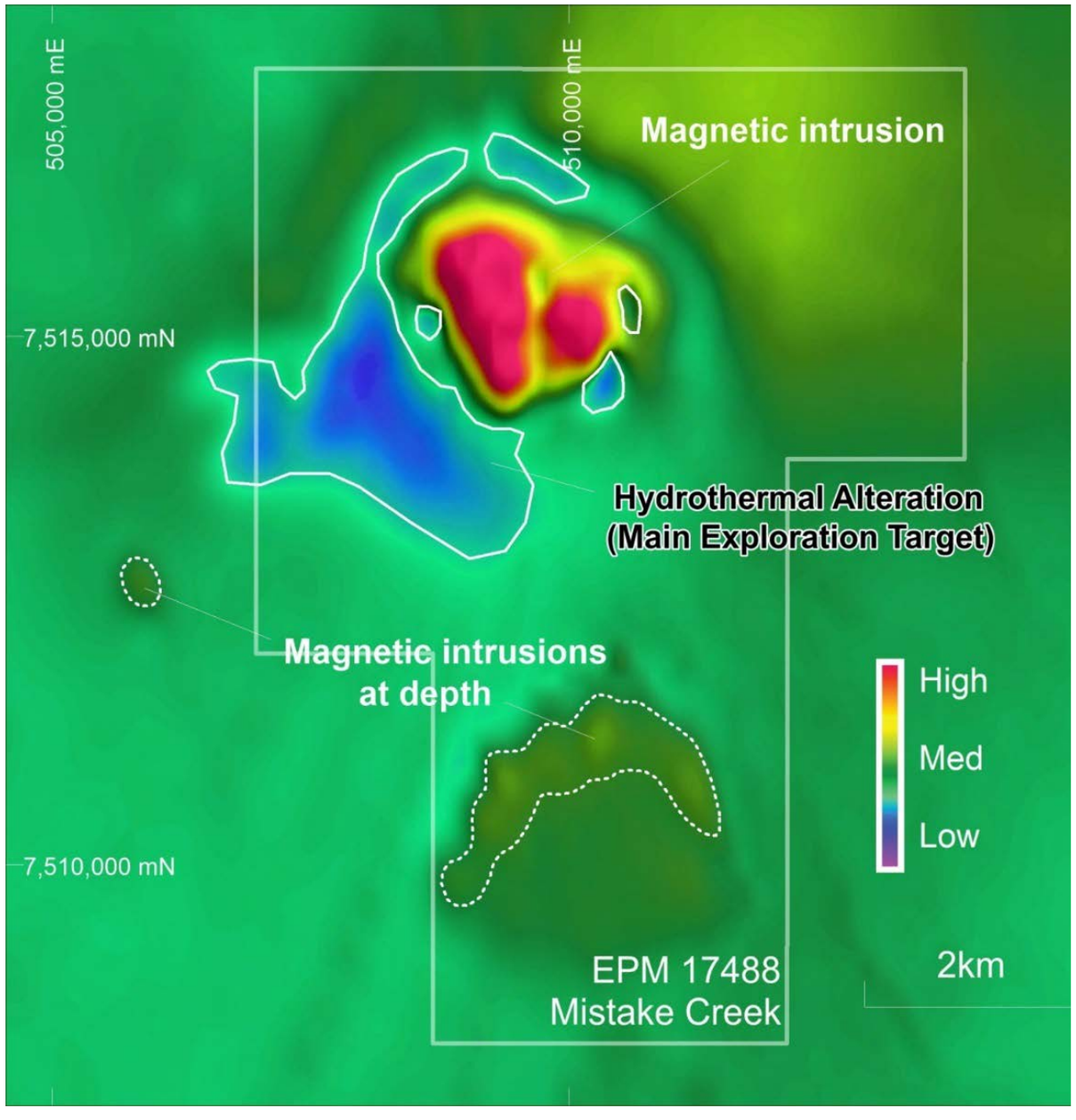


Successful exploration requires:

- **Induced polarisation (I.P.) surveys to detect disseminated sulphide concentrations and identify drilling targets**
- **Deep drilling to test the targets**
- **Careful geological study to recognise characteristic patterns of rock alteration**

Anthony deposit: I.P. chargeability anomaly (red-orange) at 100m depth surrounding the molybdenum resource

Mistake Creek (EPM 17488 Mistake Creek)

