

Gold Exploration Update

July – September 2015

In pursuit of ... the next Challenger

About Challenger

- Opened in 2002 as an open-pit mine
- Now **high-grade** narrow-vein underground
- At opening: one of Australia's most profitable gold mines ¹
- **Over 1 million ounces of gold** already ²
(A\$1.5 billion gold at current prices)
- Discovered using simple calcrete sampling



Challenger Pit
Source: Kingsgate Consolidated Limited

¹ cf. Southern Gold Annual Report 2009 p. 11

² Kingsgate Consolidated Limited: ASX Release dated 26 November 2014

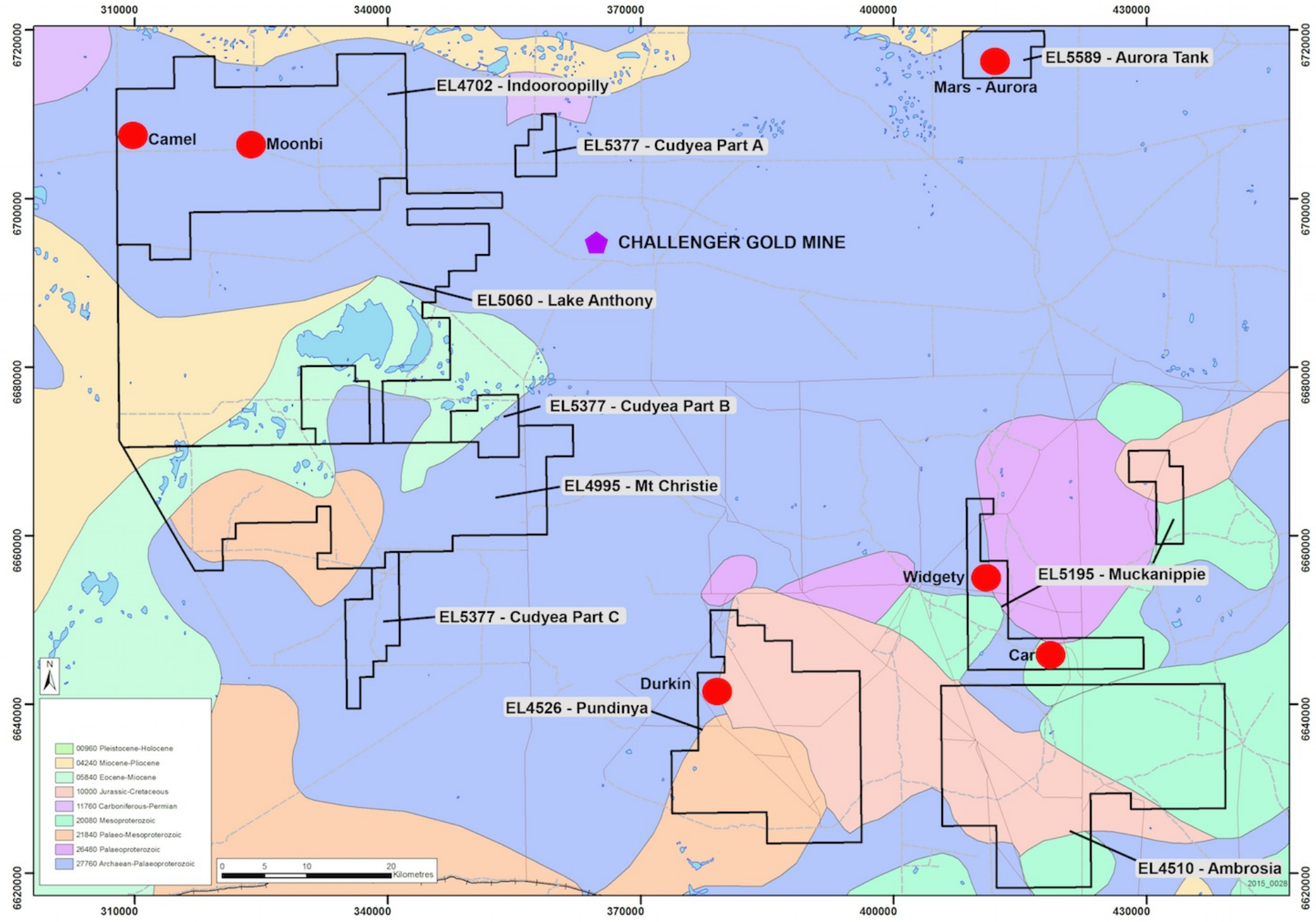
The Marmota Advantage

- Marmota (MEU) has a **DOMINANT tenement holding around Challenger**
 - **See diagrams:** next 2 pages
 - MEU tenements cover **3,500 km²** of high prospective area around the Challenger gold mine
- Woomera prohibited zone: desirable area of exploration focus ^{1, 2}
- Highly **prospective** jurisdiction and **underexplored**
 - Christie Mulgathing mobile belt
 - Comparison to WA gold fields
 - Analogous in age and style to Archaean Yilgarn block hosting most of WA's gold mineralization
- Our local turf: Marmota's 'backyard'
- In-house experienced geos + advanced geophysical database

¹ Bloomberg (19 June 2015): [Bombed, Blasted, Nuked: Outback may yield \\$27 billion in minerals](#)

² Ironclad (ASX:IFE) interview: 27 May 2015

MEU
Tenements
around
Challenger



The map displays the Challenger Gold Mine and its surrounding land parcels. The Challenger Gold Mine is marked with a purple diamond. The map includes a legend, a scale bar, and a north arrow. The Challenger Gold Mine is the central feature, surrounded by various land parcels owned by different companies. The map is color-coded by owner, with red representing Challenger Gold Operations Pty Ltd, yellow representing various other companies, and green representing the Challenger Gold Mine. The map also shows the Challenger Gold Mine's proximity to the Challenger Gold Mine and the Challenger Gold Mine.

