**ASX:RDM** 

PROJECT SUMMARY

NOOSA MINING JULY 2017

COPPER-GOLD LEAD-ZINC-SILVER NICKEL-COPPER AUSTRALIA



#### Caution Regarding Forward-Looking Statements

- Statements regarding the Company's plans with respect to exploring its projects are forward-looking. There can be no assurance that any mineralisation identified will be proven to be economic, that future evaluation work will confirm the viability of deposits identified or that future required regulatory and / or development approvals will be obtained.
- Such risks and uncertainties are described in periodic filings made by Red Metal Limited with the ASX. The Company disclaims any obligation to update information contained in any forward-looking statement.

#### Competent Persons Statement

- The information in this report that relates to Exploration Results and estimates of Mineral Resources for the Maronan Project was previously reported by the Company in compliance with JORC 2012 in market releases dated 28 January 2014, 21 November 2014, 3 February 2015, 29 July 2015, 27 October 2015 and 8 March 2016. The Company confirms that it is not aware of any new information or data that materially affects the information included in the market announcements dated 28 January 2014, 21 November 201, 3 February 2015, 29 July 2015, 27 October 2015 and 8 March 2016 and, in the case of the estimate of Mineral Resources all material assumptions and technical parameters underpinning the estimates in the market announcement of 27 October 2015 continue to apply and have not materially changed.
- The information in this report that relates to Exploration Results (other than in respect of the Maronan Project) is based on, and fairly represents, information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Rutherford consents to the form and context in which the Exploration Results and supporting information are presented in this report.
- All mineralised intervals have been length weighted. No top-cuts have been applied. A nominal 1% lead and 0.5% copper lower cut-off grade is applied.
- The lead equivalent values for Maronan was determined by AMDAD for the Preliminary Mine Scoping Study as released to the market on 8 March 2016.
- The copper equivalent values used here were calculated using on the current metal prices being Pb \$2245/t, Zn \$2425/t, Cu \$5818/t, Au \$1221/oz, Ag \$15.9/oz, Ni \$9065/t, Co \$26.76/lb, U \$20.35/kg and 0.7587USD = \$1AUD. The Maronan project is at an early stage of exploration, and as a result limited metallurgical test work has been undertaken on the lead and no metallurgical test work has been undertaken on the copper. A metallurgical recovery of 100% was therefore assumed for the purpose of the copper equivalent calculation. The copper equivalent percentage value is calculated by summing the US dollar value of contained metal for each deposit then dividing this value by the copper price x 100. The Company's opinion is that all of the elements included in the lead and copper equivalent calculation have a reasonable potential to be recovered. The copper equivalent calculation assumes 100% recovery of all metals and does not take into account any potential changes in the equivalent value caused by different recoveries, processing or transport costs for the individual metals.
- The lead and copper equivalent values are not precise and are used here to map the broad variations in the in situ metal content to assist exploration targeting and make broad grade comparisons between deposits. It is highly likely these values will vary when metallurgical factors are applied.

## Snap Shot Near Term Activity

- Australia Base Metal Focus
  - Proven and Frontier Terrains
- Advanced Maronan Lead-Silver Project
  - Significant Inferred Resources
  - Including 30Mt @ 6.5% Pb, 106g/t Ag (3.4% Cu Equ.)
  - Seeking funding towards BFS
- Drill Ready Geophyical Targets in Proven Base Metal Terrains
  - Lawn Hill Zinc-Lead-Silver: standout McArthur River/Mount Isa analogs
  - Leichhardt Copper-Gold: perhaps another Ernest Henry?
  - Punt Hill Copper-Gold: Carrapateena look-alike
- 196.8M shares, 5.55M options
- Market Capitalisation of ~\$28M

# Carpentaria



#### Carpentaria Zinc Province

- Multiple "Tier 1" zinc deposits
- Worlds most productive zinc-lead-silver terrain
- 1.7Bn tonnes of lead-zinc-silver ore
- >120Mt of zinc, 84Mt lead and 5.36Boz of silver
- "Carpentaria is for zinc what the Andes is for copper"