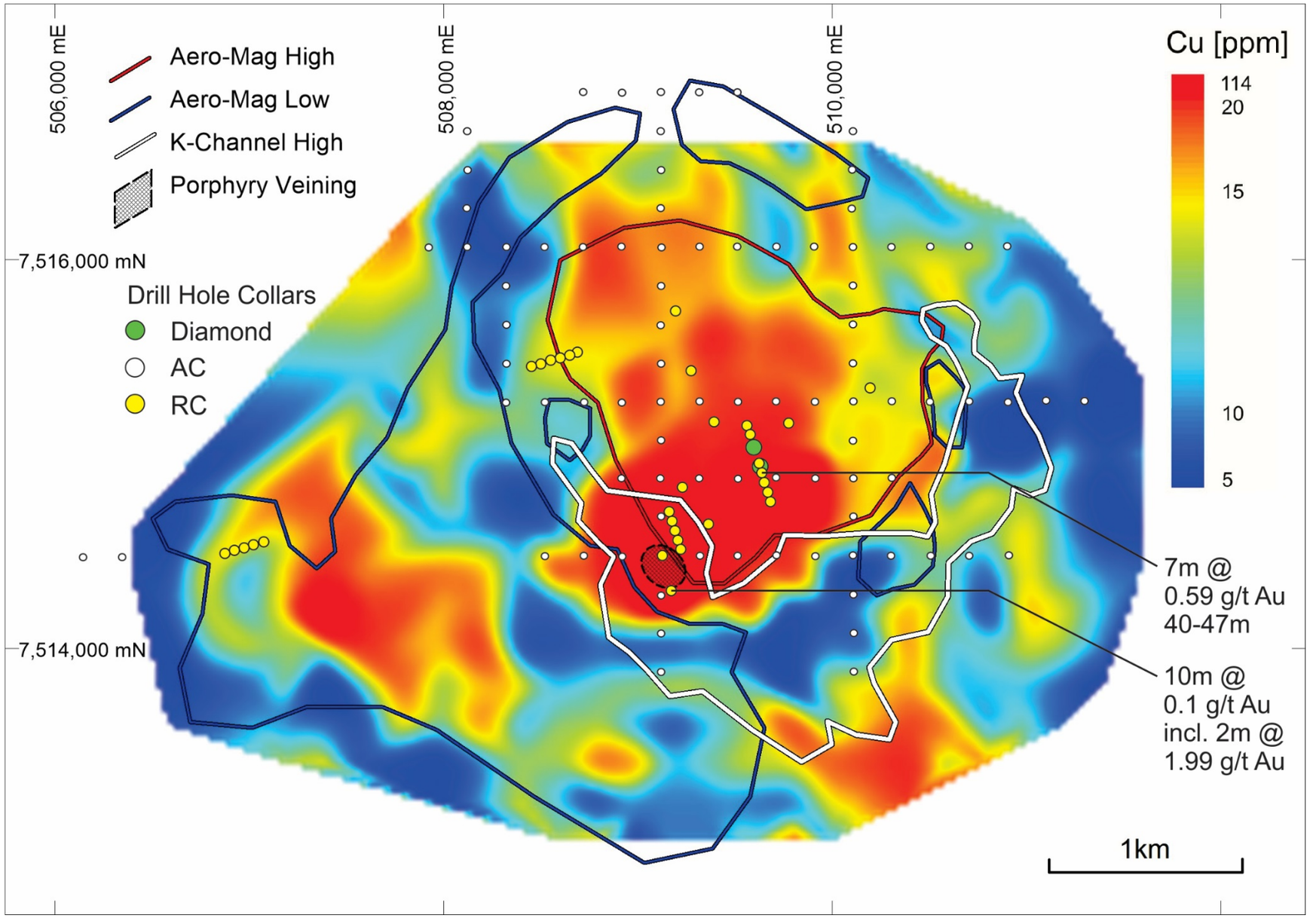


Mistake Creek magnetic image

- **Porphyry copper-gold target**
- **Magnetic high - an intrusive igneous complex**
- **Porphyry-style quartz-sulphide veins**
- **Arcuate magnetic low indicates a broad zone of rock alteration – the main exploration target, untested in previous exploration**
- **Radiometric imagery shows an arcuate potassium channel anomaly, perhaps reflecting porphyry-related potassic alteration**

Porphyry-style veins of quartz-iron oxide (after sulphide)

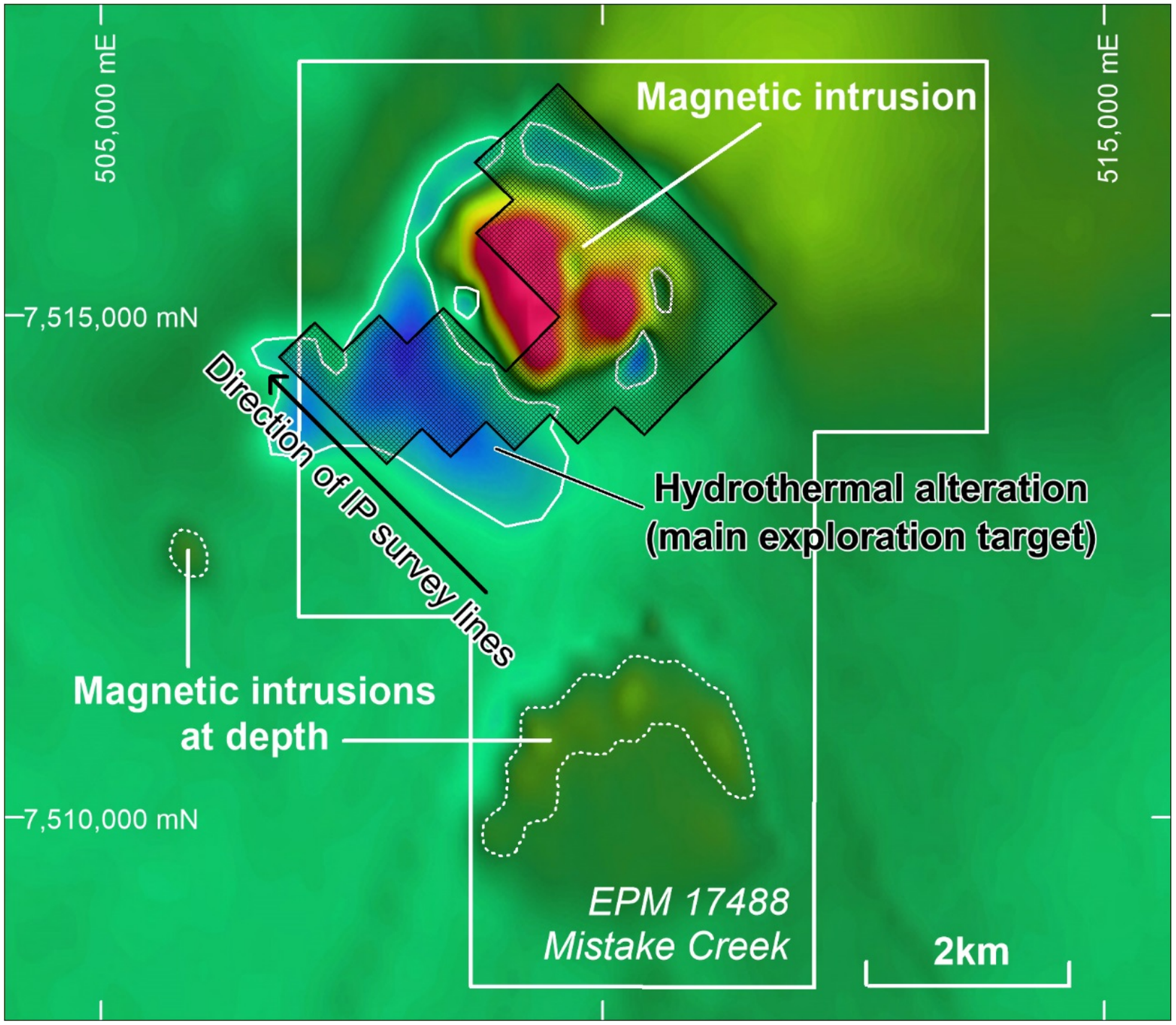
Mistake Creek - Soil Geochemistry



Copper-in-soil geochemistry

- **Extensive copper- and gold-in-soil geochemical anomalies**
- **Limited drilling -**
  - **only 2 diamond holes**
  - **mainly shallow RC holes**
  - **focussed on magnetic high, not on magnetic low (alteration)**
- **Shallow RC drilling intersected elevated gold (up to 2.0 g/t Au)**
  - **associated with elevated Cu, Mo, Zn & As**