Legend:

- Apollo Iron Ore No 2 Pty Limited
- Australian Metals Group Limited
- Challenger Gold Operations Pty Ltd
- Challenger Gold Operations Pty Ltd, Coombedown Resources Pty Ltd
- Coombedown Resources Pty Ltd
- FMG Resources Pty Ltd
- Faljack Pty Ltd
- Half Moon Pty Ltd
- Havilah Resources Limited
- Iuka (Eucla Basin) Pty Ltd
- Mincor Iron Holdings Pty Ltd
- Renascor Resources Limited
- Southern Coal Holdings Pty Ltd
- Southern Exploration Pty Ltd
- The Waterberg Coal Company Limited
- Trafford Resources Limited
- UXA Resources Limited (Subject to Deed of Company Arrangement)
- WPG Resources Ltd
- Wallaby Resources Pty Ltd

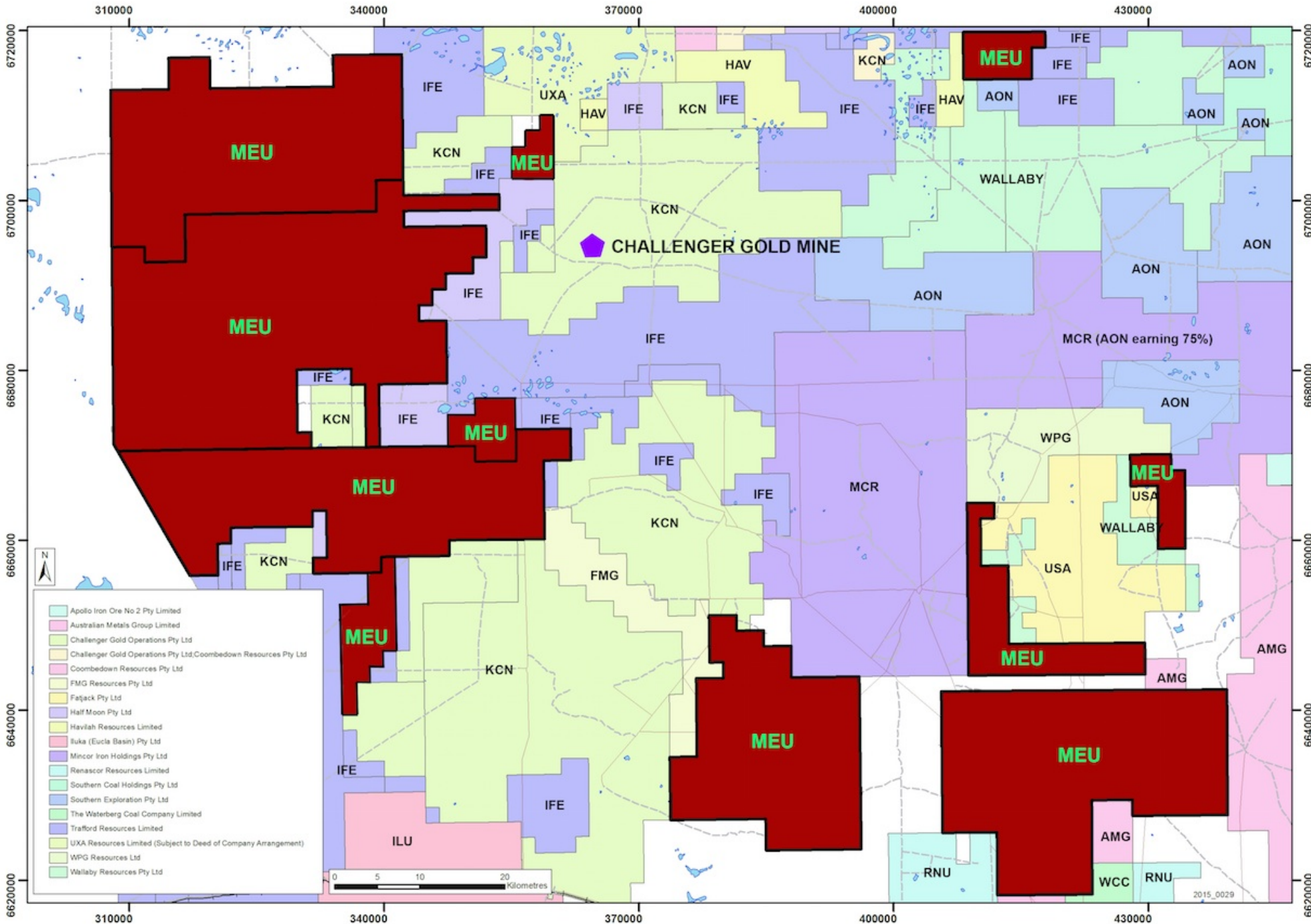
Scale: 0 to 20 Kilometres

Map Labels: MEU, IFU, KCN, HAV, UXA, WALLABY, AON, MCR (AON earning 75%), WPG, USA, WALLABY, AMG, ILU, RNU, WCC, RNU.

Challenger Gold Mine: CHALLENGER GOLD MINE

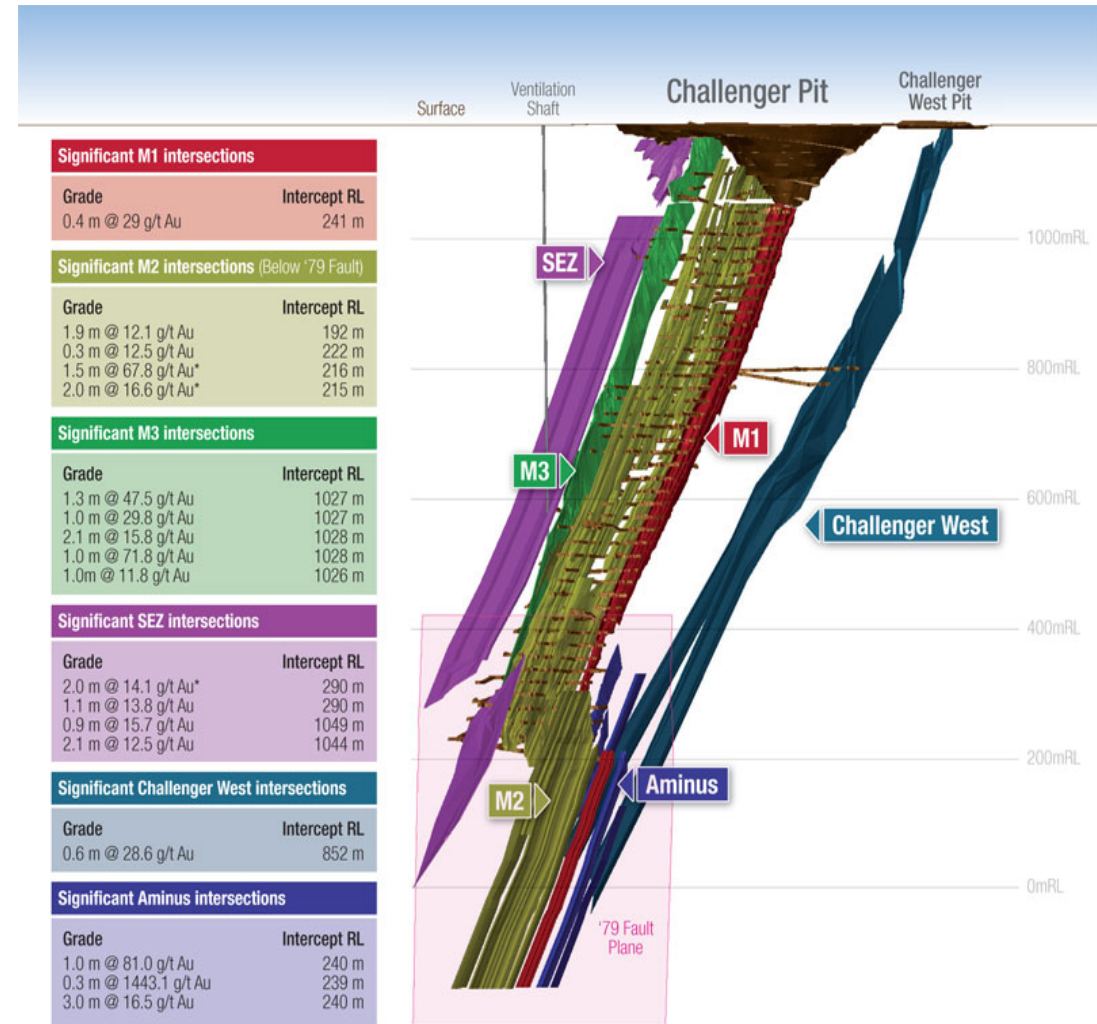
Map Coordinates: 310000, 340000, 370000, 400000, 430000, 6620000, 6640000, 6660000, 6680000, 6700000, 6720000

