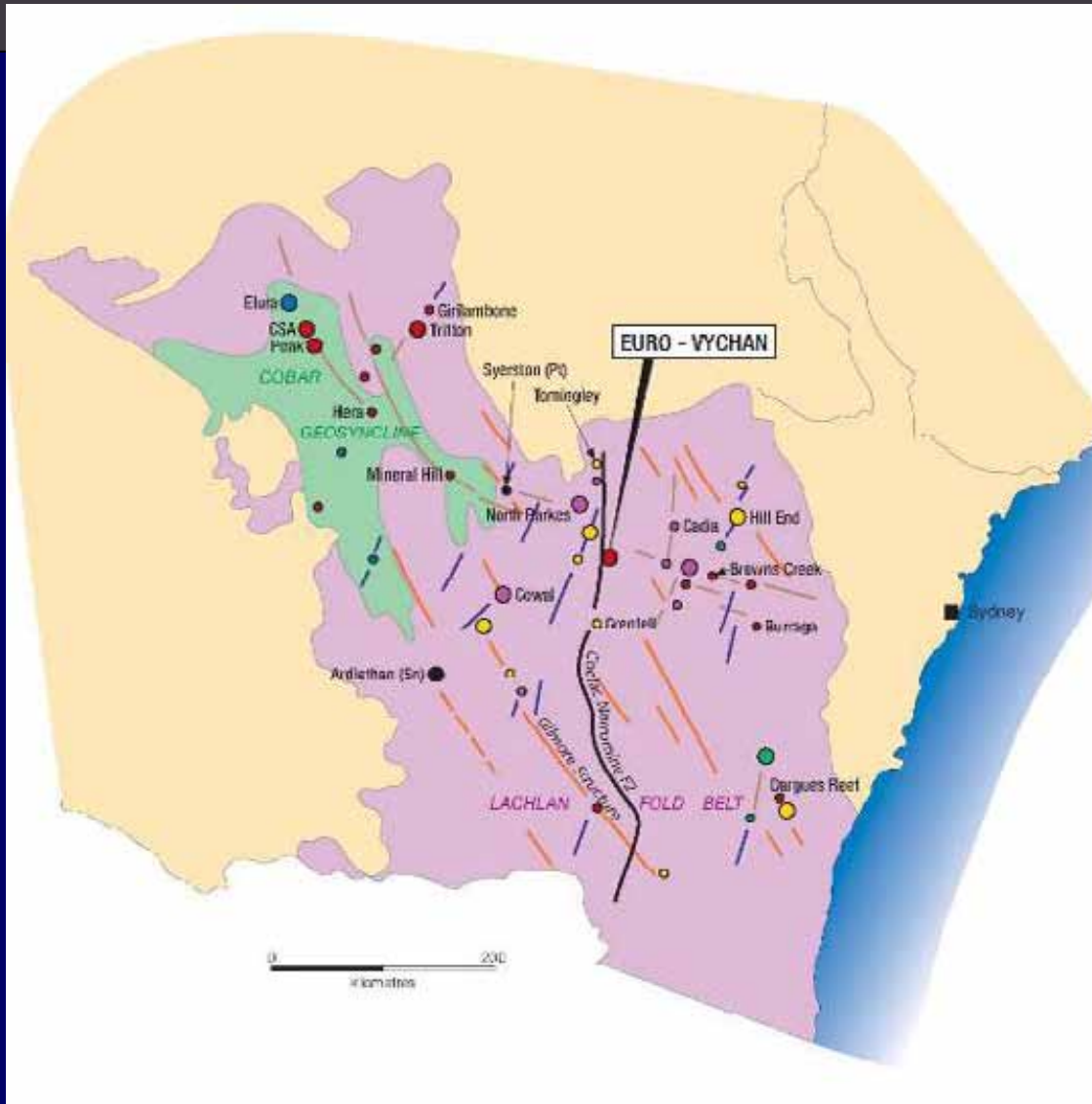


# Southern Gold Limited

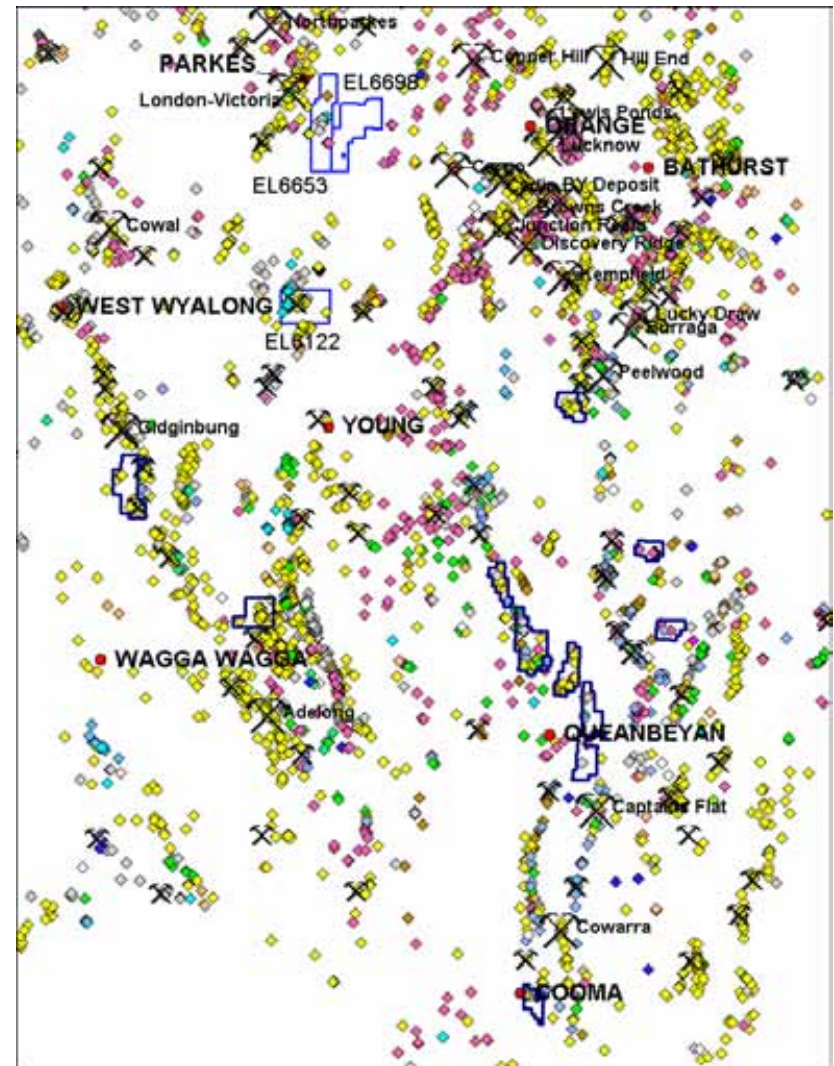
