



## **Footprints in the Great Sandy Desert**

**UNCOVER Summit – April 2014** 

**ASX : ENR** 

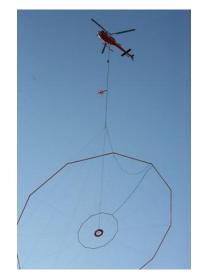
# **GREENFIELDS EXPLORATION**





#### Continental





#### **Project / Regional**





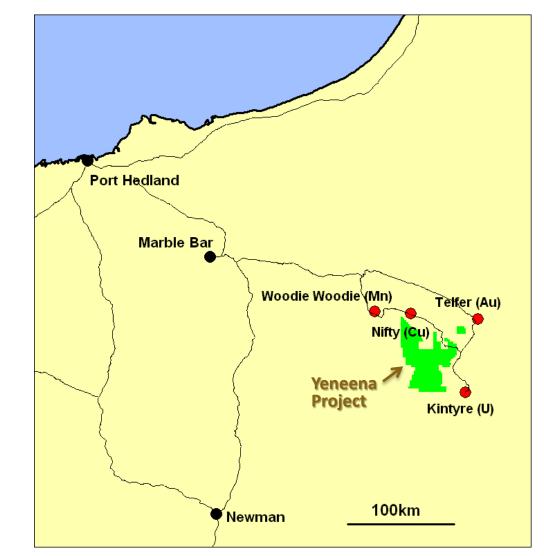
Global

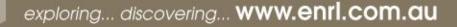


Prospect

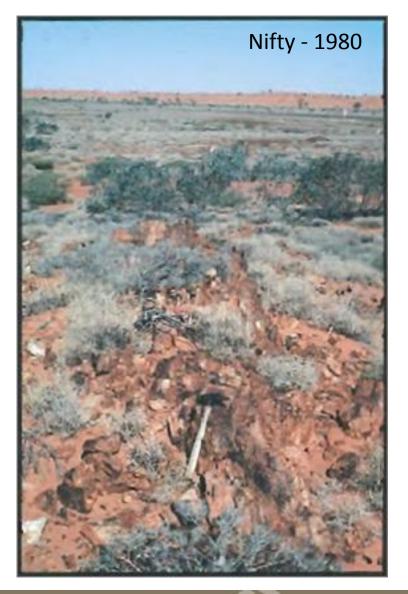
# INTRODUCTION

- Focus on greenfields, large scale metal discoveries
- Major land position in Proterozoic Yeneena sedimentary basin (1900km<sup>2</sup>)
- Surrounded by major mineral deposits (Au-Cu, Cu, U and Mn)