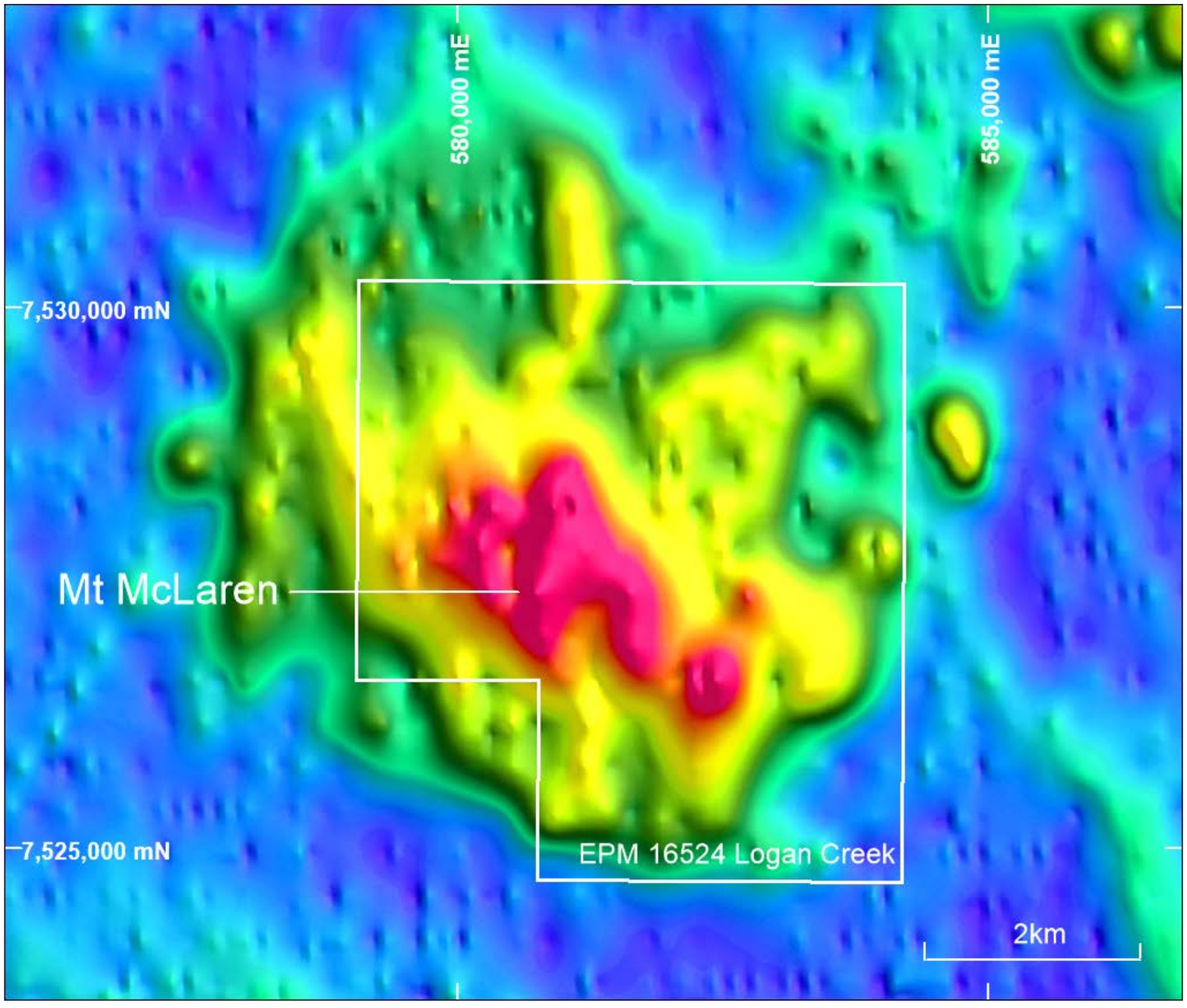
Mistake Creek - Planned Exploration Programme



- **Deep penetration dipole-dipole I.P. survey**
- **Drill testing of targets**

EPM 17488 Mistake Creek has an annual expenditure commitment of $85,000

Mount McLaren Prospect (EPM 16524 Logan Creek)



Radiometric potassium channel image

Classic porphyry signature:

- **Multiple igneous intrusions (intersected in drill holes)**
- **Veins of quartz-iron oxide (after sulphide)**
- **Silica-sericite alteration at surface**
- **A strong potassium signature in radiometric imagery**
- **A large (1500m x 1500m) Mo-in-soil geochemical anomaly surrounded by Cu and Pb-Zn anomalies**
- **3000m x 2000m zone of elevated I.P. chargeability**
- **Elevated Au Cu Mo As Zn & Pb in drill hole intersections.**

Mount McLaren Prospect (EPM 16524 Logan Creek)

Quartz-iron oxide veins in silica-sericite altered rhyolite

Exploration Programme

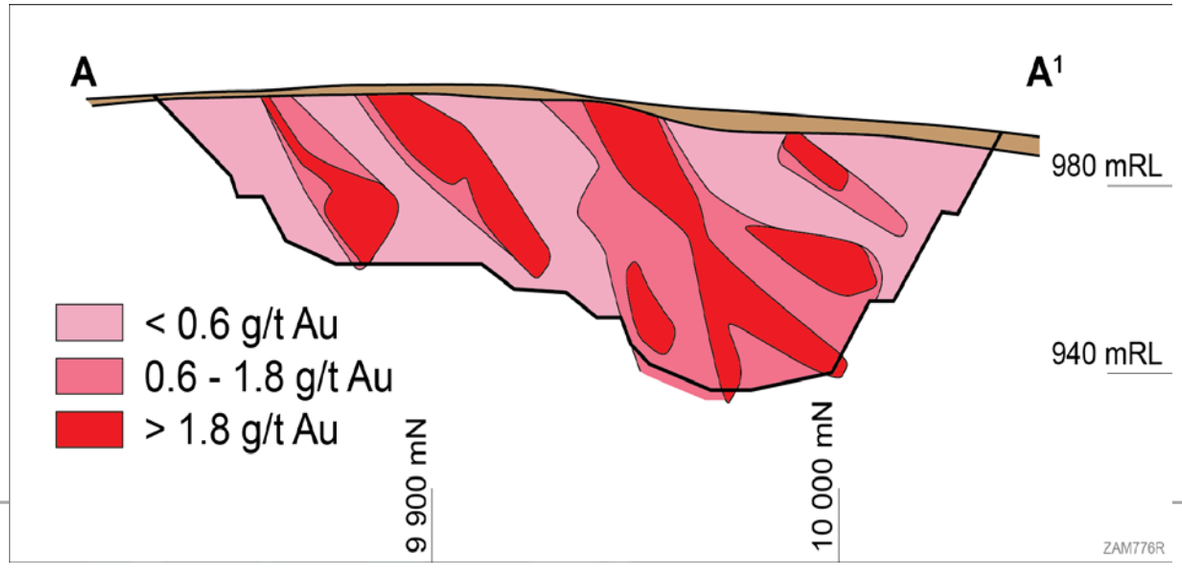
- **Re-assessment of historic soil geochemistry**
- **Re-model historic I.P. data and, if necessary, carry out a new I.P. survey**
- **Reverse circulation ('RC') and diamond drilling to test targets identified by the I.P. survey**

EPM 16524 Logan Creek has an annual expenditure commitment of $120,000

Belyando Gold Mine (EPM 15145 Mazeppa Extended)