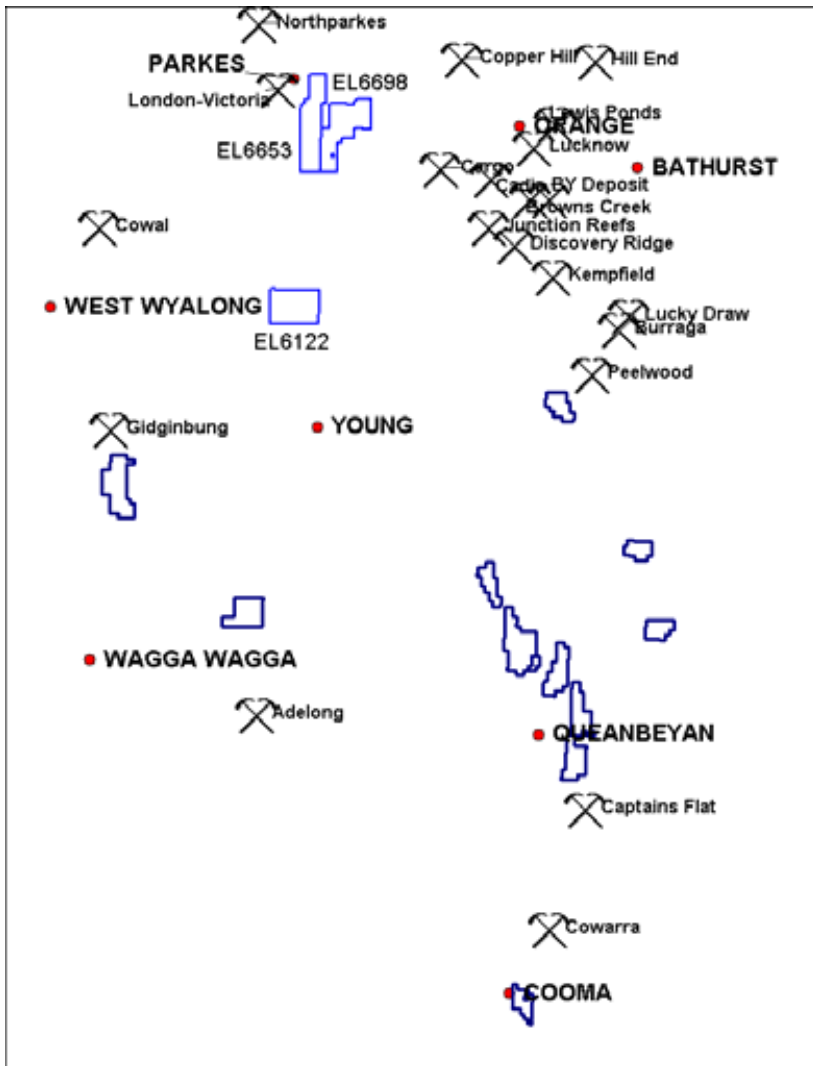
## Lachlan Fold Belt

### Eurow-Vychan historical Cu mine location