Map Date: 2015_0029



Why calcrete sampling?

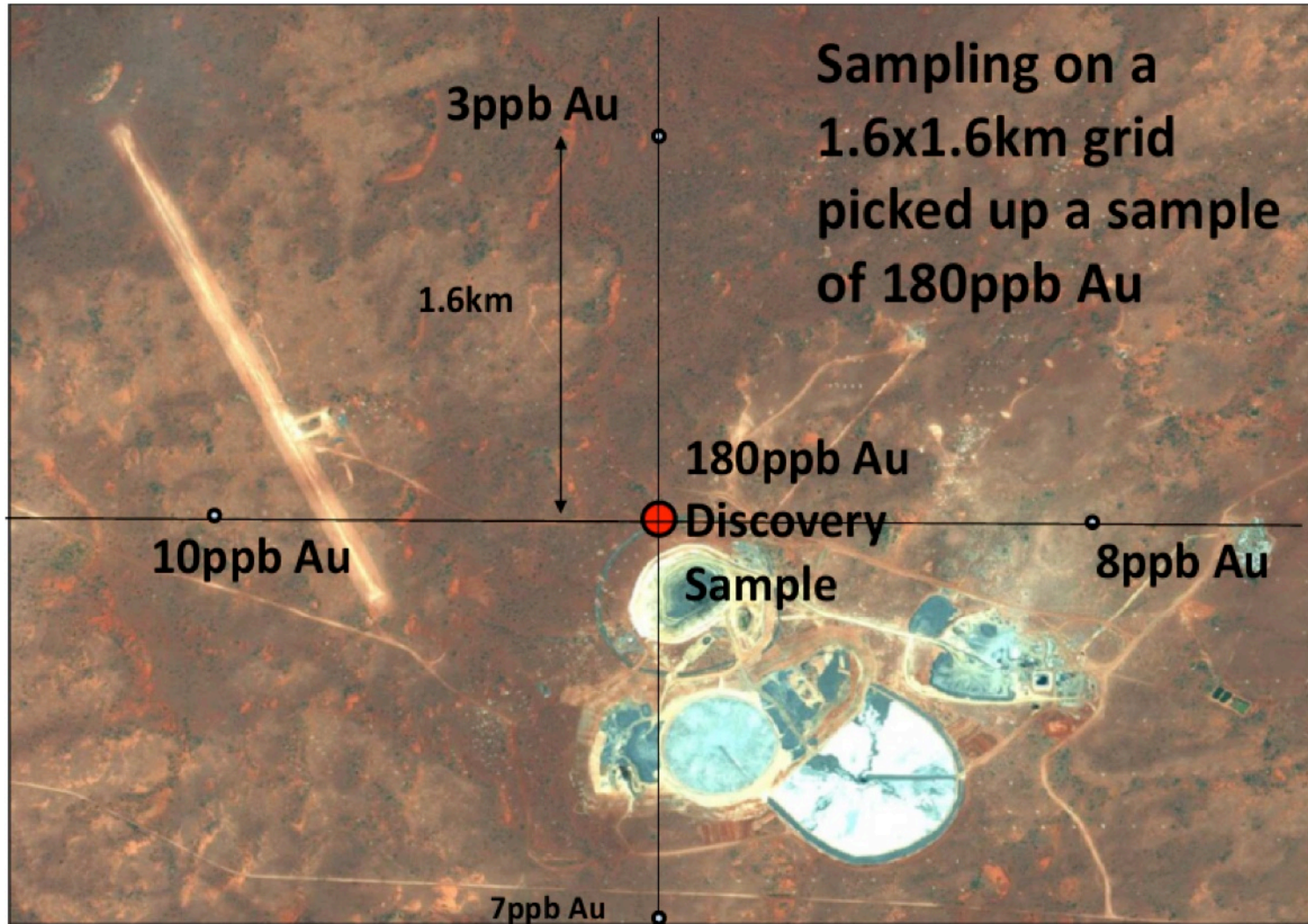
- Calcrete sampling found Challenger
- The usual geologist toolkit would *not* find Challenger. Why? Because:
 - Challenger **lacks** any significant magnetic signature:
 - nil or weak IP geophysical signature
 - no EM geophysical signature
- Challenger DOES feature:
 - ✓ Anomalous gold in calcrete sampling
 - ✓ Located on the **margin of a regional gravity 'high'**
 - ✓ Hosted by quartz veins in Christie Gneiss (deformed granite)
 - ✓ Small footprint: high-grade, narrow shoots
- Summary**
Calcrete and **gravity** are the best diagnostic tools to find Challenger-style systems.