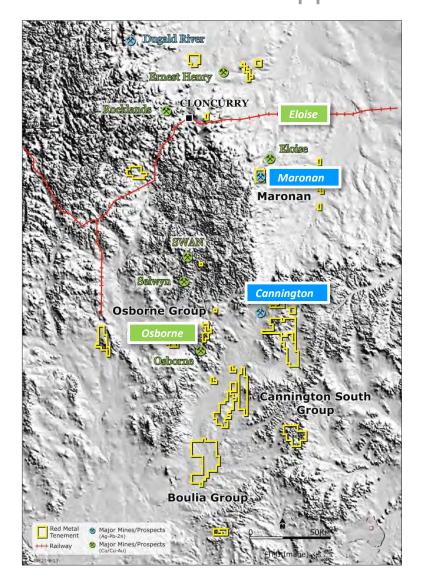
#### Large/giant silver-lead-zinc deposits

- HYC
- Teena (~600m cover)
- Century
- Lady Loretta
- Mount Isa
- George Fisher
- Dugald River
- Maronan (~50m cover)
- Cannington (~50m cover)
- Broken Hill

#### Significant copper deposits

- Mount Isa
- Ernest Henry (~50m cover)
- Osborne (~20m cover)

## Maronan Lead-Silver & Copper-Gold



# red metal

- 100% Red Metal
- Two separate mineral systems
  - Bedded Cannington or Broken Hill-type silver-lead mineralisation
  - Partially overprinted by Osborne-type copper-gold
- Significant Inferred Resources (JORC)
  - 30Mt @ 6.5% lead, 106g/t silver
     (3.4% Cu Equivalent)
  - 11Mt @1.5% Cu, 0.8g/t Au

(2.1% Cu Equivalent)

- Excellent Infrastructure
  - 130 kilometres by bitumen due north of Cannington Mine
  - 50 kilometres by bitumen south of rail infrastructure
  - Good water and power options



# Maronan The Game Changer

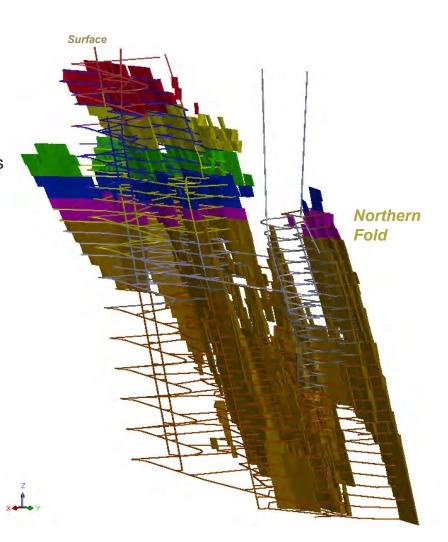
- Simple Processing
  - Coarse-grained and soft lead-silver ore
  - Outstanding recoveries,
  - Low-cost processing
  - Lowers economic cut-off grade to ~3.1% Pbeq
  - Allows mining of thicker and shallower ore lenses



### Maronan

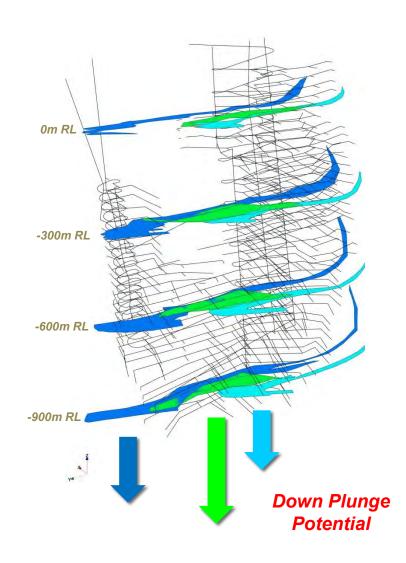
#### The Game Changer

- Simple Processing
  - Coarse-grained and soft lead-silver ore
  - Outstanding recoveries
  - Low-cost processing
  - Lowers economic cut-off grade to ~3.1% Pbeq
  - Allows mining of thicker and shallower ore lenses
- Favorable Geometry
  - Multiple ore horizons
  - Good mining widths (average 9m for the lead)
  - Steep dips
  - Excellent ground conditions
  - Sulphides within 90 metres of surface
  - Support a vision for a 1.5-2Mtpa operation
- Modelling reveals potential for strong positive cashflows using current prices



