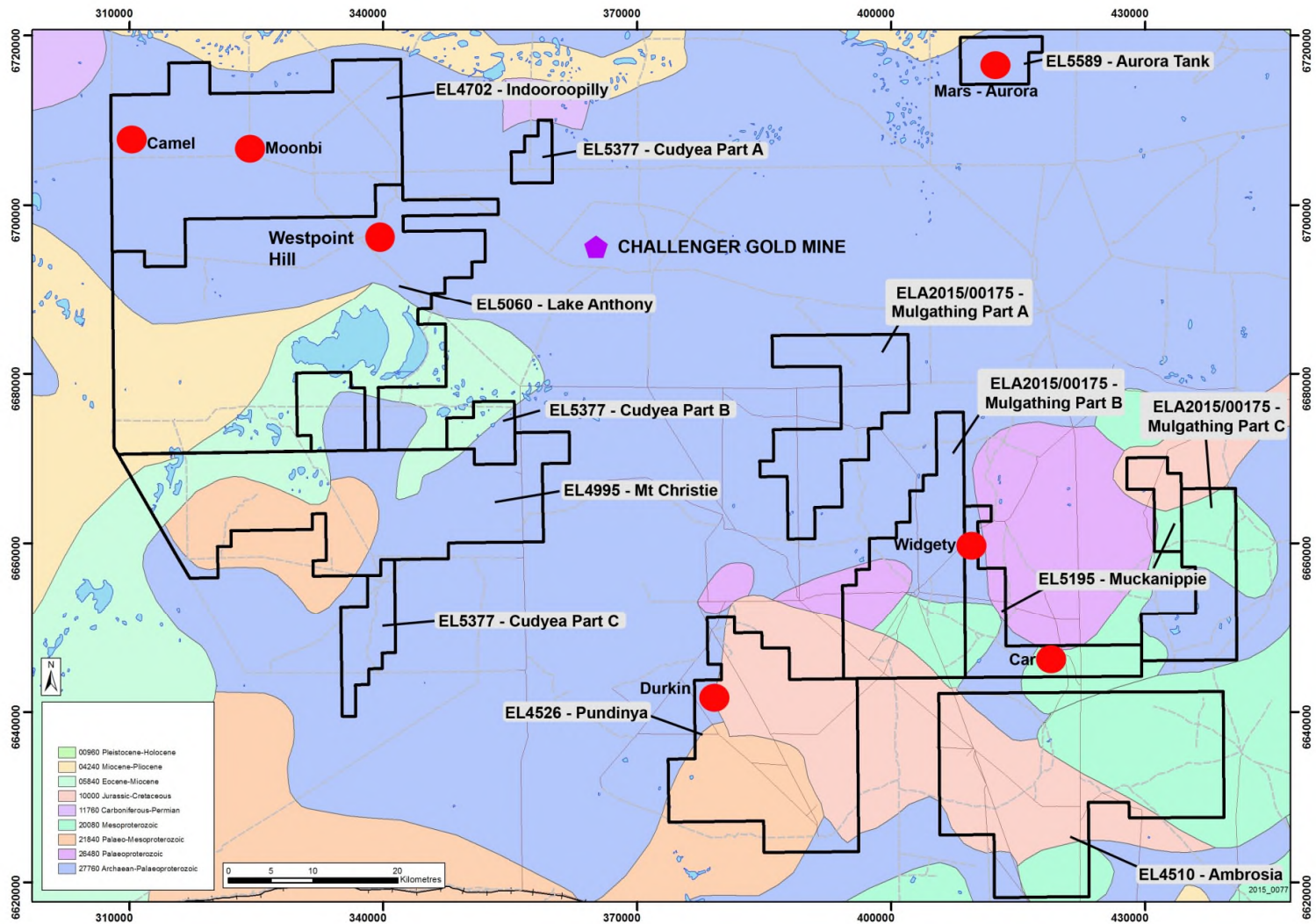




# **CALCRETE SAMPLING -GAWLER CRATON GOLD PROJECT**

**Dan Gray  
Senior Project Geologist**

# Westpoint Hill Location



# Why calcrete sampling?

- Effective exploration tool in this region.
- Challenger Gold Mine discovered.
- Calcrete is a
  - calcium rich sedimentary rock type
  - typically forms just below the surface.
- Occurs in a variety of forms
- Best is nodular or massive