*Reported in March 2012 Quarterly

Source: Kingsgate Consolidated Limited (ASX:KCN)

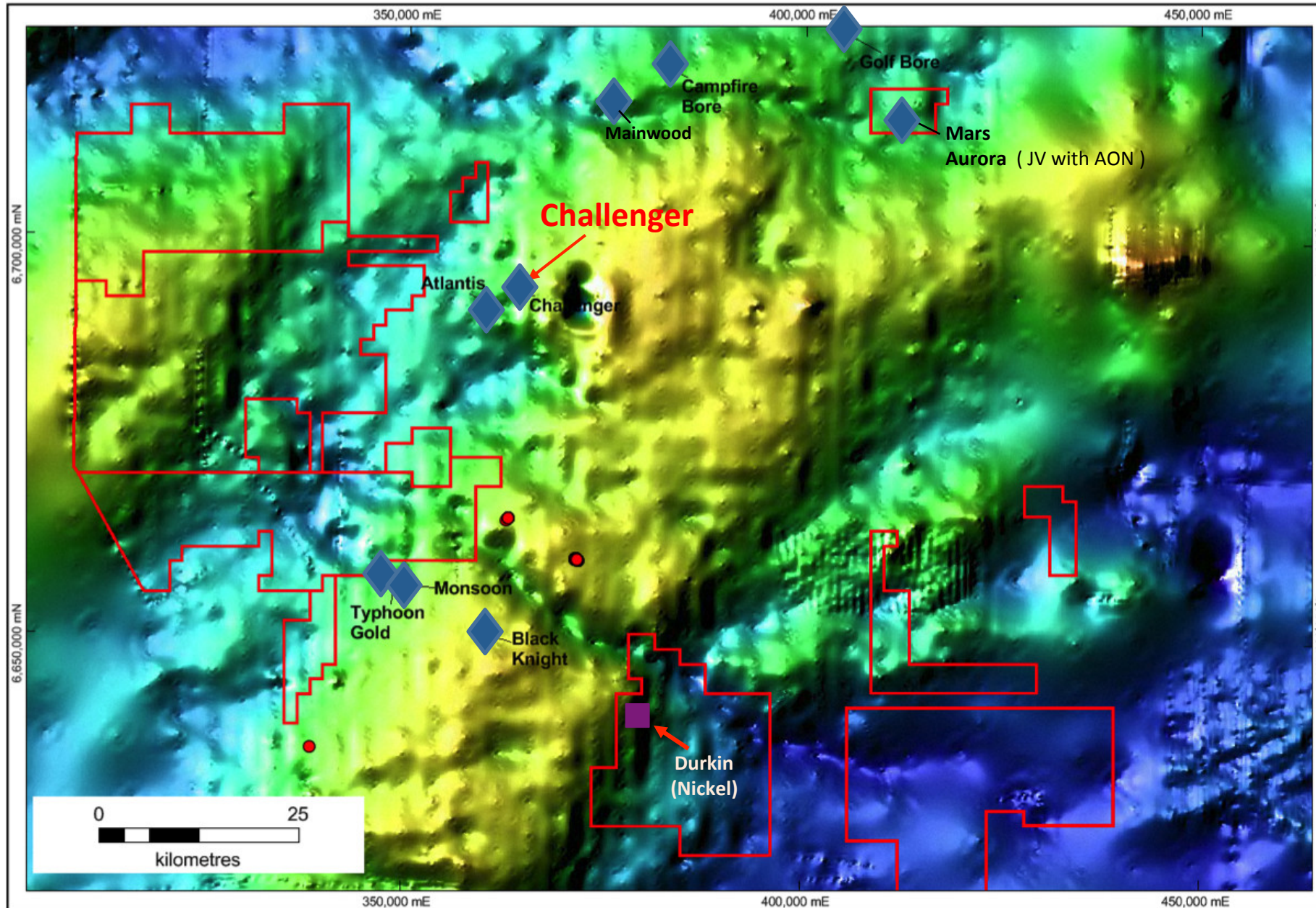
Calcrete sampling found Challenger



Challenger Pit with
initial calcrete sampling

Source: Ironclad Mining Limited – ASX Release dated 14 May 2015

Calcrete anomalies yield gold deposits



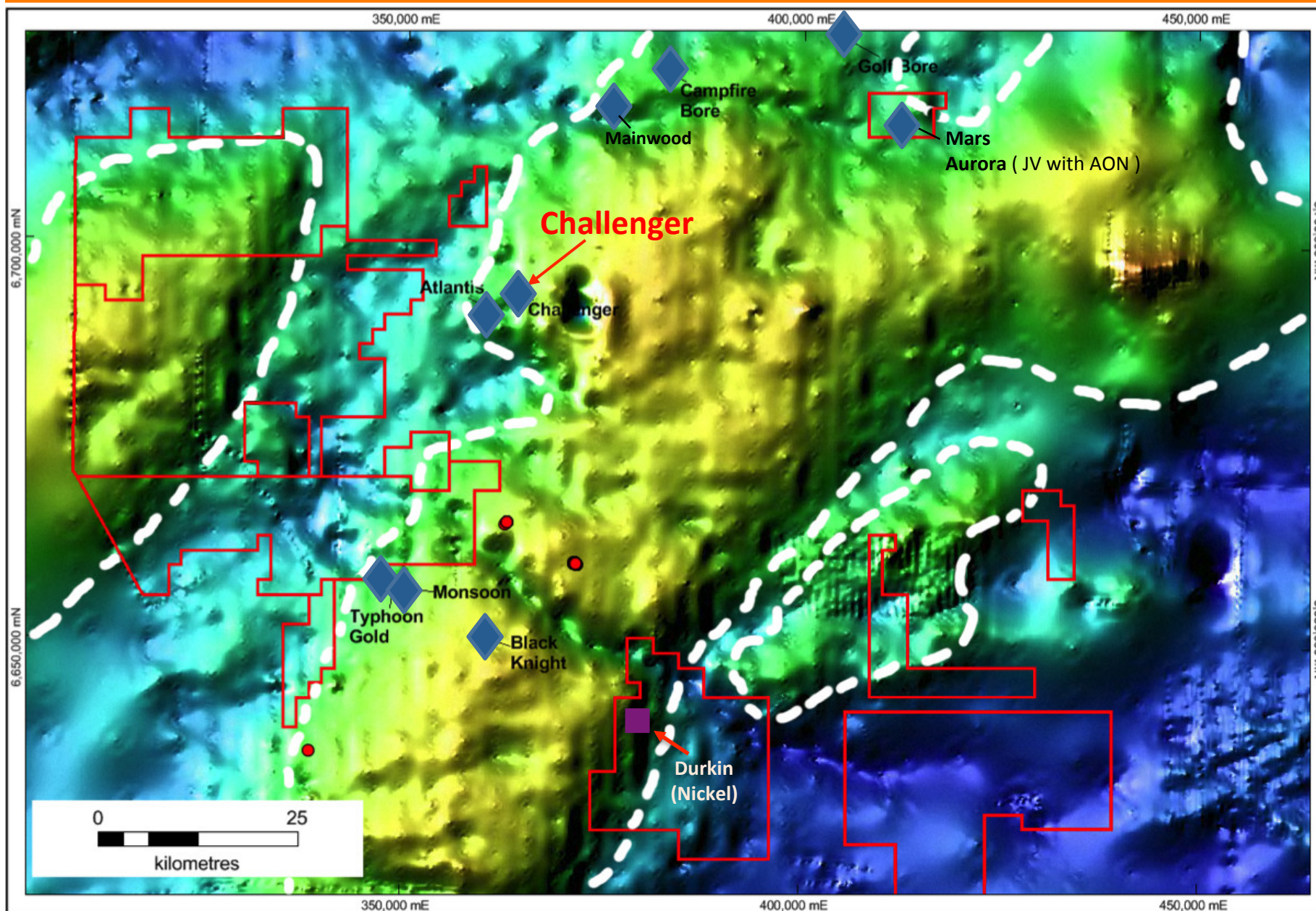
Gawler Craton
gravity image
showing:

◆ Gold mineralisation
drilled below
calcrete anomaly

MEU tenements

● calcrete samples
with Au >100ppb

MARGINS of gravity highs ARE IMPORTANT



Gawler Craton
regional gravity highs
highlighted by **WHITE**

◆ Gold mineralisation
drilled below
calcrete anomaly

□ MEU tenements

● calcrete samples
with Au >100ppb

Marmota: July – Sept 2015 gold exploration program

- **Part 1**

Targeting known anomalies around Challenger at:

- Camel [@ Indooroopilly tenement]
- Widgety [@ Muckanippie tenement]

- **Part 2**

Testing high prospectivity areas that have no (or very little) data coverage, *starting at*:

- Cudyea central / Mt Christie east
- ... regional and detailed calcrete sampling program



Drilling at Moonbi prospect in May 2013

- ✓ MEU has successfully obtained grant from DSD¹ towards funding geologist work
- ✓ Adopting same techniques/methods as used to discover Challenger itself ...
- ✓ Heritage cleared; Woomera access clearance obtained

¹ Department of State Development (South Australia) Grant: July to Dec 2015

Exploration Work Locations


Map of Gawler Craton region
showing:

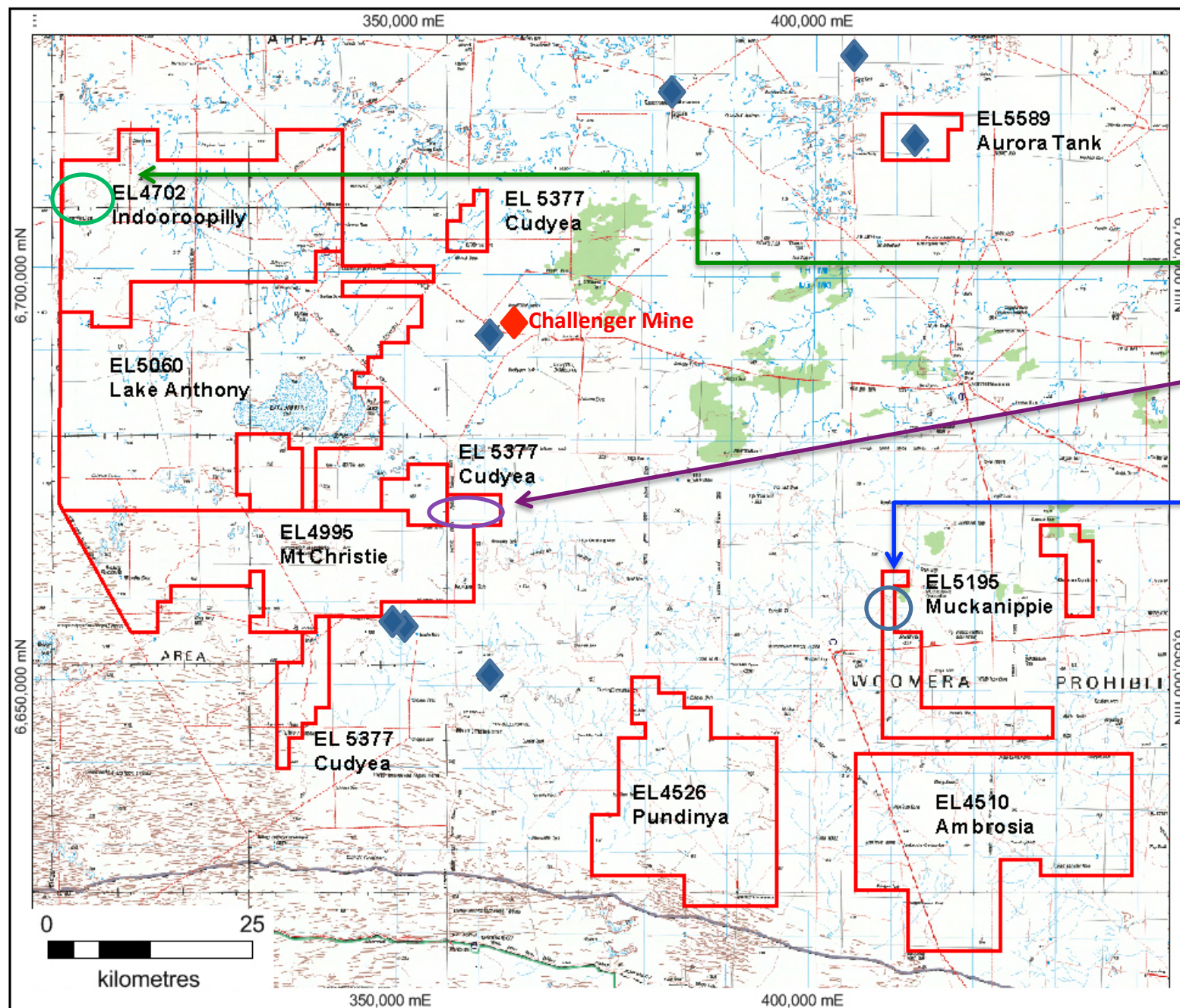
Camel target

Cudyea central /
Mt Christie east

Widgety target

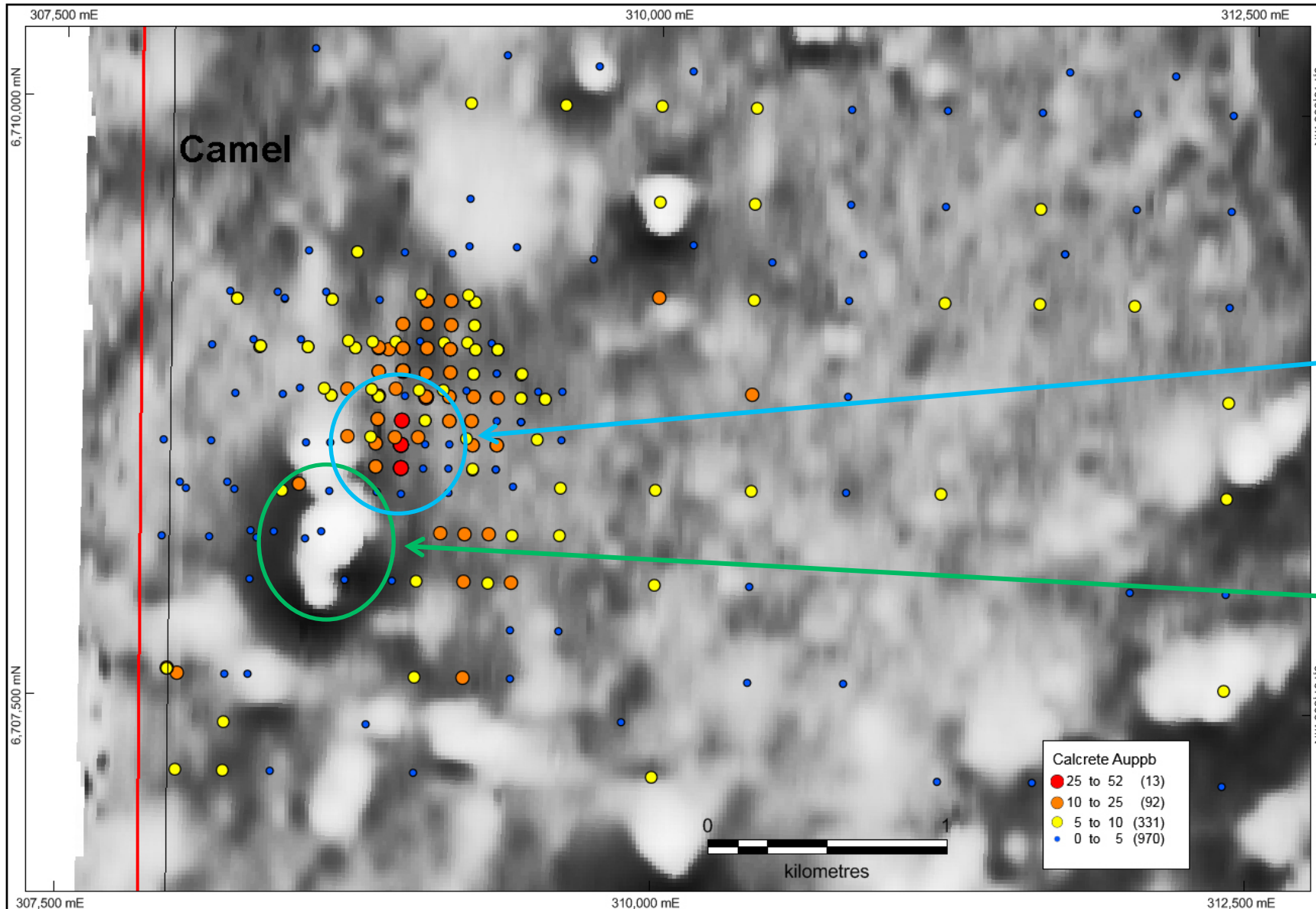
 MEU tenements

 Gold mineralisation
drilled below calcrete anomaly



Camel Target

@ Indooroopilly Gold Project



Au in calcrete in the region of the Camel target set against aeromagnetic 1VD image