## **HISTORICAL DISCOVERIES**







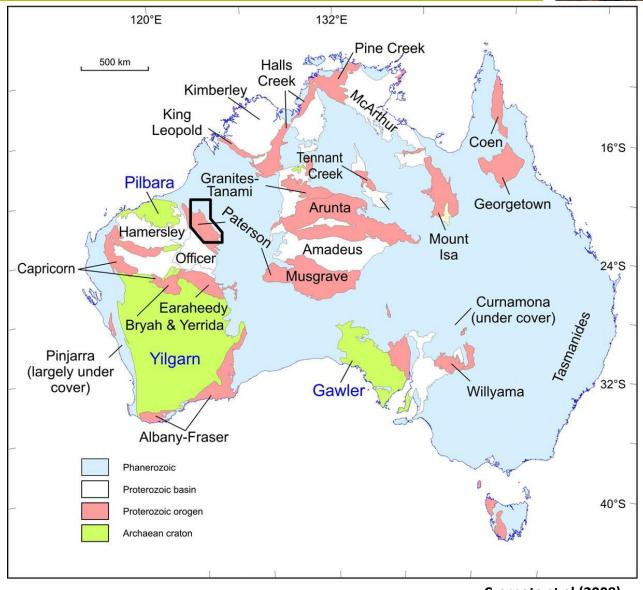


# THE OPPORTUNITY

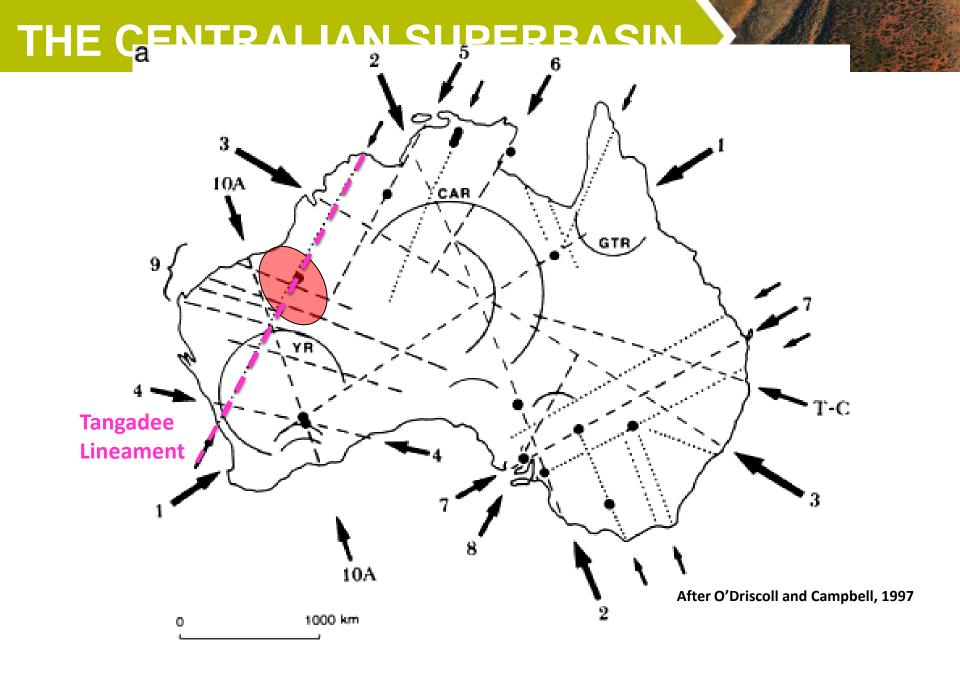




# **CONTINENTAL-SCALE CONTEXT**

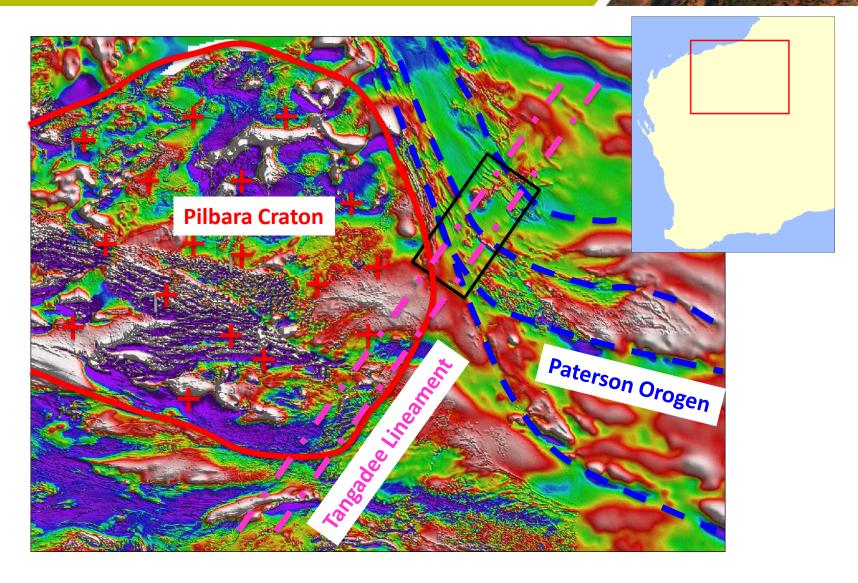


Czarnota et al (2008)