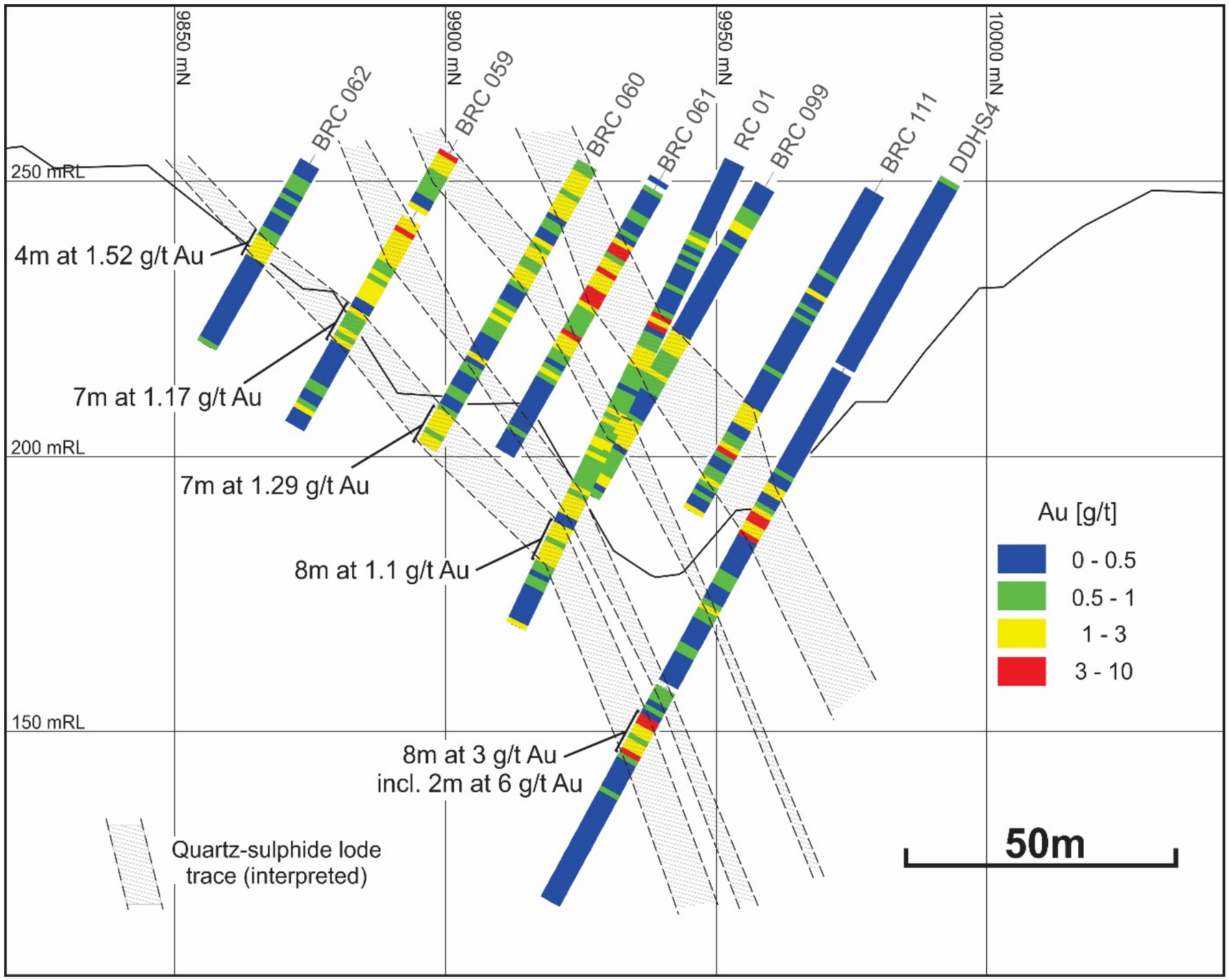
Belyando opencut with leach heaps in the background

- **Discovered in 1985 by drilling a geochemical anomaly**
- **Initial Resource – 1.16 Mt at 2.19 g/t Au to a depth of 55m (81,000 oz contained Au)**
- **Operation 1989-1995**
- **Production: 85,846 oz Au, recovery 72%**
- **Multiple gold lodes plunging northwest**
- **Gold mineralisation outlined to 150m depth and remains open down plunge**



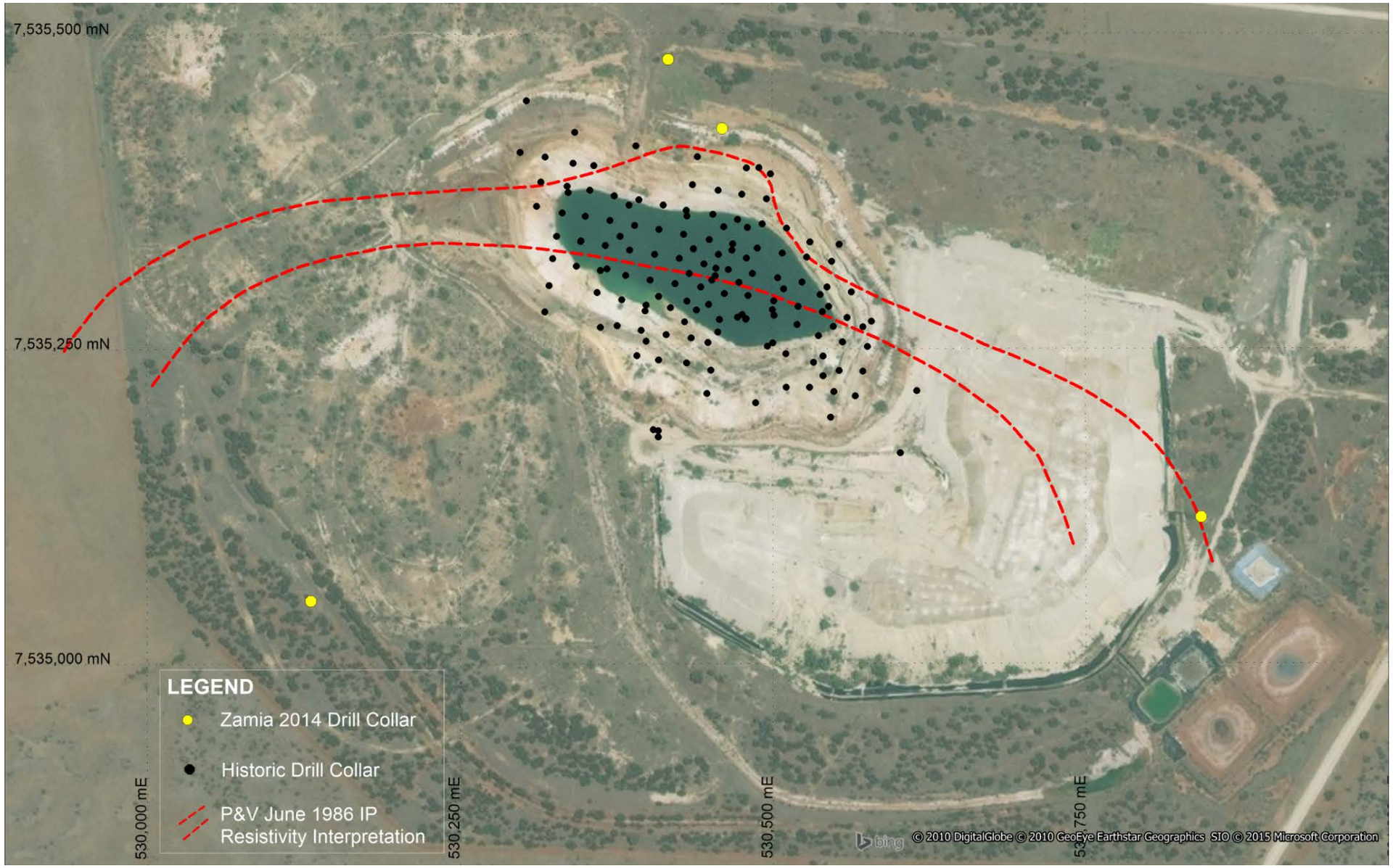
Grade section 10,000mE (looking west)