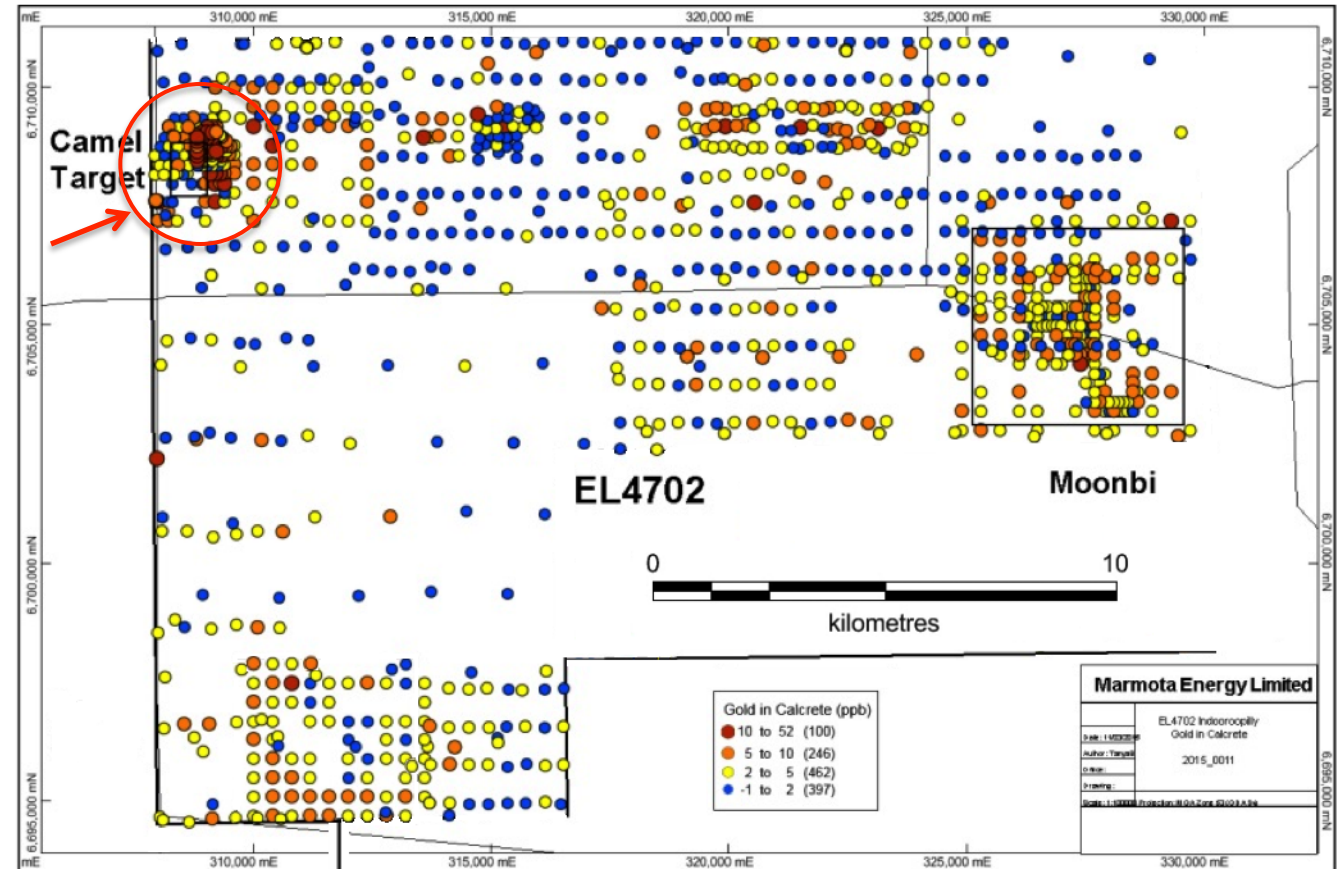
Coherent gold in calcrete anomaly

Unexplained: offset magnetic anomaly

Camel Target

@ Indooroopilly Gold Project

- Indooroopilly tenement covers 584km²; located 25km west of Challenger Gold Mine.
- Camel target features:
 - ✓ gold calcrete anomalies
 - ✓ on margins of gravity 'high', +
 - ✓ confirmed Christie Gneiss basement present
- Limited historical shallow drilling
- Exploration at Camel with calcrete infill sampling on a 50m grid **already underway**