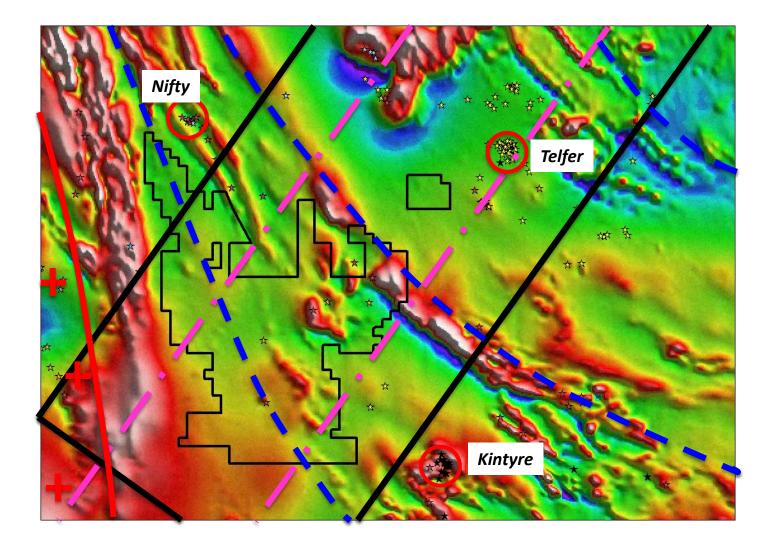


# **REGIONAL TARGET SELECTION**



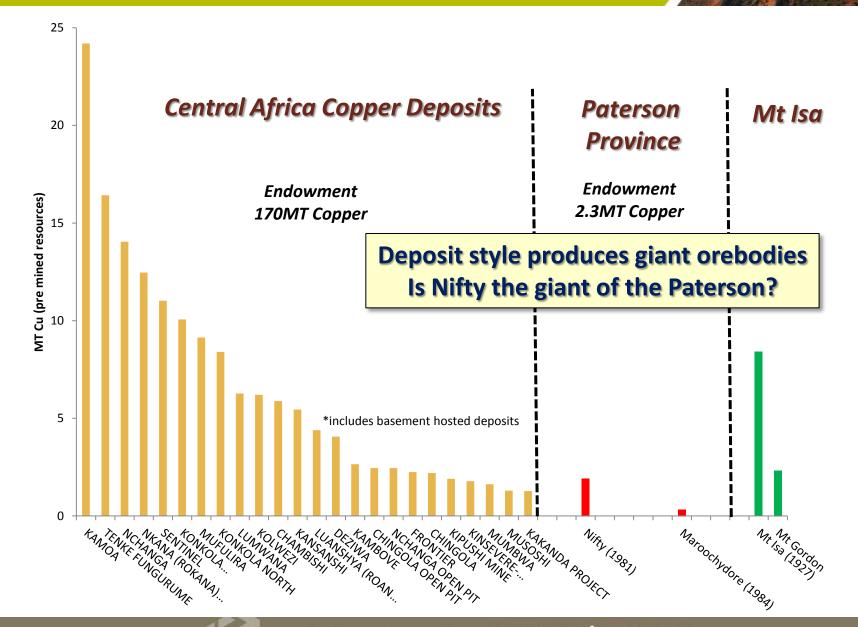


# **REGIONAL TARGET SELECTION**

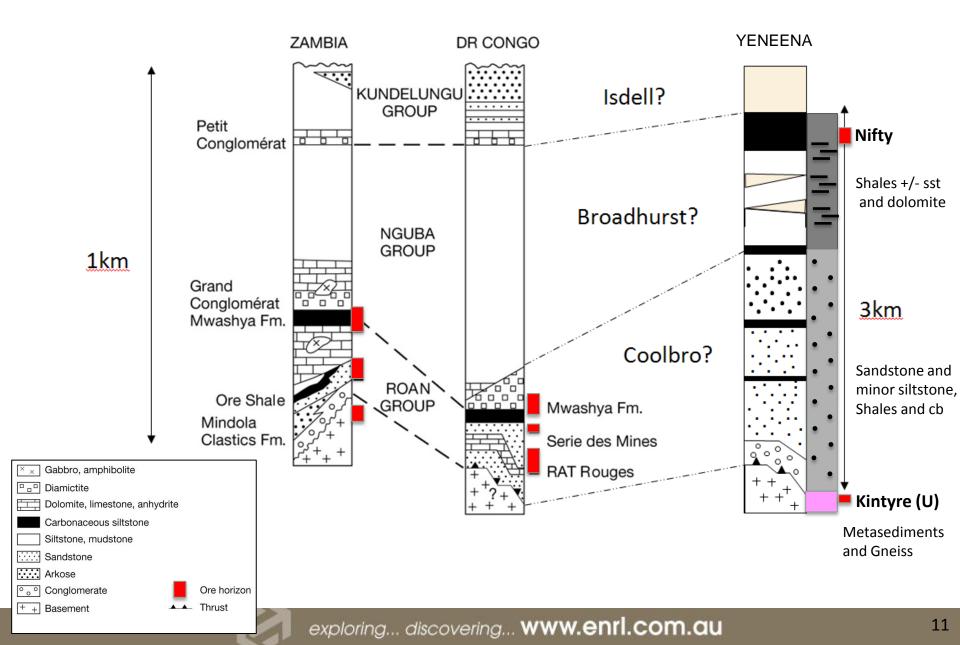




# WHY SEDIMENT HOSTED CU?



## **CENTRAL AFRICAN COPPER**

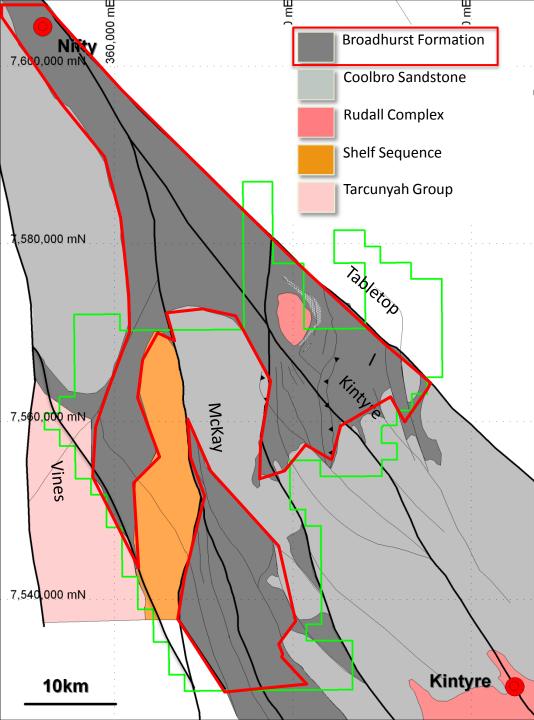


## **GEOLOGICAL INTERP.**

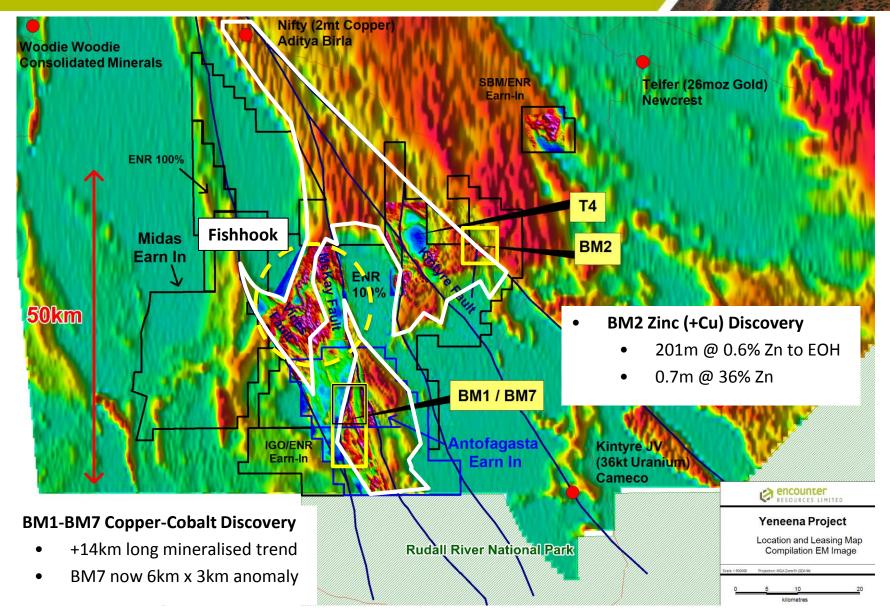