## Maronan Upside

- Simple Processing
  - Coarse-grained and soft lead-silver ore
  - Outstanding recoveries
  - Low-cost processing
  - Lowers economic cut-off grade to ~3.1% Pbeq
  - Allows mining of thicker and shallower ore lenses
- Favorable Geometry
  - Multiple ore horizons
  - Good mining widths (average 9m for the lead)
  - Steep dips
  - · Excellent ground conditions
  - Sulphides within 90 metres of surface
  - Support a vision for a 1.5-2Mtpa operation
- Modelling reveals potential for strong positive cashflows using current prices
- Scope for a "Cannington" at depth
  - Increasing zinc and silver
  - Plus wider zones of copper and gold

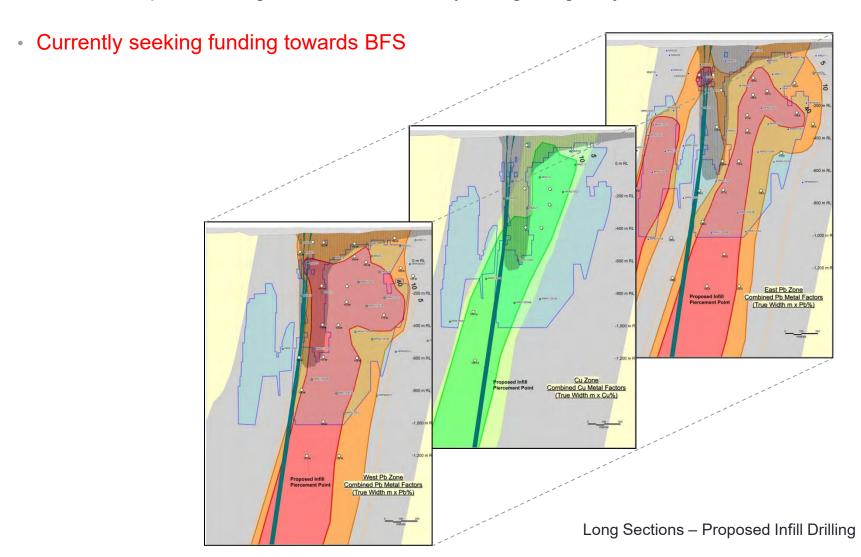




### Maronan

### Lead-Silver & Copper-Gold

Infill and step-out drilling is both economically and geologically valid

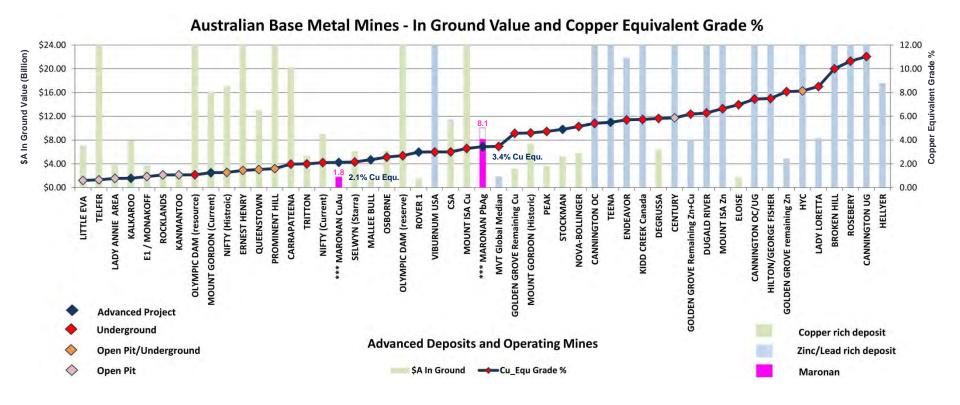




# Maronan Peer Comparison

- Inferred Resources
  - 30Mt @ 6.5% lead, 106g/t silver
  - 11Mt @1.5% Cu, 0.8g/t Au

(3.4% Cu Equivalent) (2.1% Cu Equivalent)