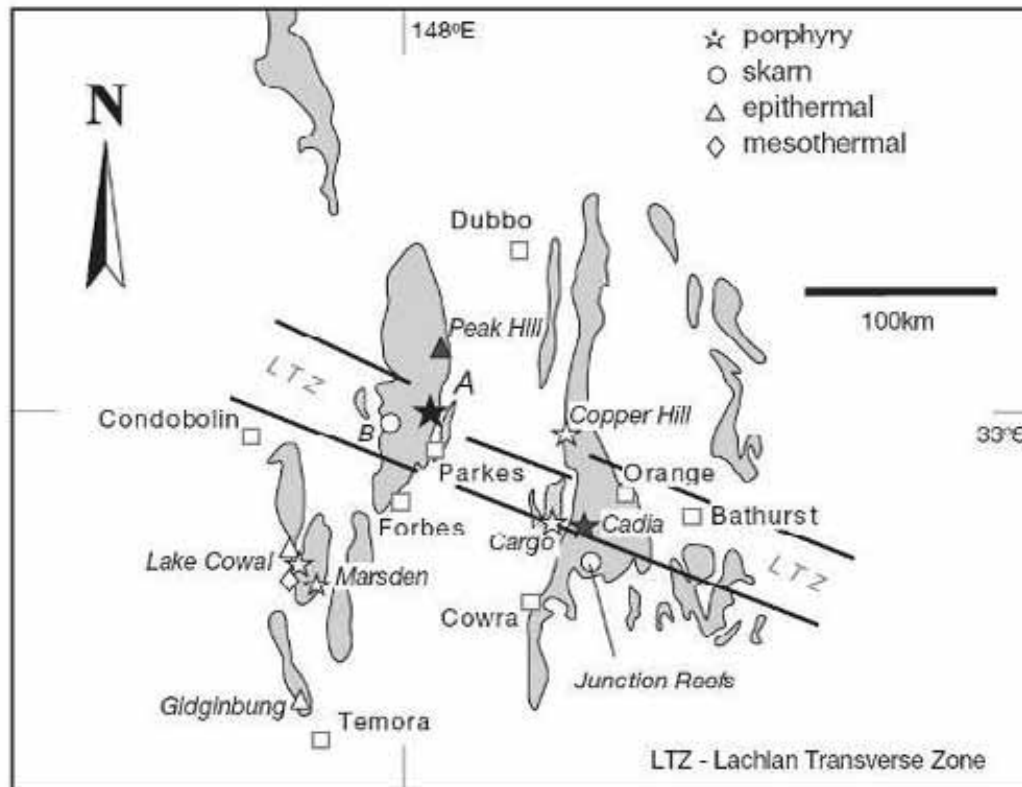
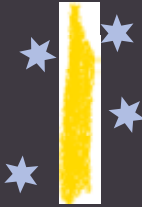
# Southern Gold Ltd

## NSW