- Geological Domains
  - Geophysical characterisation of geological units
  - AEM KEY effective dataset: EM signatures of Coolbro Sst. vs
    Broadhurst vastly different
- Structural Framework
  - AEM CDIs
  - Breaks and drag folding in conductive flat-lying shales in Broadhurst Fmn

exploring... dis

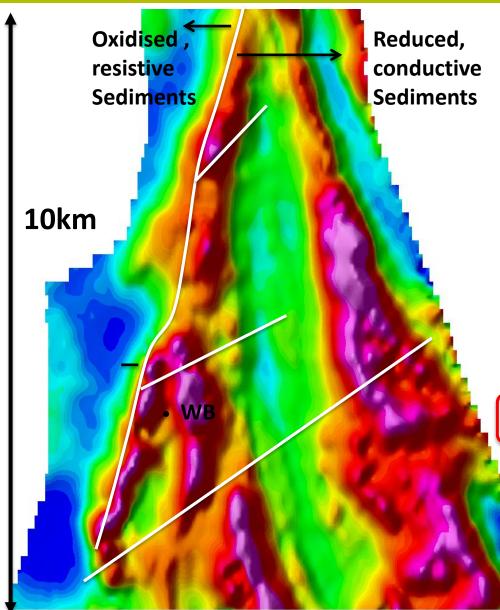