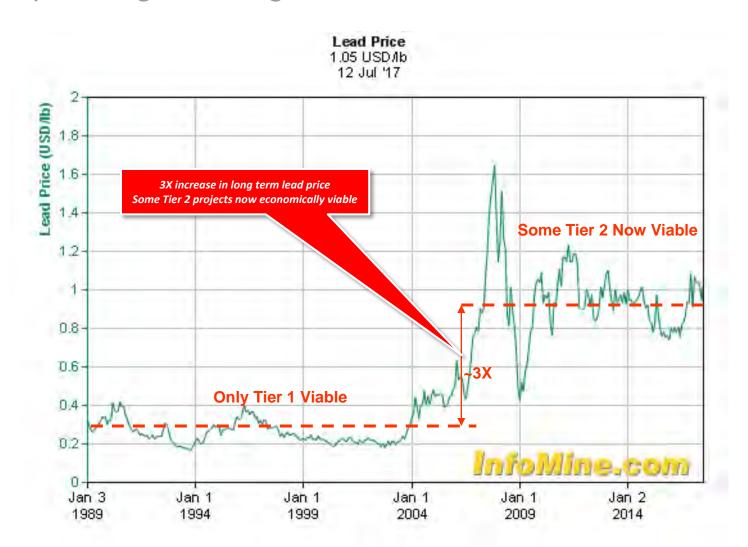


Copper equivalent calculated using USD commodity prices quoted July 7<sup>th</sup> 2017 being Pb \$2245/t, Zn \$2425/t, Cu \$5818/t, Au \$1221/oz, Ag \$15.9/oz, Ni \$9065/t, Co \$26.76/lb, U \$20.35/kg and 0.7587USD = \$1AUD. Calculations assume 100% recovery of the published resource figures. Cautious note: in ground metal values and copper equivalent grade % do not reflect a projects economic profitability.



### Maronan

#### 3x Step Change in Long Term Lead Price





### Maronan

#### 3x Step Change in Long Term Silver Price



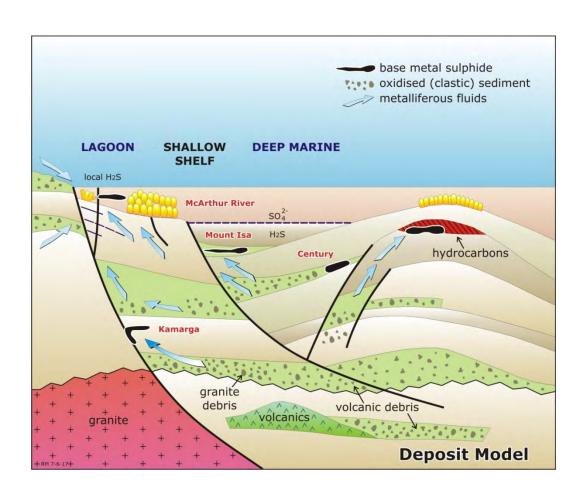


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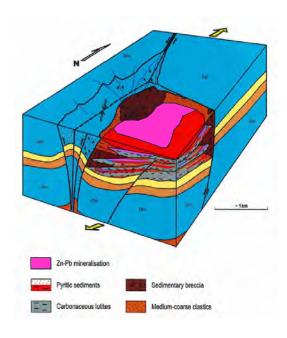
LAWN HILL ZINC-LEAD-SILVER



# Lawn Hill Zinc-Lead-Silver

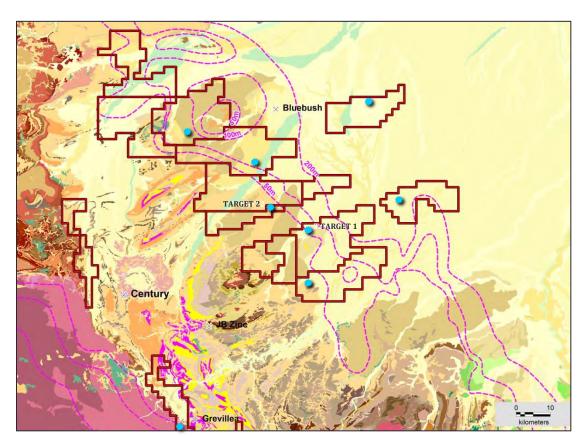


- Scope for more than one giant zinc deposit type in the Lawn Hill region
- Where is the giant McArthur River or Mount Isa style deposit?