ELs and ELAs and NSW DPI data - mines, deposits and mineral occurrences

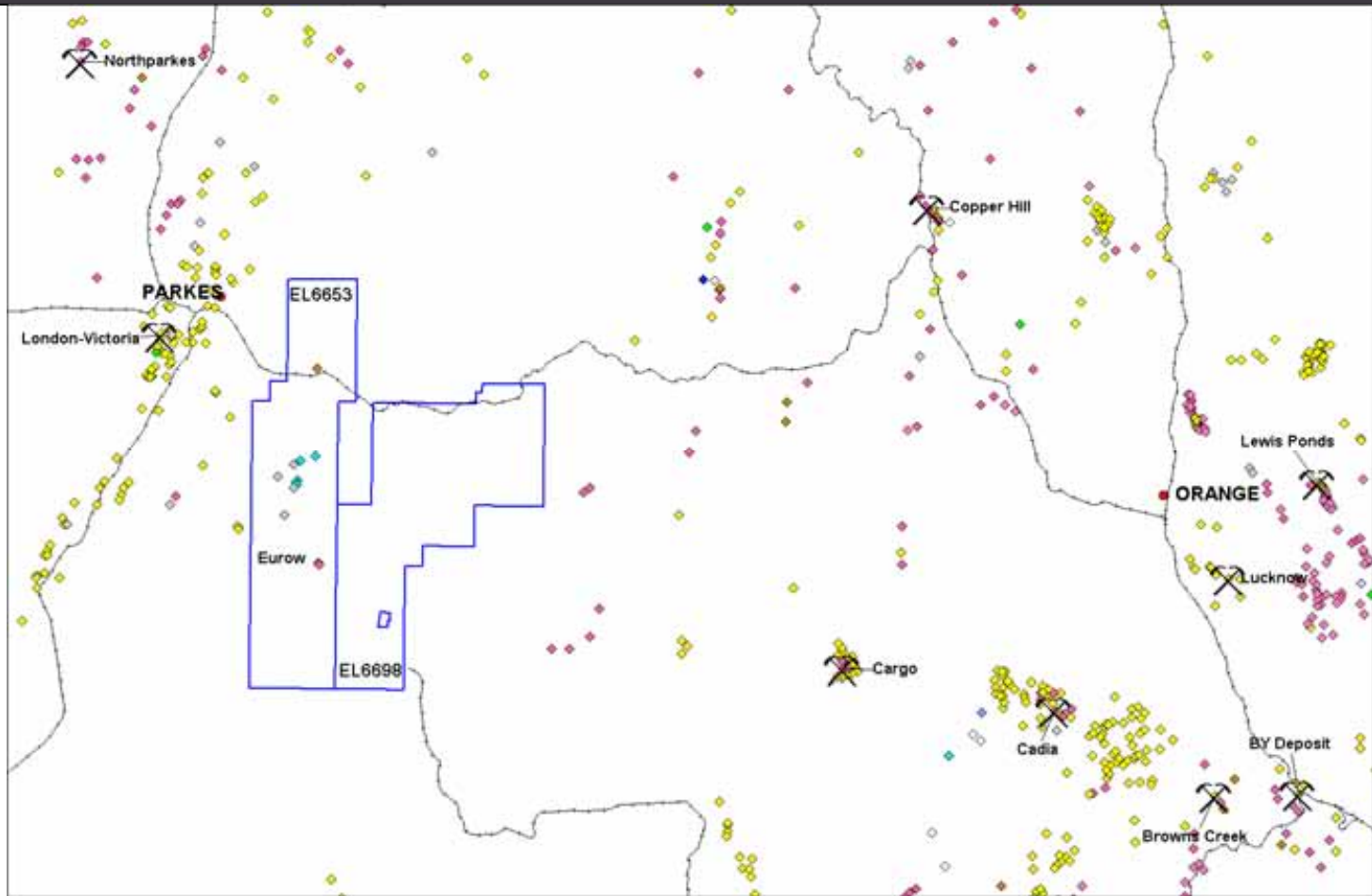