- Integration with independent datasets
  - Gravity
  - Magnetics
  - GSWA Mapping
  - EOH Geology



## **TARGET GENERATION**



# **PROSPECT DEFINITION**



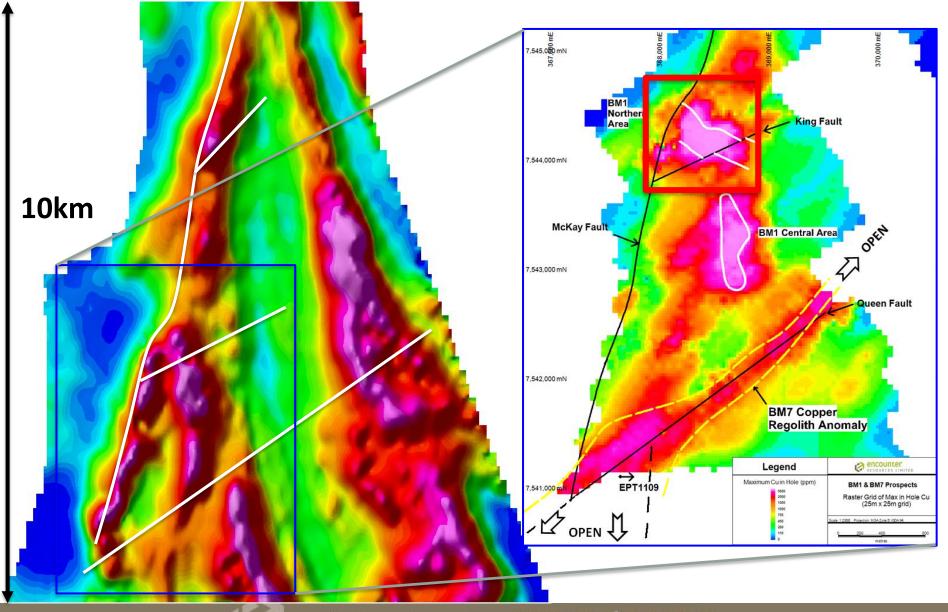
- Airborne EM (VTEM)
  - Structural / Geological Interpretation
  - Historical Data Compilation
  - Regolith Drilling (Aircore)