# Lawn Hill New Zinc Plays



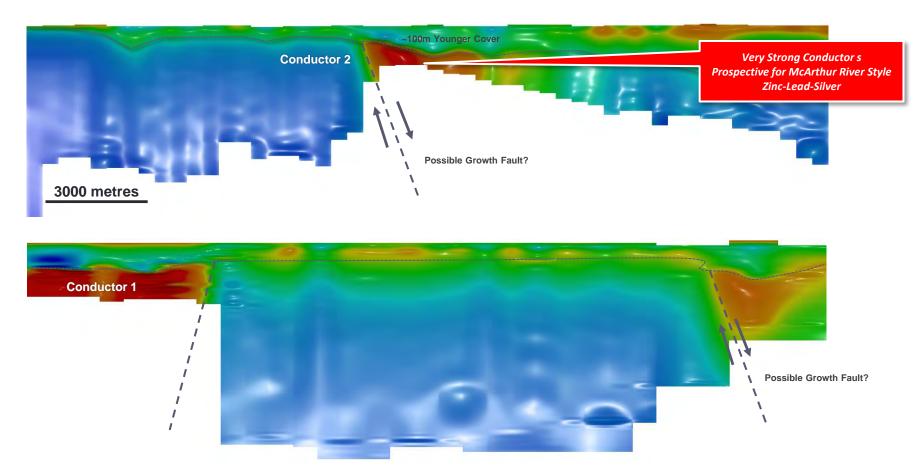
Surface Geology Image

- New Red Metal regional interpretation
- Defined several previously untested zinc plays under shallow cover
- Resulting in a number of new exploration licenses being secured
- New VTEM survey flown and interpreted (GSQ/GA/RDM)
- First-pass drilling is set to begin shortly



### Significant Conductors

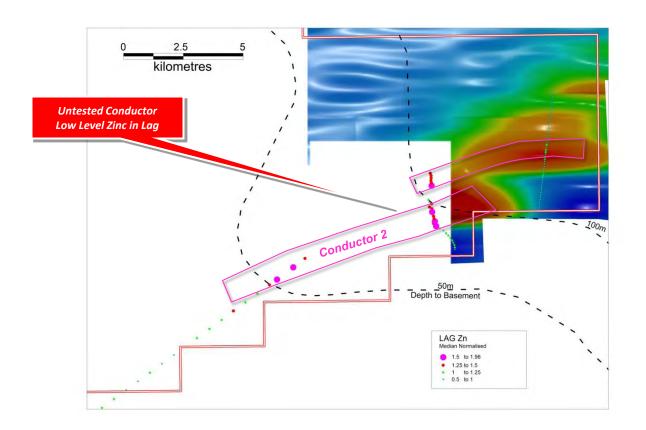
- Two strong stratiform conductors identified in historic ground EM data
- Interpreted as McArthur River equivalent stratigraphy Riversleigh Siltstone





### Significant Conductors

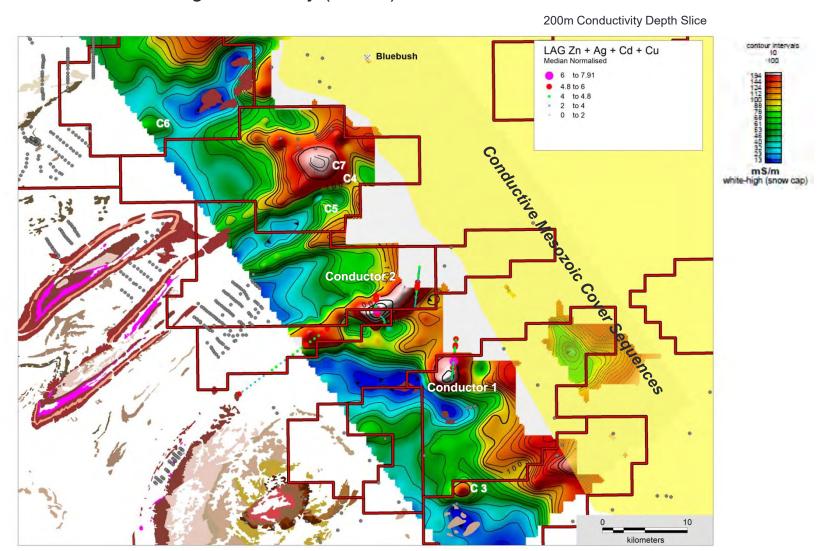
- Lag sampling defines low level zinc, silver, cadmium, copper and thallium anomalism above conductors
- Considered significant as 50-200m transported cover





### Significant Conductors

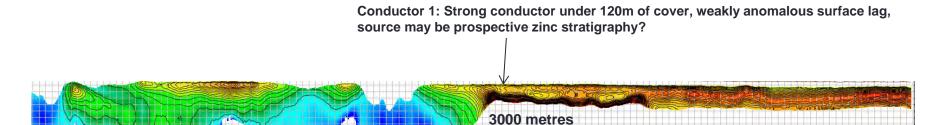
New airborne electromagnetic survey (VTEM)