Belyando Gold Mine (EPM 15145 Mazeppa Extended)



Previous resource drilling, mostly to a depth of only 80m, shows good gold intersections below the pit, showing good potential for gold at depth below the pit

Belyando I.P. Survey (1986)



Shallow (~ 100m) I.P. showed (a) a chargeability anomaly extending away from known gold concentration, and (b) a broad arc of high resistivity possibly due to silica alteration. I.P. targets remain largely untested by drilling

Belyando Gold Mine (EPM 15145 Mazeppa Extended)

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- **Gold in quartz-pyrite-arsenopyrite veins and in siliceous breccia**
- **Hosted by silicified & brecciated Anakie Metamorphics**

Quartz + fine grained pyrite from 64.6m in hole DDHS4. Assay 2.36 g/t Au + 1800 ppm As

Targets

- **Extensions of known lodes to northwest below and down plunge from open-cut mine**
- **Undiscovered lodes lateral to and along strike from known lodes. Magnetic imagery shows magnetite depletion (alteration) along a northwest (NW) - oriented structure**
- **A broad zone of low grade gold (0.8 – 1.0 g/t Au) offering a target for a bulk-mineable gold deposit**
- **Satellite gold deposits (e.g. Ibis geochemical anomaly)**
- **Possibly, porphyry-style copper-gold at depth below the Belyando gold deposit**

Belyando Gold Mine - Planned Exploration Programme

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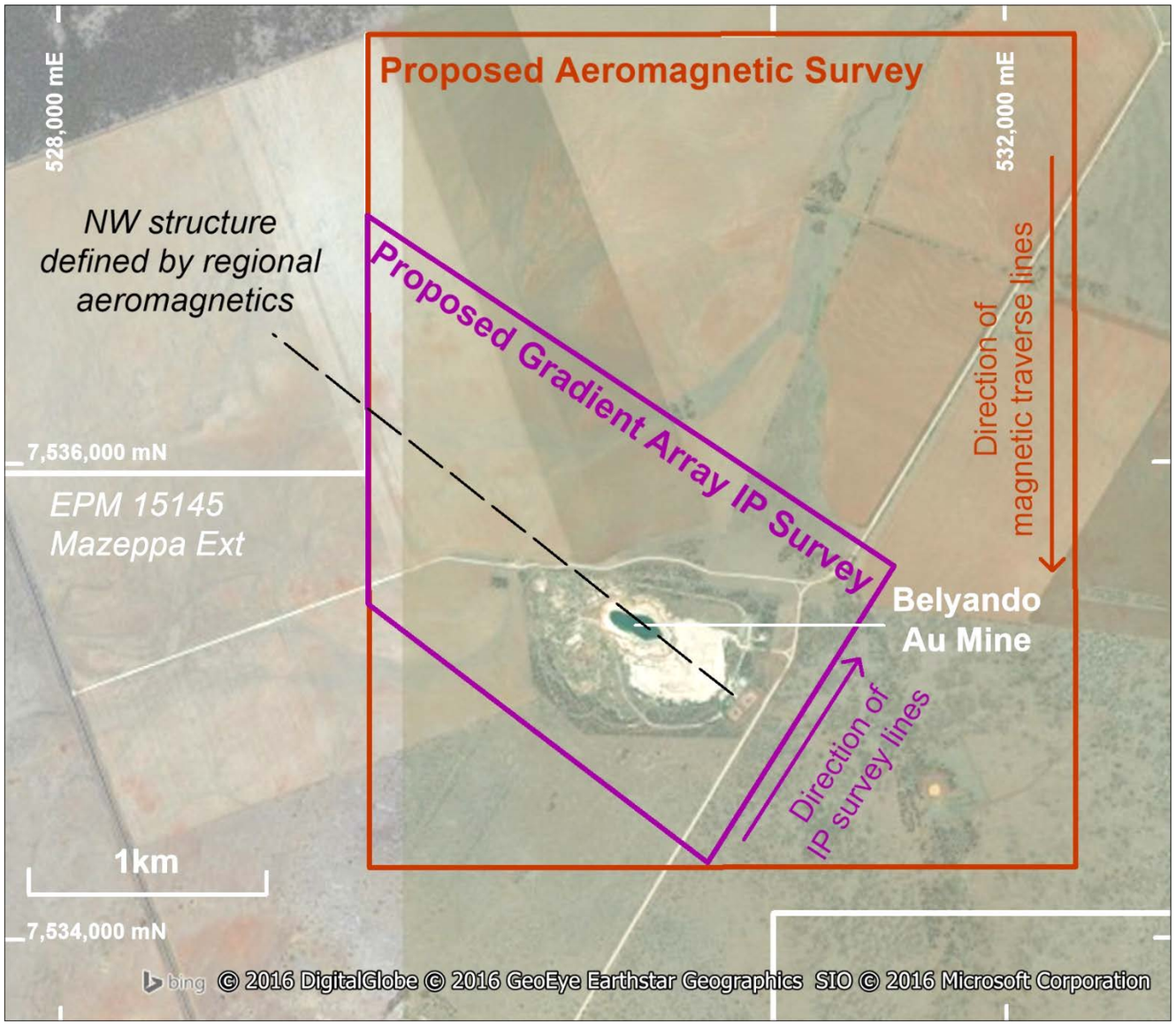
- **Helicopter magnetic survey over Belyando and extending several kilometres beyond**
- **A gradient array I.P. survey covering a larger area than the 1986 survey and capable of extending to greater depth**
- **RC and diamond drill holes to test:**
  - **Extensions to the known gold lodes**
  - **Targets identified by the I.P. survey**
  - **The IBIS geochemical anomaly**



EPM 15145 has an annual expenditure commitment of $300,000

Hill 271 Prospect (EPM 19369 Amaroo South)

- **Pervasive sericite alteration over an area of 1000m x 1000m**
- **Surface rubble (“float”) of quartz veins with gossanous iron oxide (after sulphide)**
- **Float samples have elevated concentrations of Au As Sb Bi Cu**
- **Best assays 16.7 g/t Au & 12.2% Cu**
- **Limited previous shallow drilling intersected only low grade gold**

Quartz-iron oxide float

- **Aeromagnetic imagery shows that the prospect lies along a northwest-trending structure, i.e. parallel to the one which apparently controls the Belyando gold lodes**
- **In 2013, a single 1.6 km I.P. line detected a chargeability anomaly of +700m width at a depth of + 100m**
- **An RC drill hole, to 211m, intersected only weak copper-gold mineralisation**

Hill 271 Prospect (EPM 19369 Amaroo South)