# LOTS OF AIRCORE DRILLING





# BM6 – BM1 – BM7 REGOLITH CU



# **BM1 - BM7 PROSPECTS**

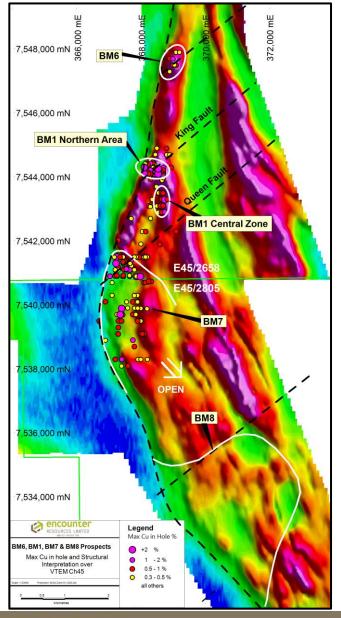
## Mineral system 14km long and growing





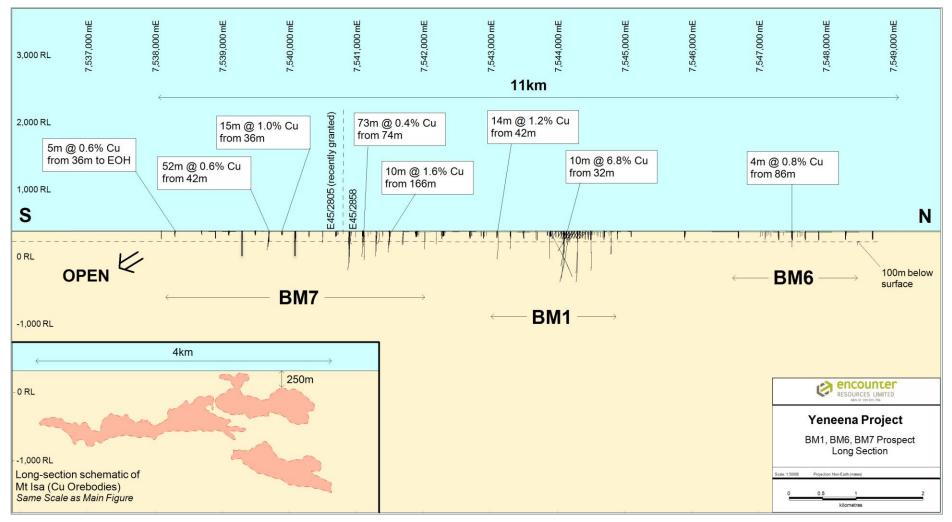






# LONG SECTION BM6-BM1-BM7

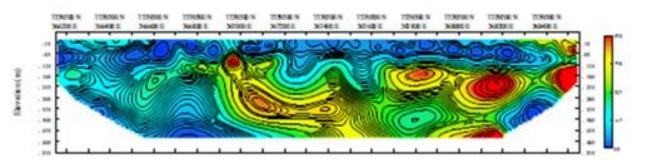
#### Shallow drilling defines major new Copper-Cobalt mineral system



Antofagasta farming-in

# **DIRECT DETECTION ?**





- Partial Leach Geochemistry
- Ground EM
- Ground IP
- Detailed ground gravity
- Detailed Seismic
- AMT