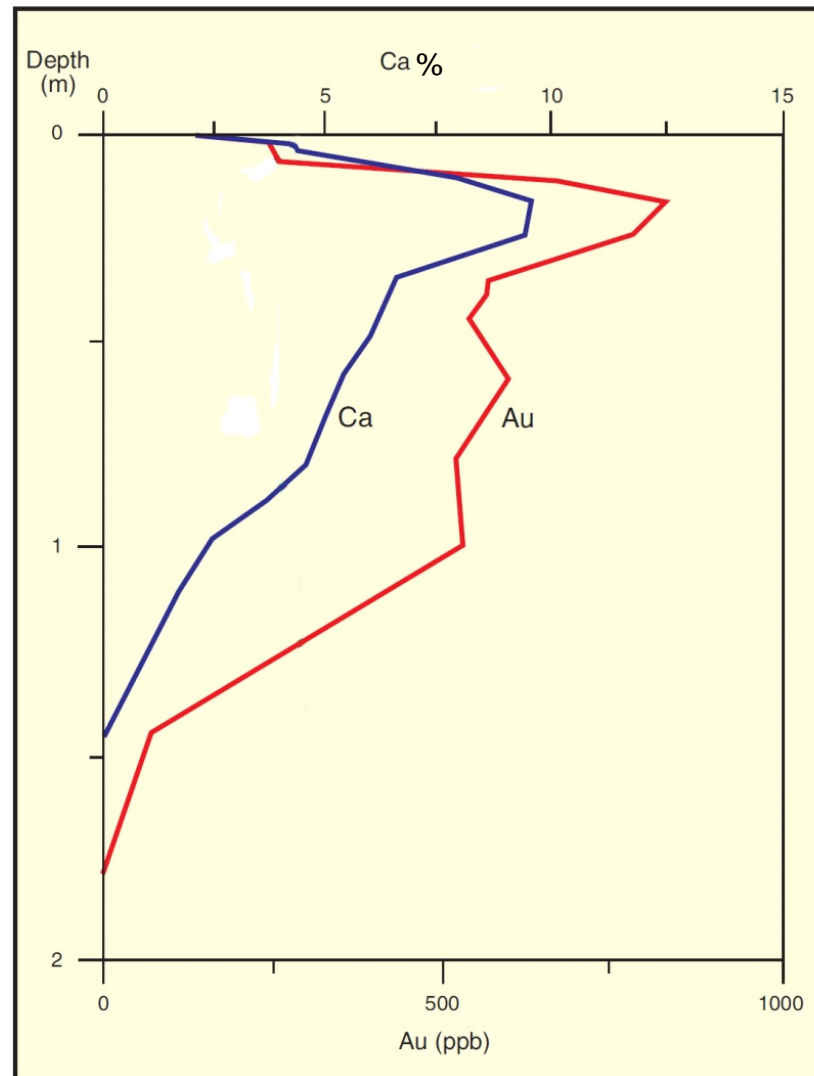


Above: nodular calcrete



Left: massive calcrete

# Amount of calcium important



Calcrete profile (0-2m) above known gold mineralisation  
Diagram adapted from MESA Journal 5, April 1997