# Lawn Hill Drill Ready

Inversion modelling define two standout stratiform conductors ready for drill testing

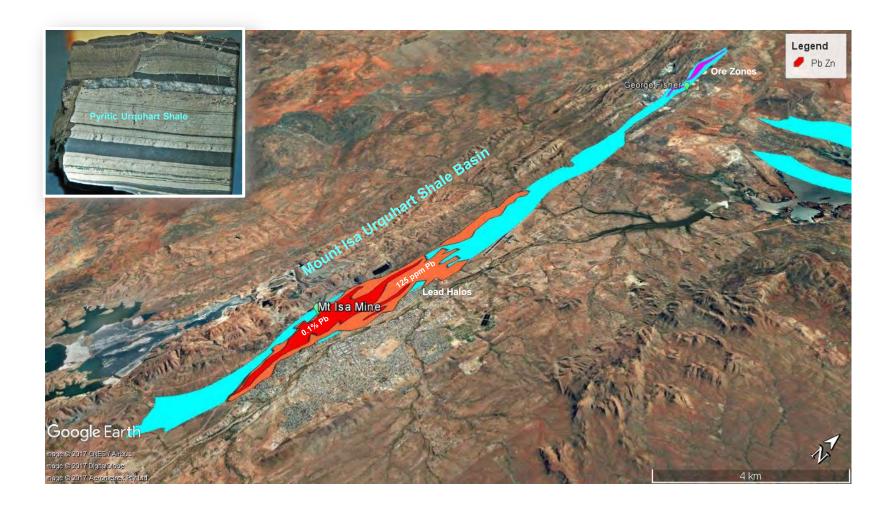






#### Mount Isa Zinc

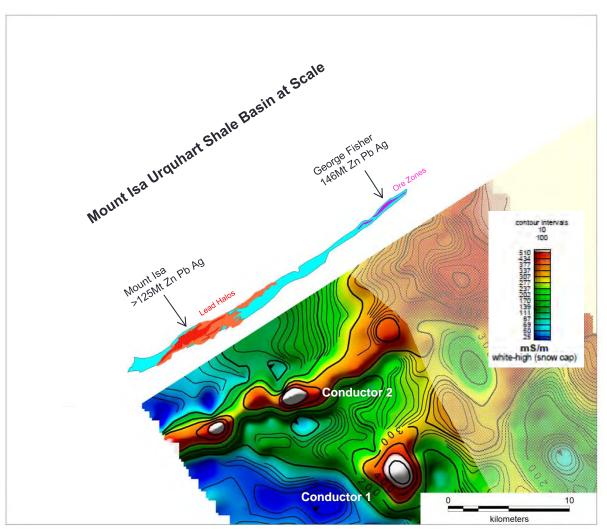
- 27km long by ~1km thick, heavily pyritic and carbonaceous sub-basin highly conductive
- 1-2km ore zones within >6km geochemical halo