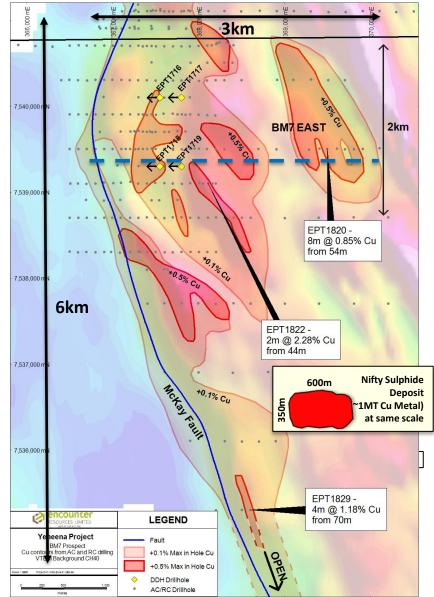




# **BM7 2013 SUMMARY**

### **BM7 mineral system**

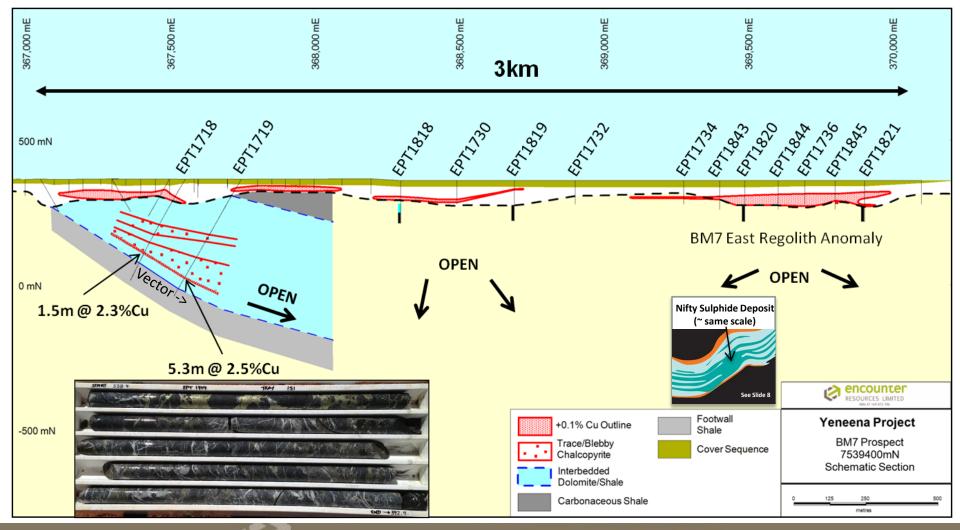
- Regolith anomaly 6km in strike and up to 3km in width
- Generated specific new primary copper sulphide targets
- Extraordinary copper oxide footprint with high grade copper in the primary zone
- System remains open to the south and south east



(refer ASX announcement 27 Nov 2013)

# **BM7 SCHEMATIC SECTION A-A'**

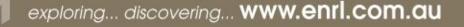
#### Diamond drill program has confirmed depth extensive copper sulphide mineralisation and established the high grade potential of BM7 system



# **EXPLORATION LEARNINGS**

#### Exploring the Yeneena for new copper systems

- Extensive cover of between 1 to 15m
- Detailed VTEM defined broad area of subdued conductance and key structural intersections
- Shallow regolith drilling highlights areas of interest
- EM, IP, Gravity, Magnetics or Surface Geochemistry has not delivered direct detection of high grade mineralisation
- Broad spaced drilling to allow structural targeting and define lithogeochemical vectors to high grade copper sulphides.



# **REGIONAL COPPER TARGETS**

**Untested targets north of BM1-BM7** 

- VTEM Survey completed
- Significant north-east trending structure that mirrors the BM1-BM7 copper system
- Shallow sand cover
- Minimal previous exploration a handful of holes – anomalous in copper