# Calcrete sampling



# Calcrete sampling



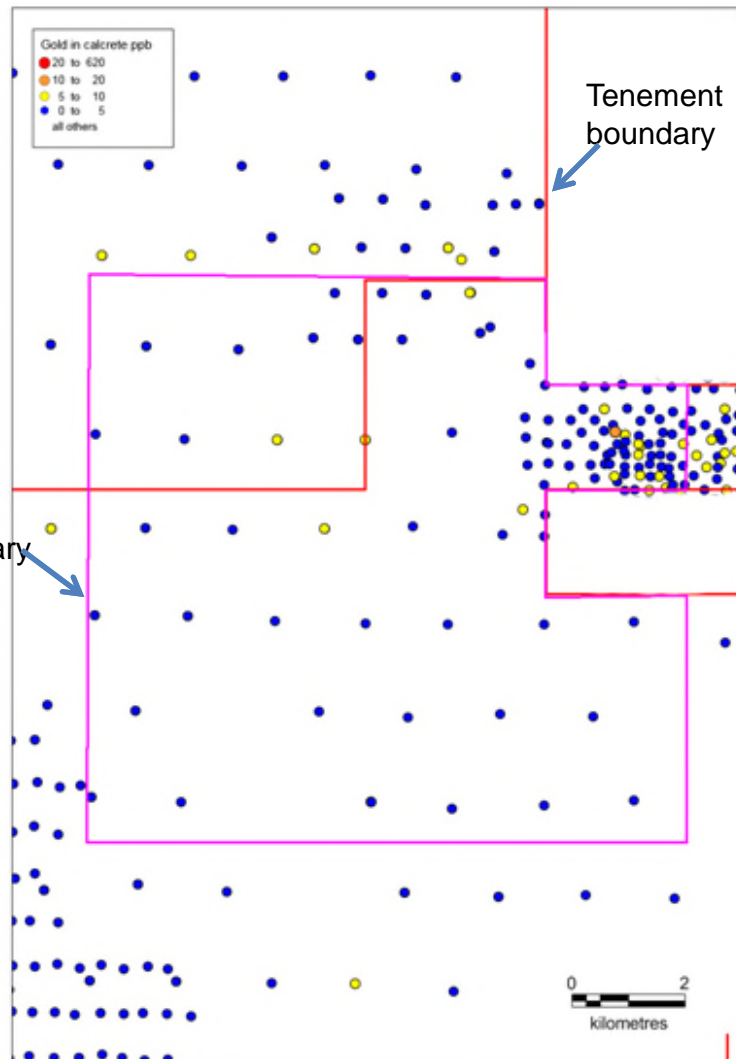
# Calcrete sampling

Video demonstration of Marmota Energy's calcrete sampling

# Calcrete sampling

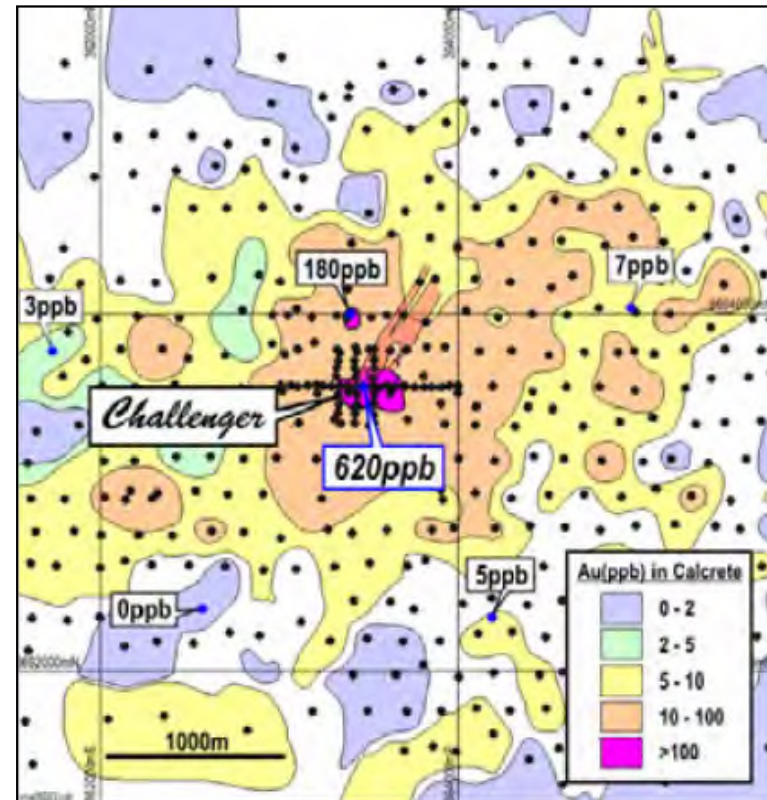
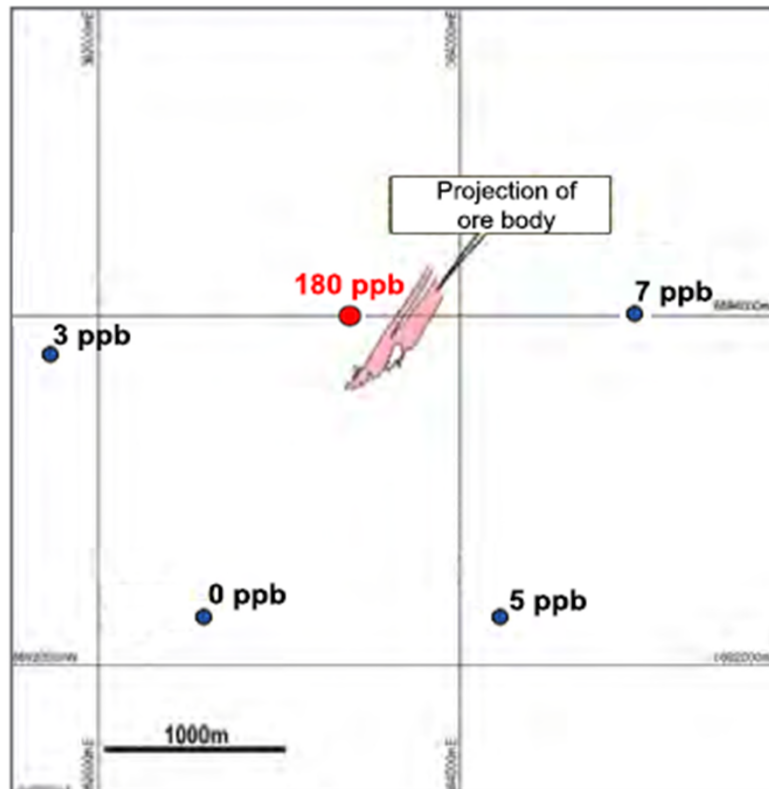
Video demonstration of Marmota Energy's calcrete sampling