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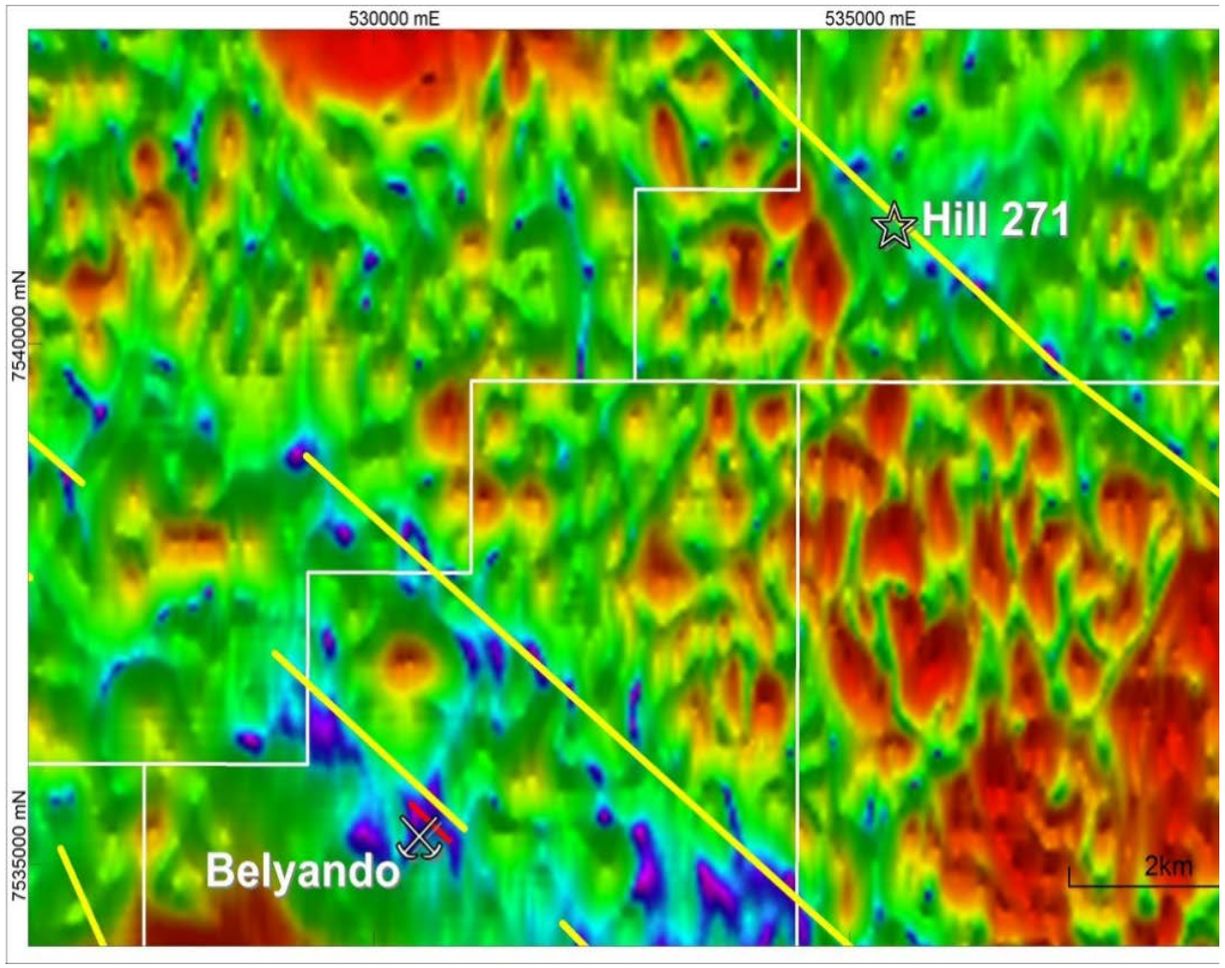
Targets

- The northwest structure is a zone of magnetite depletion (alteration) similar to Belyando
- The radiometric signature (high potassium) could indicate proximity to a porphyry-style copper-gold system.



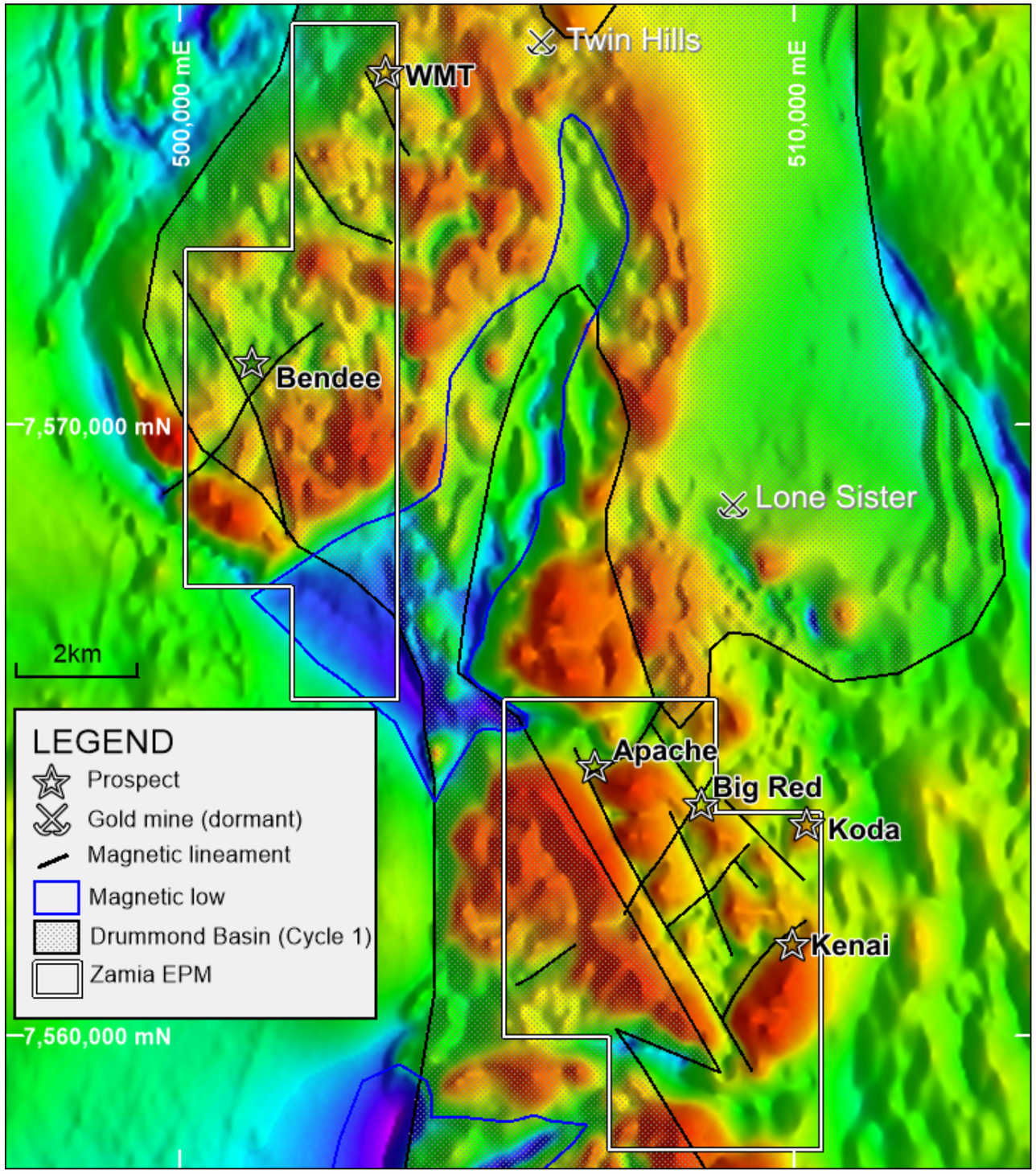
Aeromagnetic image showing northwest-trending structures