# LACHLAN TRANSVERSE ZONE

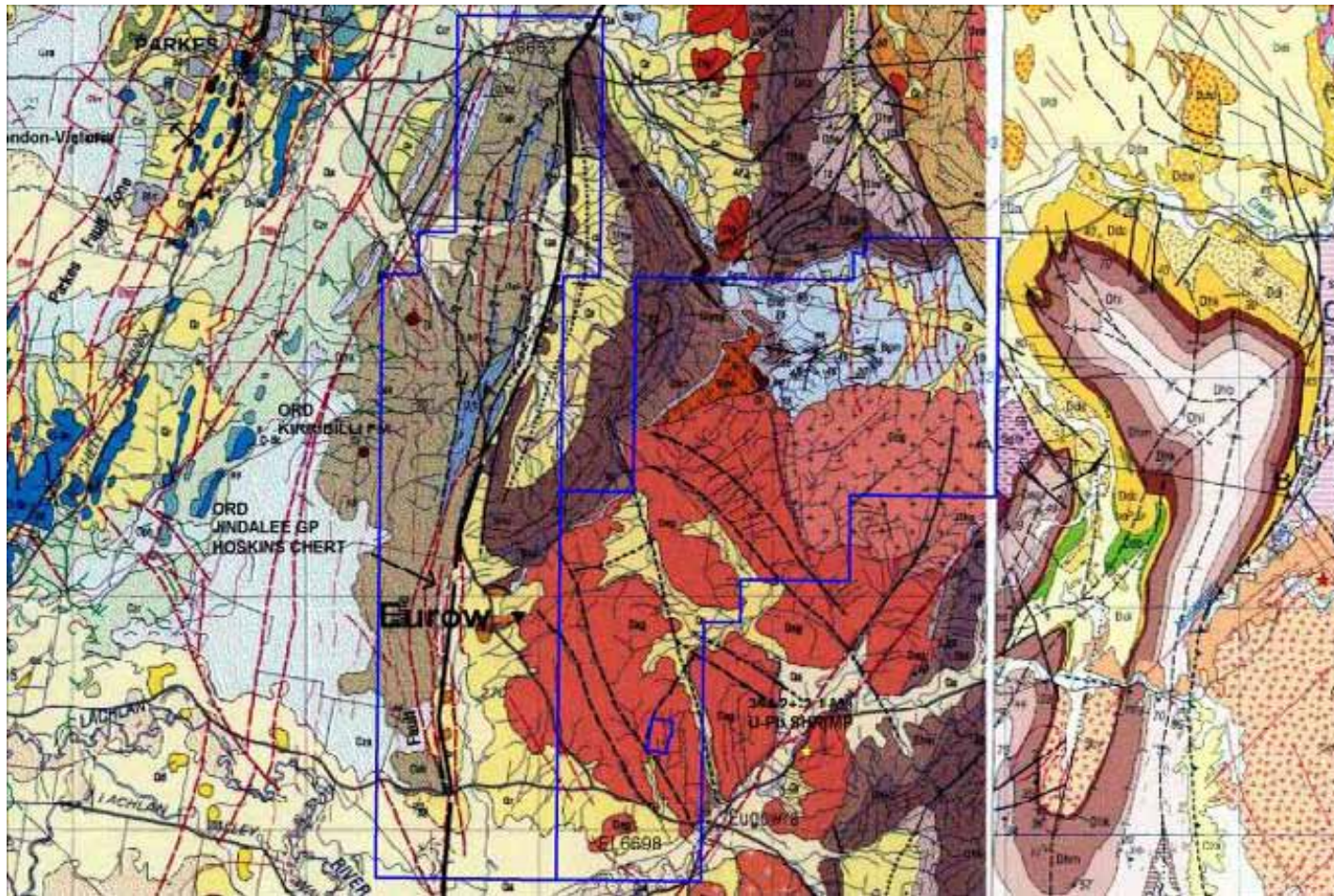
(Lickfold et al, 2003)