# Why Westpoint Hill?



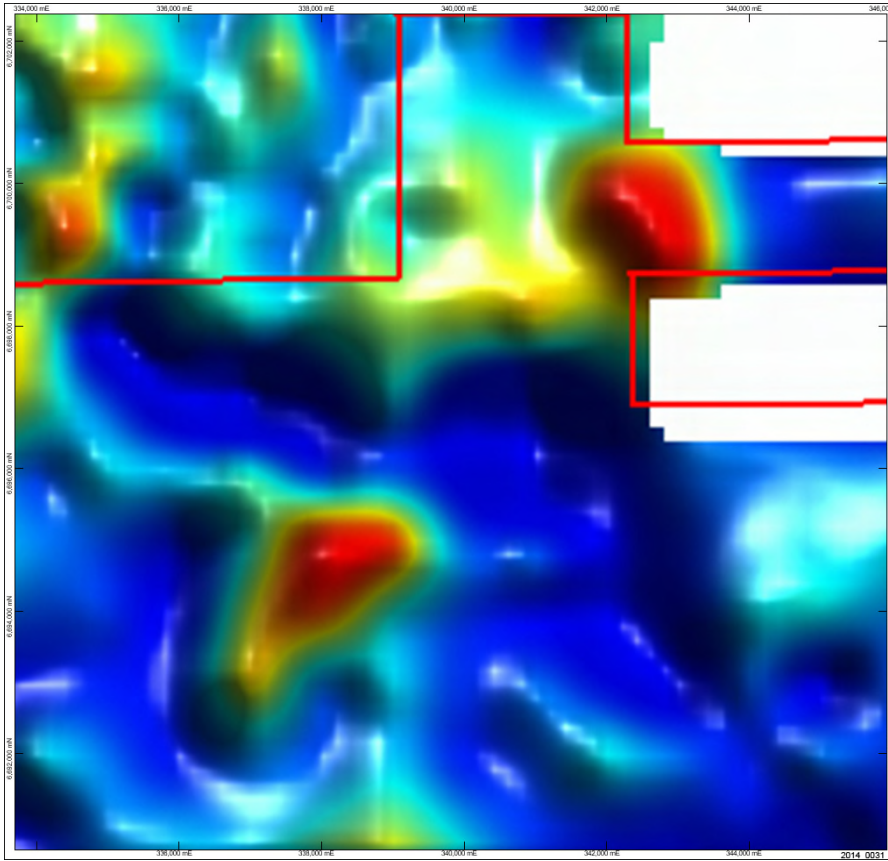
- Historic calcrete results in the area were not encouraging (1.6km grid)
- Previous focus to the NE within the target area
- Interesting unexplained gravity and magnetic anomalies under cover
- But could they have missed something?