Exploration Programme

- Detailed surface geological mapping to record vein styles and intrusive rocks
- Additional I.P. to provide coverage over the northwest-oriented zone of magnetite depletion evident in the aeromagnetic image
- Plan drill targets based on the I.P. and soil geochemical results

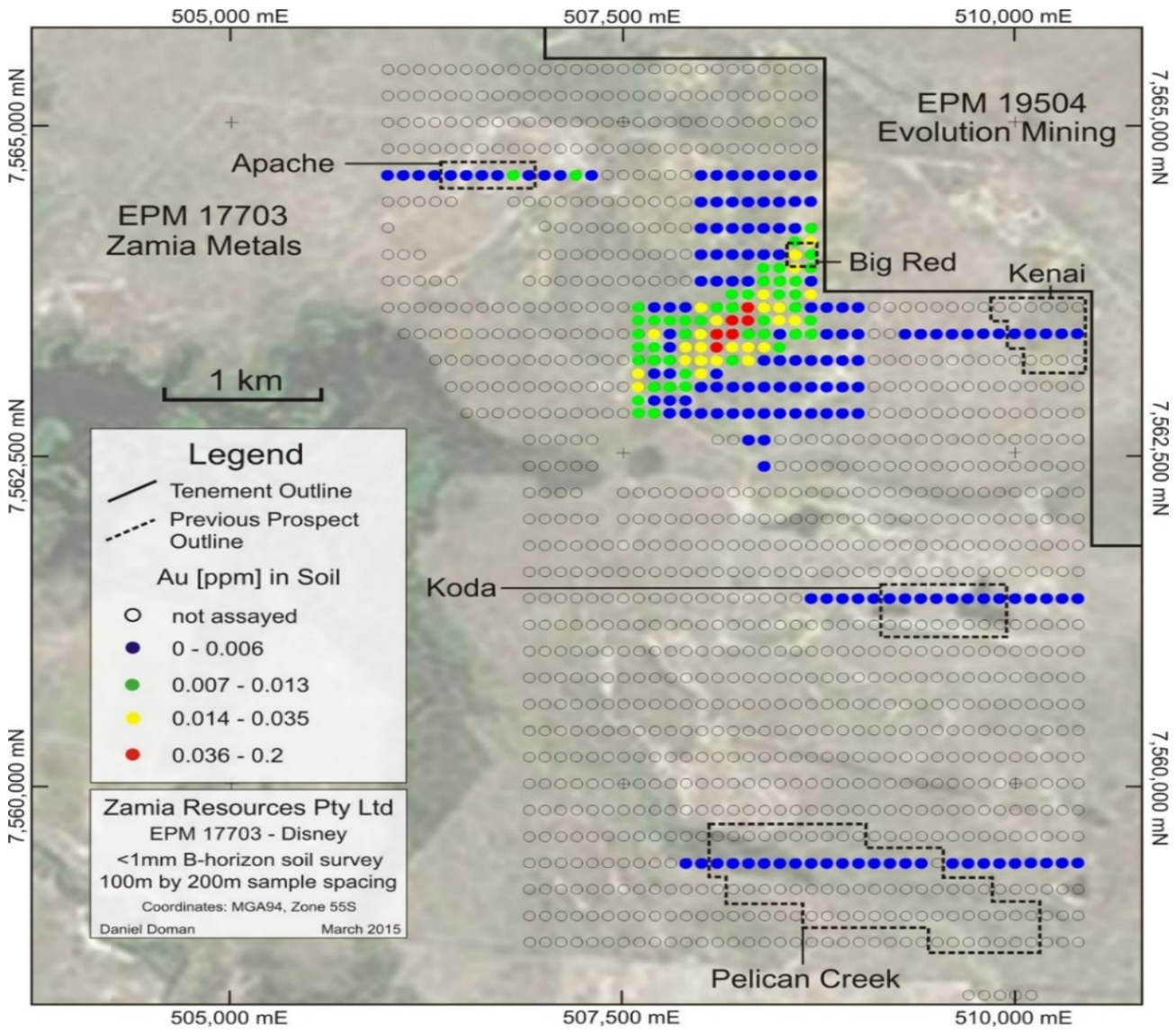
EPM 19369 Amaroo South has an annual expenditure commitment of $45,000

Disney Epithermal Gold Targets (EPM 17703 Disney)



- **EPM 17703 lies immediately west and south of known epithermal gold deposits, Twin Hills and Lone Sister (held by Evolution Mining)**
- **EPM 17703 contains several epithermal gold prospects which have had limited drill testing**
- **Apache: Previous drilling intersected 2m at 3.25 g/t Au from 137m depth. Untested area with quartz float containing up to 2.72 g/t Au**
- **Bendee: Previous drilling intersected 4m at 0.63 g/t Au from surface. A 1 km strike of breccia remains untested by drilling.**
- **Aeromagnetic imagery shows demagnetised linear features - evidence of hydrothermal activity along controlling structures**
- **Soil geochemical anomalies are located along these structures**

Big Red Prospect (EPM 17703 Disney)



- **Gold-in-soil anomaly extends over 1.5 km strike length**
- **Surface rubble includes hydrothermal breccia containing up to 1.06 g/t Au**
- **Most intense gold-in-soil anomaly not tested by drilling**