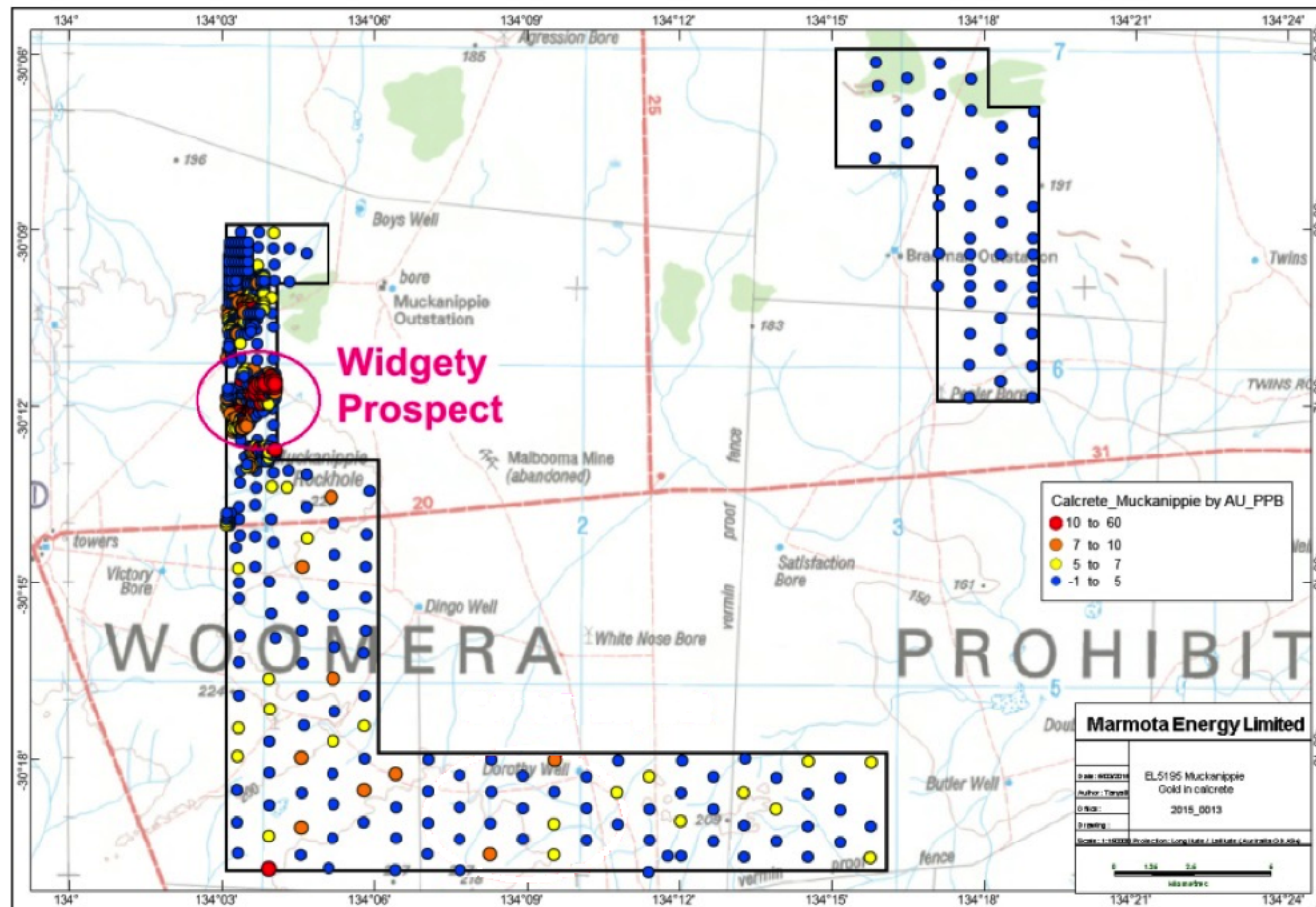


Target area in Indooroopilly overlain on gold in calcrete sample results

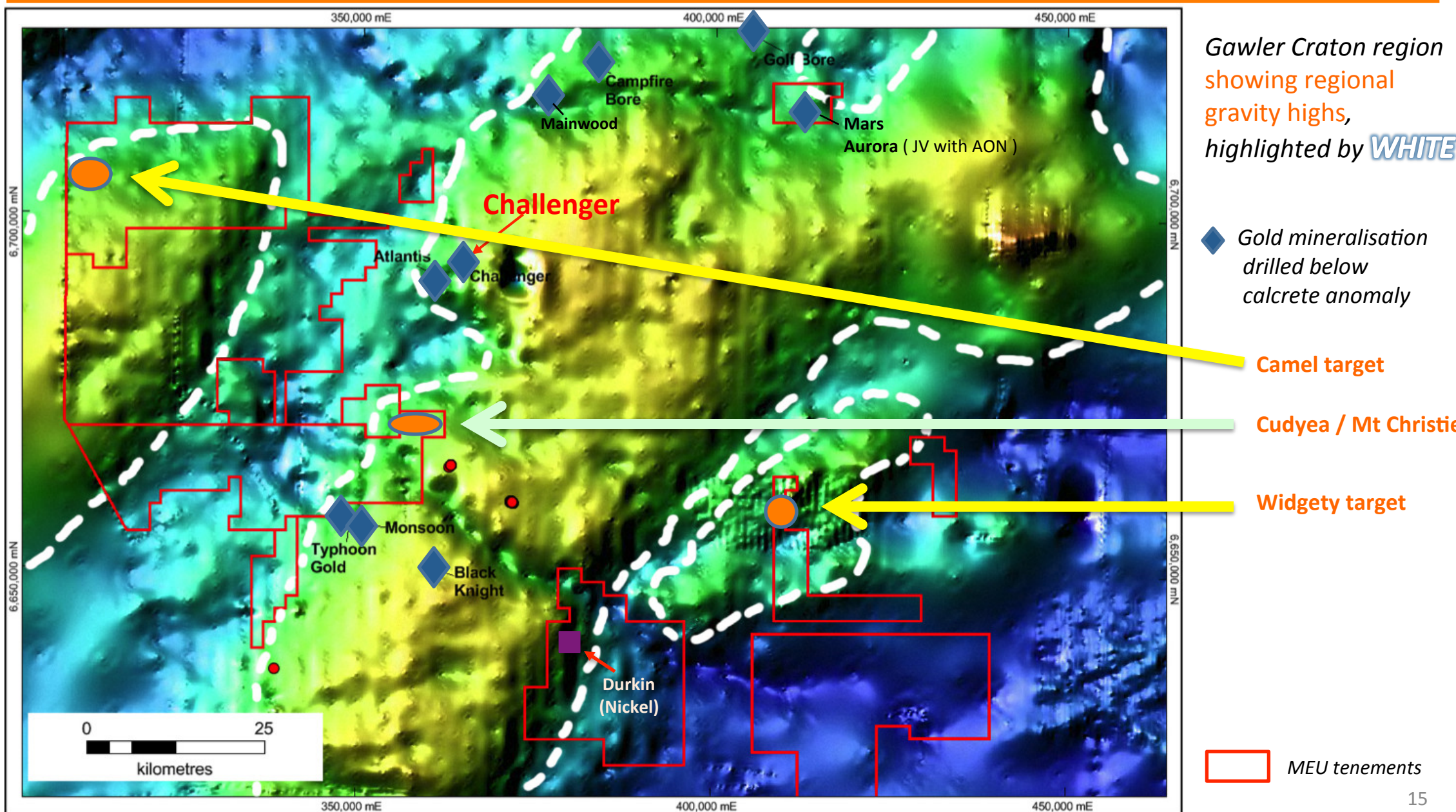
Widgety Target

@ Muckanippie Tenement

- Muckanippie tenement comprises two areas covering 181 km²; 60km SE of Challenger
- Targets are Olympic Dam-style IOCG mineralisation, base metal deposits and structurally controlled Challenger-style gold
- Calcrete anomalies at Widgety
- Limited exploration in the past due to Woomera Prohibited zone restrictions



New Targets: In the zone ...



Summary

- Focus on gold
- Marmota has a dominant holding around Challenger
- Highly prospective tenements and massively underexplored
- Immediate exploration program **already underway**
- Adopting **same techniques** as used to find Challenger ...
- Targets being refined to allow immediate drilling
- + a bounty of highly prospective targets for investigation!



Disclaimer

Disclaimer

This presentation has been prepared by Marmota Energy Limited (“MEU”). The information contained in this presentation is a professional opinion only and is given in good faith. Certain information in this document has been derived from third parties and though MEU has no reason to believe that it is not accurate, reliable or complete, it has not been independently audited or verified by MEU. Any forward-looking statements included in this document involve subjective judgement and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and may be unknown to, MEU. In particular they refer only to the date of this document they assume the success of MEU’s strategies, and they are subject to significant regulatory, business, competitive and economic risks and uncertainties.