# Why Westpoint Hill?

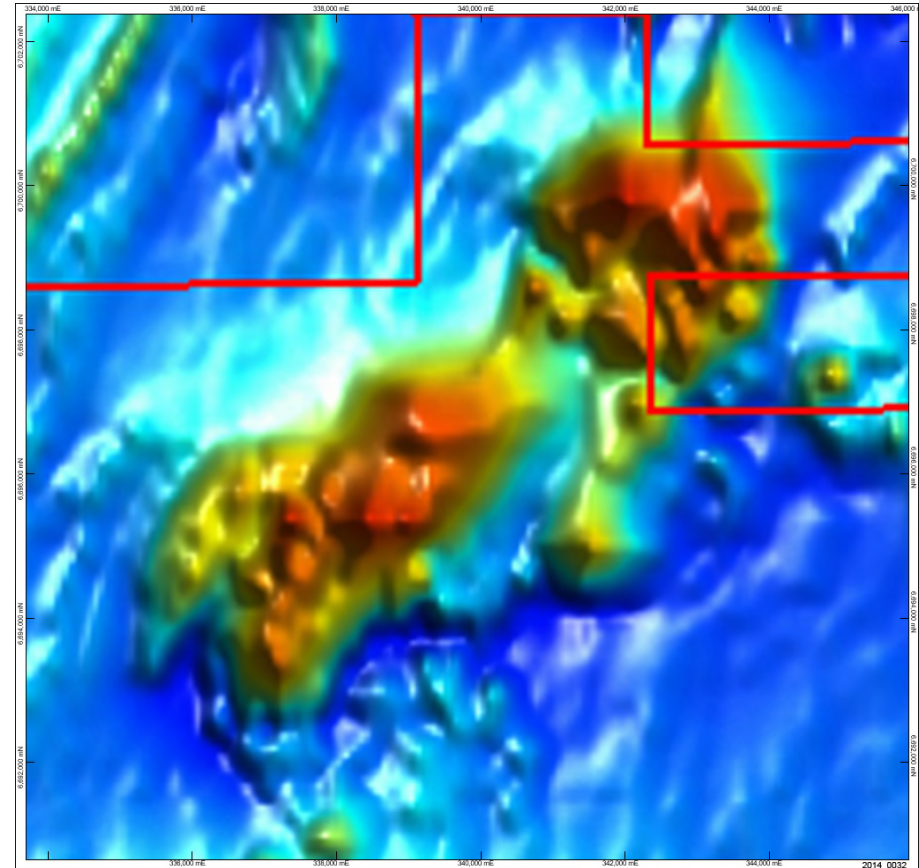


Source: Wills, K and Edgecombe, D – 2014 – *Discovery of the Challenger Gold Mine – Adelaide Conference, SA Branch AIG*

# Why Westpoint Hill?

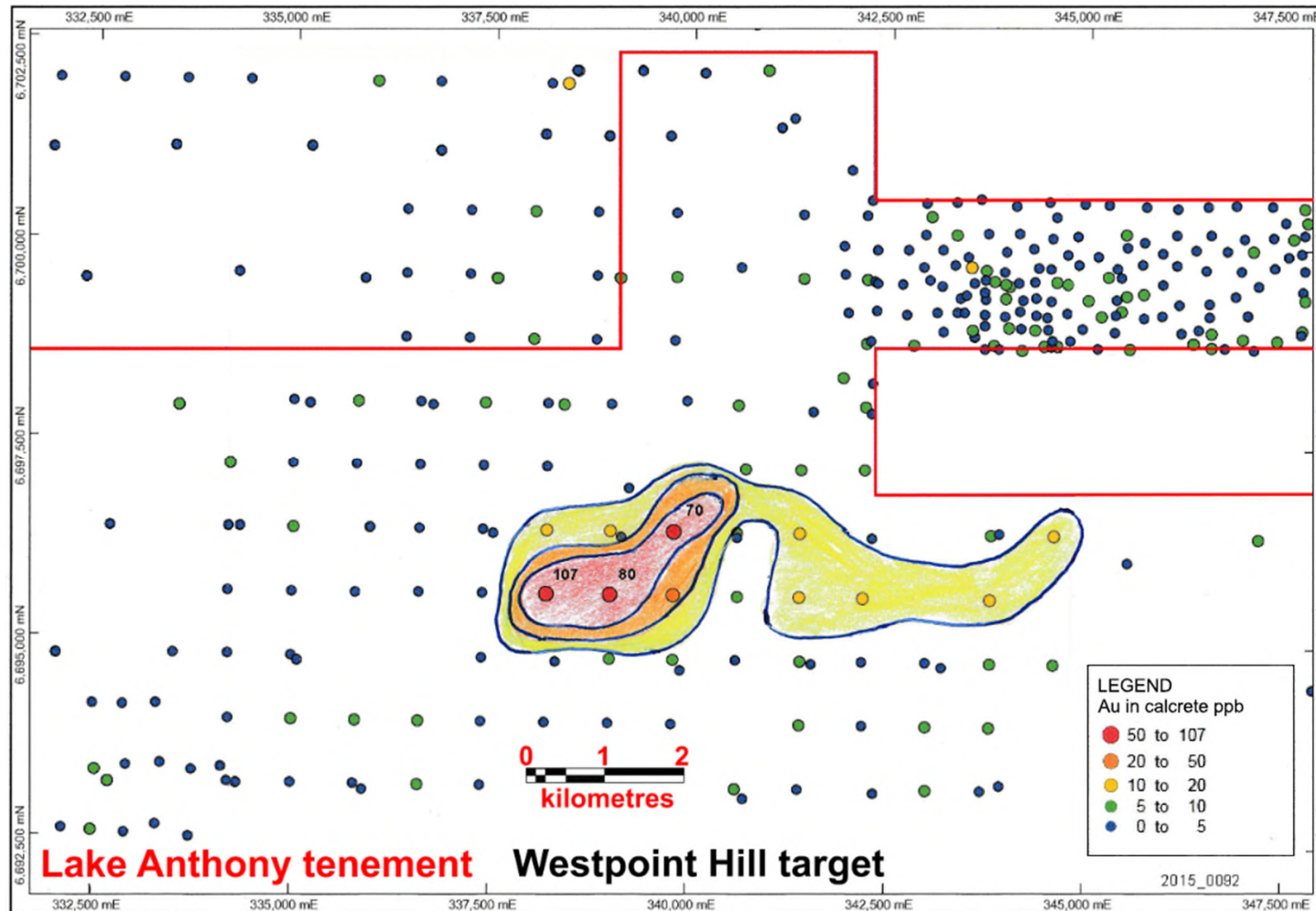


Gravity (1km spaced grid  
Marmota Energy data 2013)