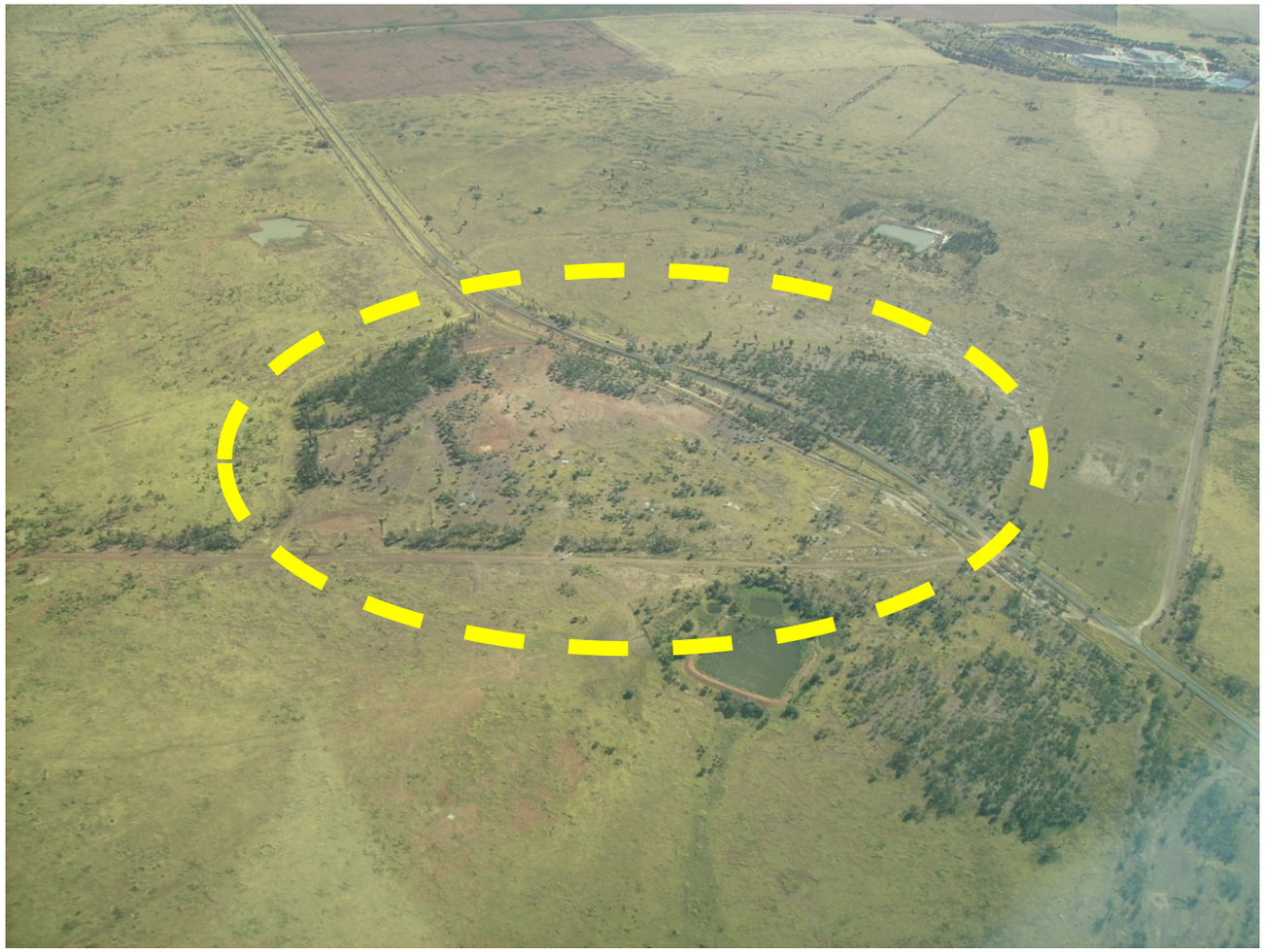
<u>Exploration programme</u>

- **Re-analyse all soil samples for gold**
- **RC drilling to test the best geochemical anomalies**

Gold-in-soil geochemistry, high-lighting the Big Red prospect. The area of highest gold-in-soil (red dots) has not been tested by drilling

EPM 17793 Disney has an annual expenditure commitment of $220,000

Anthony Project (EPM 15145 Mazeppa Extended)



Oblique aerial photograph of the Anthony project area. The deposit, approx. 800m x 600m in area, is outlined in yellow. The Belyando mine workings can be seen in the right background

- **Anthony is a large porphyry molybdenum (Mo) deposit discovered by Zamia in 2008 by drilling on a Mo-in-soil geochemical anomaly**
- **The project is sub-economic at the present low molybdenum price**
- **Drilling on I.P. targets marginal to the Mo resource showed porphyry-style alteration but failed to intersect significant Cu-Au**
- **It is possible that Anthony will be a feasible project in the future. Zamia intends to apply for a Mineral Development Licence (MDL) covering the deposit plus enough area for future infrastructure requirements**
- **The MDL area will be excised from Zamia's EPM 14790 Mazeppa and EPM 15145 Mazeppa Extended.**

Investment Highlights

- ✓ **An established gold province with excellent potential for discovery of further epithermal gold and porphyry copper-gold deposits**
- ✓ **Large tenement holding with drill-ready epithermal gold and porphyry copper-gold targets**
- ✓ **Dormant Belyando open-cut gold mine: Resource open down plunge and additional substantial resource potential below known gold lodes**
- ✓ **Good access and excellent regional infrastructure**

Exploration Permits for Minerals (EPMs)

Mineral resources are owned by the State of Queensland.

Exploration Permits:

- **Are issued by the Queensland Department of Natural Resources and Mines, initially for a five year period**
- **Carry expenditure and reporting obligations**
- **Require lodgement of environmental bonds**
- **Require access agreements to be negotiated with land-holders**
- **Require access agreements to be negotiated with native title claimants**
- **Can be renewed if all obligations are met**
- **Must be progressively reduced in area**
- **Provide exclusive rights to apply for Mining Licences within the EPM areas**

Zamia's Exploration Permits

Tenement Number	Tenement Name	Grant Date	Expiry Date	Status as at 31.03.2016	Area km^2	Expenditure Commitment
EPM 14790	Mazeppa	12.01.2006	11.01.2021	Year 11	39	$70,000
EPM 15145	Mazeppa Extended	11.08.2006	10.08.2017	Year 10	112	$300,000
EPM 17488	Mistake Creek	05.11.2009	04.11.2017	Year 7	47	$85,000
EPM 16524	Logan Creek	23.12.2010	22.12.2020	Year 6	21	$120,000
EPM 17703	Disney	30.01.2012	29.01.2017	Year 5	60	$220,000
EPM 19369	Amaroo South	30.01.2012	29.01.2017	Year 5	34	$45,000
EPM 18655	Dingo Range	29.05.2013	28.05.2019	Year 3	34	$70,000

12-Month Exploration Programme, July 2016 – June 2017

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<u>Mistake Creek</u>: Porphyry copper-gold target

- **Deep penetration dipole-dipole IP survey**
- **Drill test targets with a fence of holes for porphyry style mineralisation indicators i.e. quartz vein style, alteration and metal zonation**

EPM 17488 Mistake Creek has an annual expenditure commitment of $85,000

<u>Mount McLaren</u>: Porphyry copper-gold-molybdenum target

- **Re-assessment of historic soil geochemistry**
- **Re-model historic I.P. data and, if necessary, carry out a new I.P. survey**
- **RC and diamond drill holes to test targets identified by the I.P. survey**

EPM 16524 Logan Creek has an annual expenditure commitment of $120,000

<u>Belyando</u>: Epithermal gold target; possible porphyry system at depth

- **Helicopter magnetic survey over Belyando and extending several kilometres beyond**
- **A gradient array I.P. survey covering a larger area andextending to greater depth than the 1986 survey**
- **RC and diamond drilling**

EPM 15145 Mazeppa Extended has an annual expenditure commitment of $300,000.

12-Month Exploration Programme, July 2016 – June 2017

<u>Hill 271</u>: Epithermal gold target; possible porphyry system at depth

- **Detailed surface geological mapping**
- **Additional I.P. to provide coverage over the NW-oriented zone of magnetite depletion**
- **Compile and interpret historical soil geochemical results**
- **Identify and prioritise drill targets based on the I.P. and soil geochemical results**

EPM 19369 Amaroo South has an annual expenditure commitment of $45,000.

<u>Disney</u>: Epithermal gold targets

- **Complete detailed soil geochemical surveys over target areas**
- **RC drilling to test the best geochemical anomalies**

EPM 17703 Disney has an annual expenditure commitment of $220,000

Smaller funding amounts are required for other regional targets

The total expenditure commitment for the 12-month period is $910,000

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