#### Nice One!

Conductor 2 vs Mount Isa



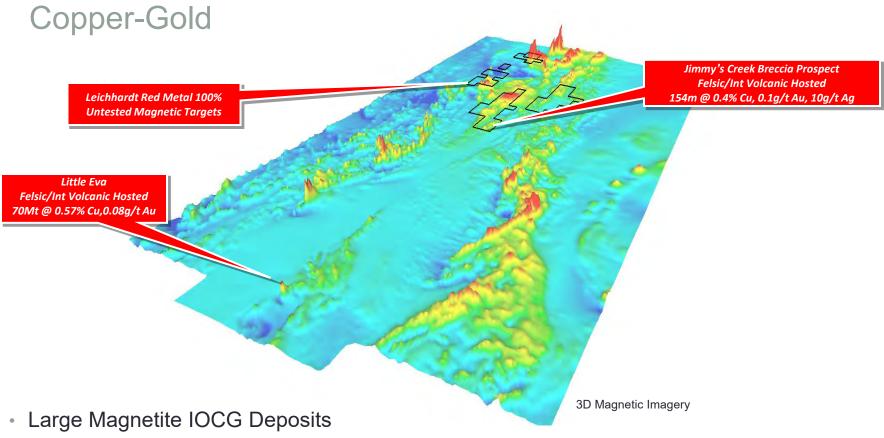
175m Conductivity Depth Slice



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COPPER-GOLD LEICHHARDT, QLD

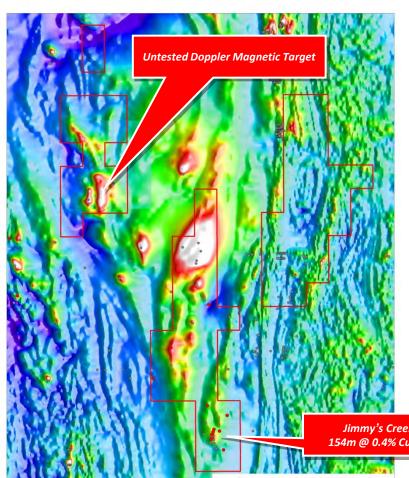
Leichhardt



- Breccia/stockwork deposits hosted in structurally and chemically favourable felsic to intermediate volcanic or intrusive rock
- Ernest Henry: ~ 250Mt @ 1.1% Cu, 0.5g/t Au (andesitic volcanic)
- Little Eva: 70Mt @ 0.57% Cu,0.08g/t Au (felsic-intermediate volcanic, ore S.G. 2.8)
- Caldelaria: 600 Mt @ 0.95% Cu, 0.22 g/t Au, 3.1 g/t Ag (andesitic volcanic)
- Sossego: 350Mt @ 1.1%Cu, 0.28g/t Au (felsic granophyre and volcanic)
- Regionally significant magnetic anomalies
- Not always gravity highs

### Leichhardt

#### Mineralised Breccia



## red metal

#### Doppler

- Regionally significant magnetic target in NW structural jog
- Low density felsic volcanic trend
- Dense source hidden by gravity gradient

#### Jimmy's Creek Breccia Prospect

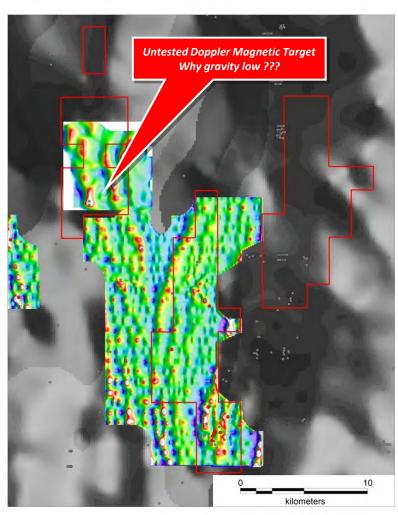
- Felsic volcanic-hosted sulphide-dominant breccia, low total iron oxide
- 153m @ 0.41% Cu, 0.1g/t Au, 10g/t Ag
- 211m @ 0.33% Cu, 0.2g/t Au
- Weak magnetic / low gravity



Jimmy's Creek Breccia Prospect 154m @ 0.4% Cu, 0.1g/t Au, 10g/t Ag

kilometers

# Leichhardt Brilliant!

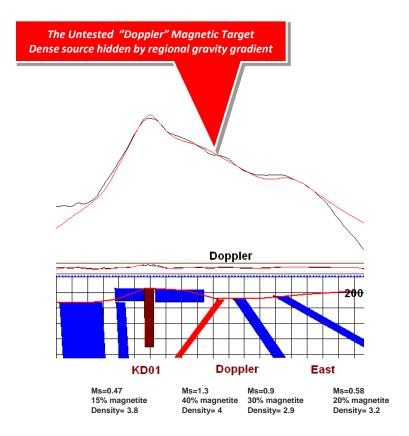


Residual Gravity Imagery

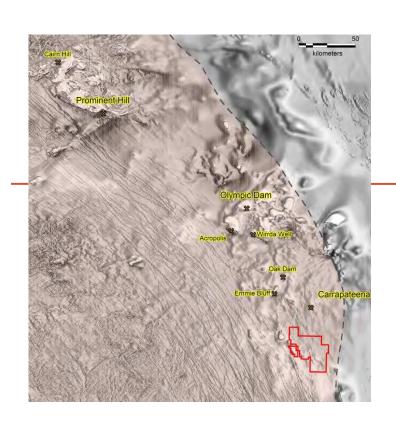
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Gravity model using magnetic modelled shapes