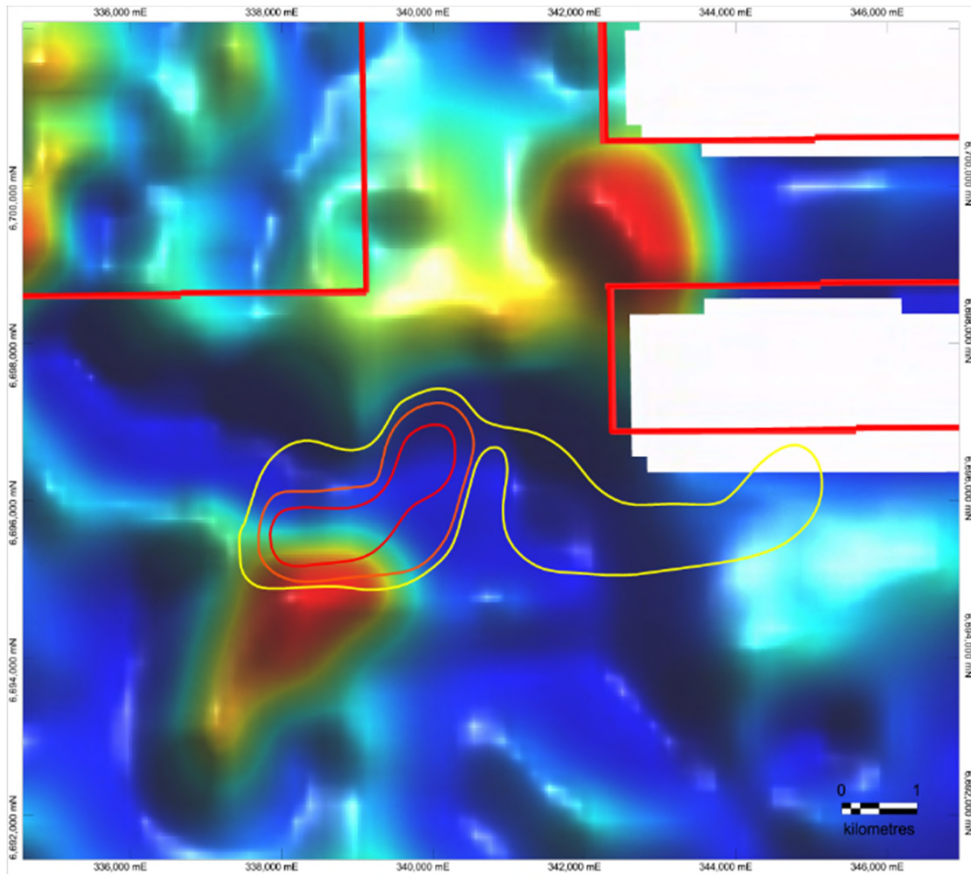


Magnetics (regional airborne  
400m line spaced data)