Actual future events may vary materially from those in the forward looking statements. Recipients of this document are cautioned not to place undue reliance on such forward-looking statements. MEU makes no representation or warranty as to the accuracy, reliability or completeness of information in this document and does not take responsibility for updating any information or correcting any error or omission which may become apparent after this document has been issued. To the extent permitted by law, MEU and its officers, employees, related corporations and agents, disclaim all liability, whether direct, indirect or consequential for any loss or damage arising out of, or in connection with, any use or reliance on this presentation or information.

Cautionary Statement

The estimates of exploration target sizes mentioned above should not be misunderstood or misconstrued as estimates of Mineral Resources. The estimates of exploration target sizes are conceptual in nature and there has been insufficient results received from drilling completed to date to estimate a Mineral Resource compliant with the JORC Code (2004) guidelines. Furthermore, it is uncertain if further exploration will result in the determination of a Mineral Resource.

Forward Looking Statement

This report may contain forward looking statements that are subject to risk factors which are based on MEU’s expectations relating to future events. Forward-looking statements are subject to risks, uncertainties and other factors, many of which are outside the control of MEU, which could cause actual results to differ materially from such statements. MEU makes no undertaking to update or revise the forward-looking statements made in this report to reflect events or circumstances after the date of this release.

Competent Persons Statement

Information in this exploration update relating to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Peter Thompson, who is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves.” Mr Thompson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

For further information, please contact: **David Williams** Managing Director
Email: info@marmotaenergy.com.au
Phone: (08) 7088-4883