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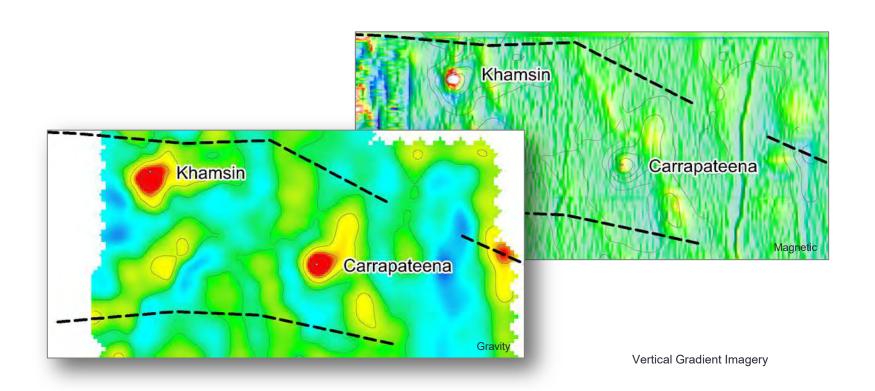
PUNT HILL & PERNATTY COPPER-GOLD SA

# Punt Hill & Pernatty Copper-Gold

# red metal

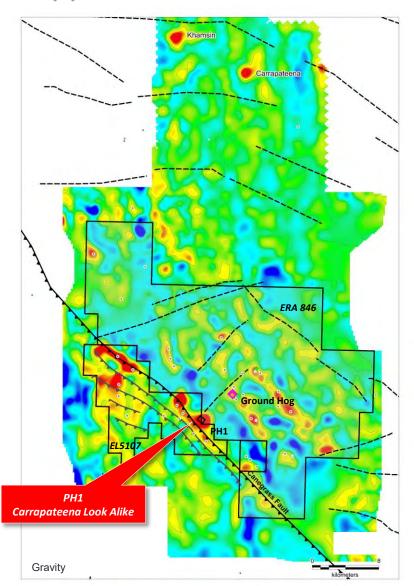
#### Carrapateena

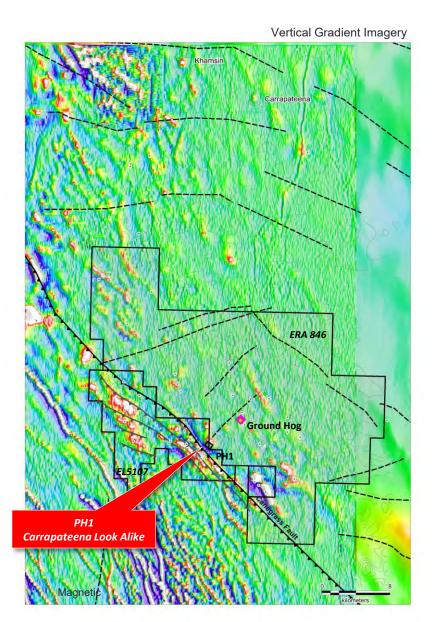
- Hematite IOCG breccia
- 134Mt @ 1.5%Cu, 0.6g/t Au, 6.5g/t Ag
- Host in older granite
- Very weakly magnetic



# Punt Hill & Pernatty

Copper-Gold

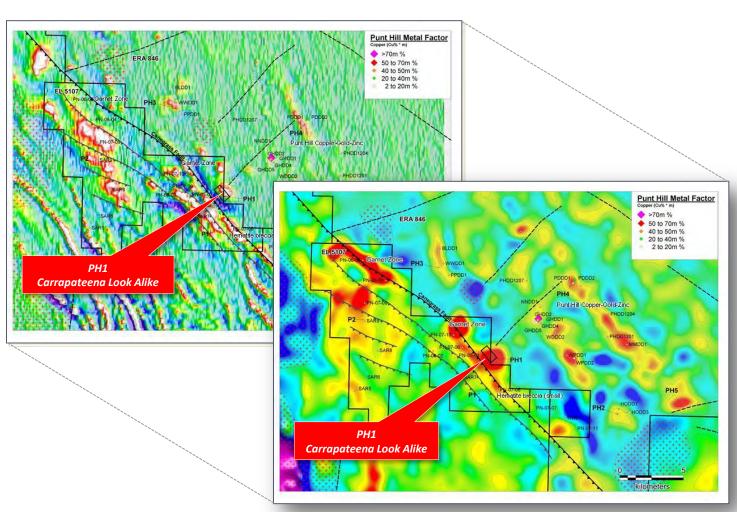






# Punt Hill & Pernatty Wow!

Vertical Gradient Imagery



# Near Term Why only \$28M?

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