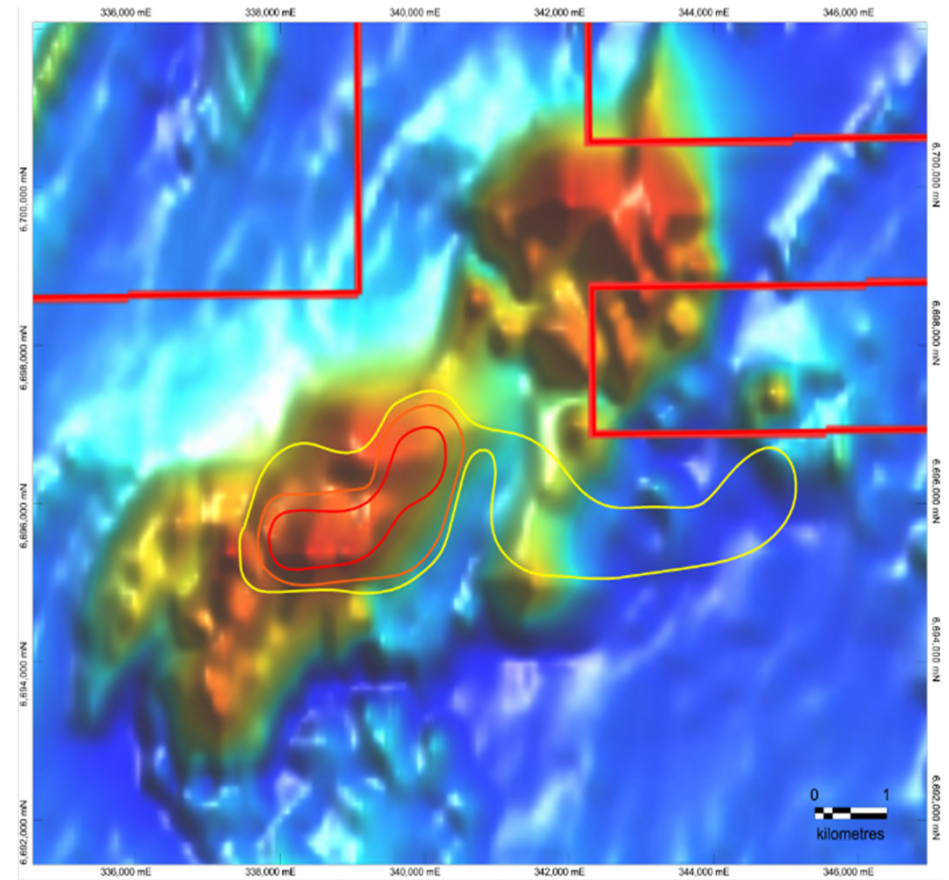
# Marmota calcrete sampling



# Why Westpoint Hill?

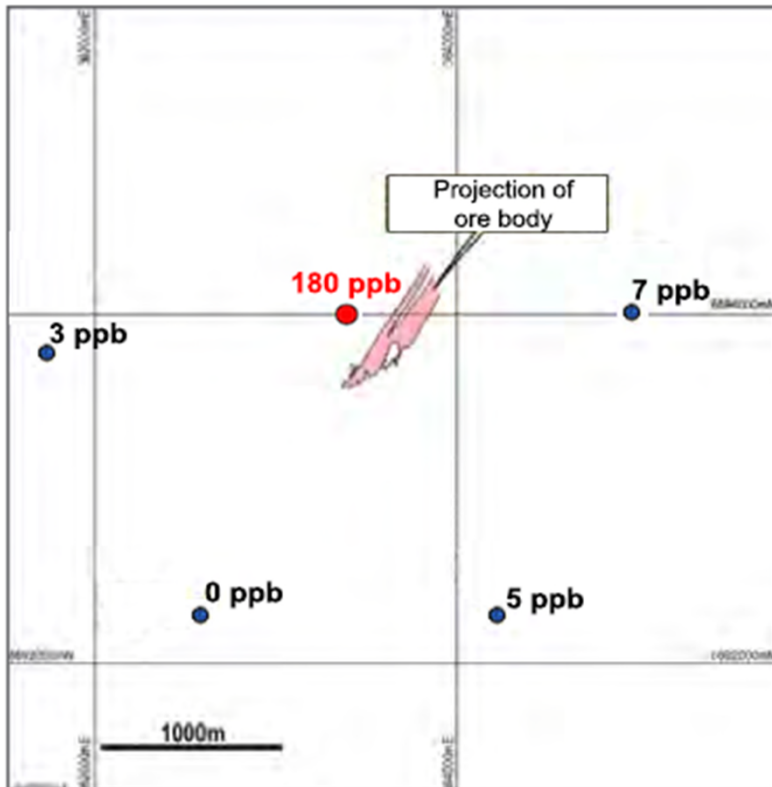


Gravity

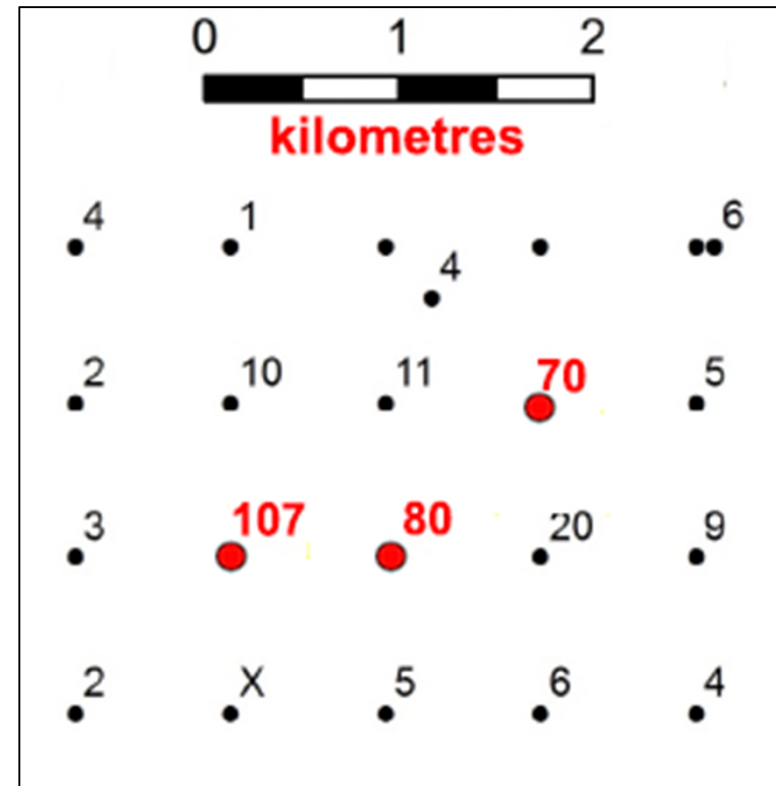


Magnetics

# Similarities with Challenger exploration

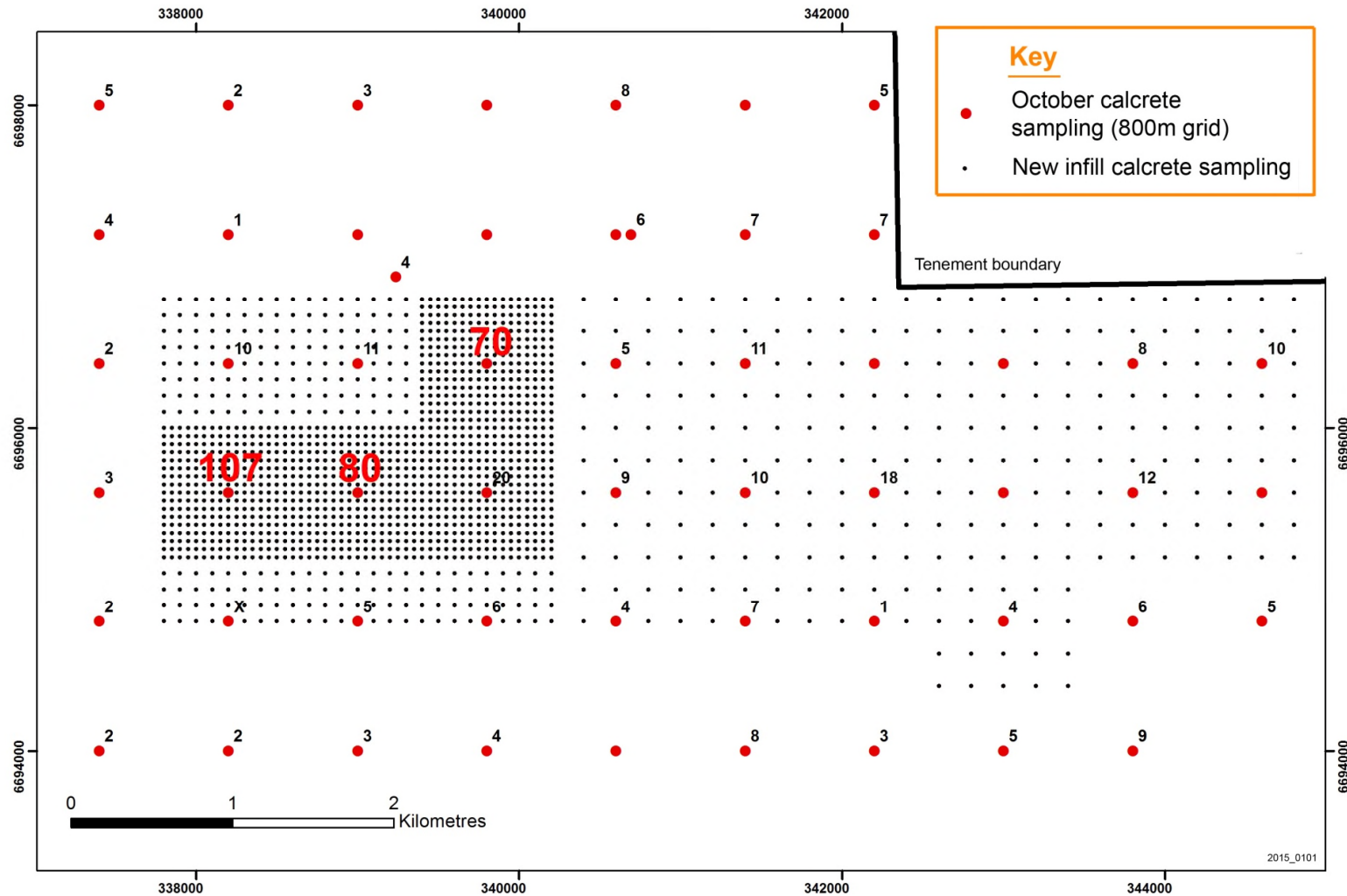


Challenger 1.6km grid



Westpoint Hill 800m grid

# Current infill calcrete sampling



# Westpoint Hill target





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**Competent Persons Statement**

*The information in this presentation that relates to Exploration Results and Mineral Resources is based on information compiled by Dan Gray as Senior Project Geologist of Marmota Energy Limited who is a member of the Australasian Institute of Geoscientists. 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 for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gray consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.*