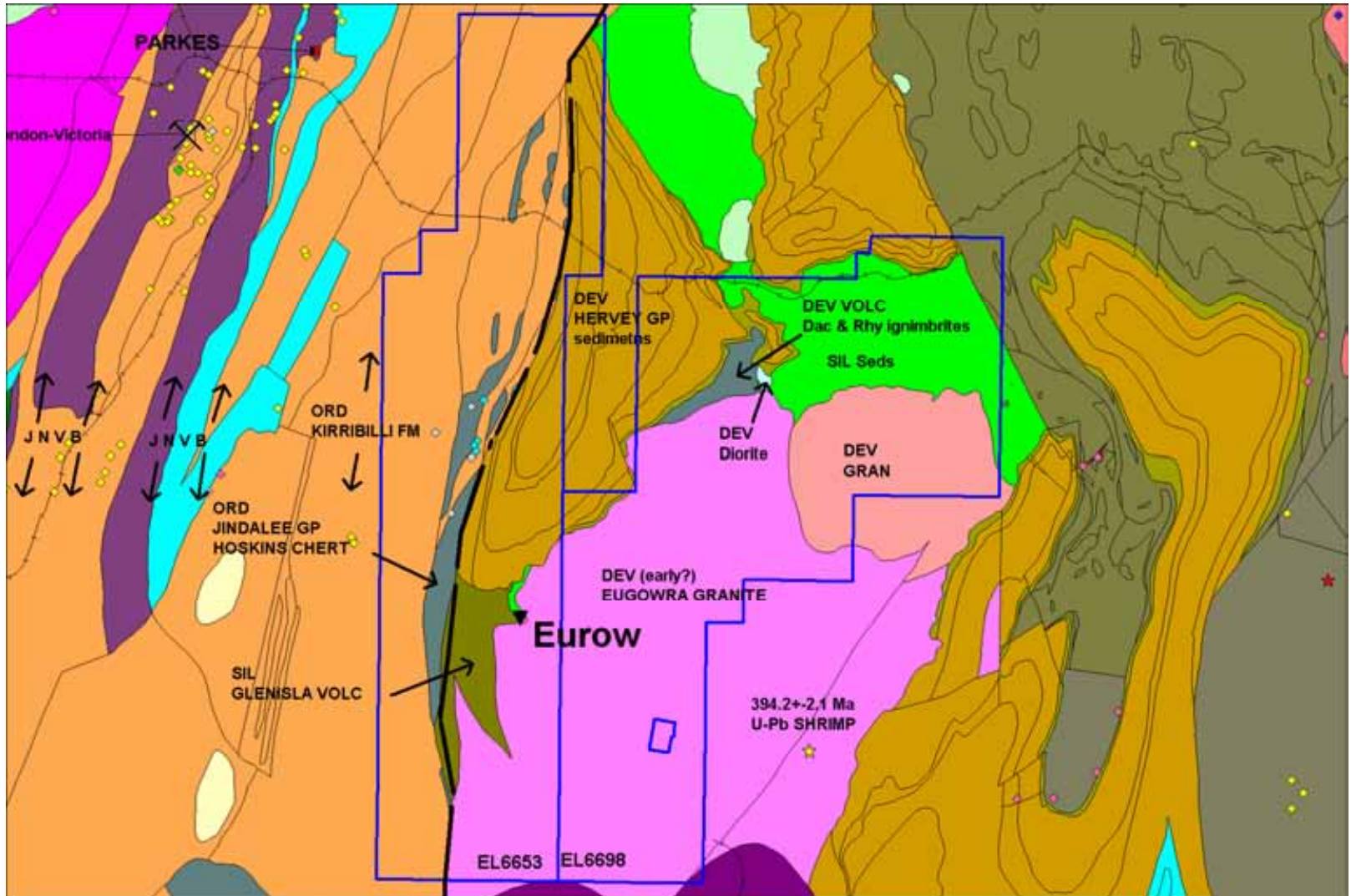
# Orange-Parkes area metallogeny



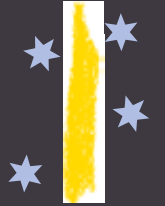
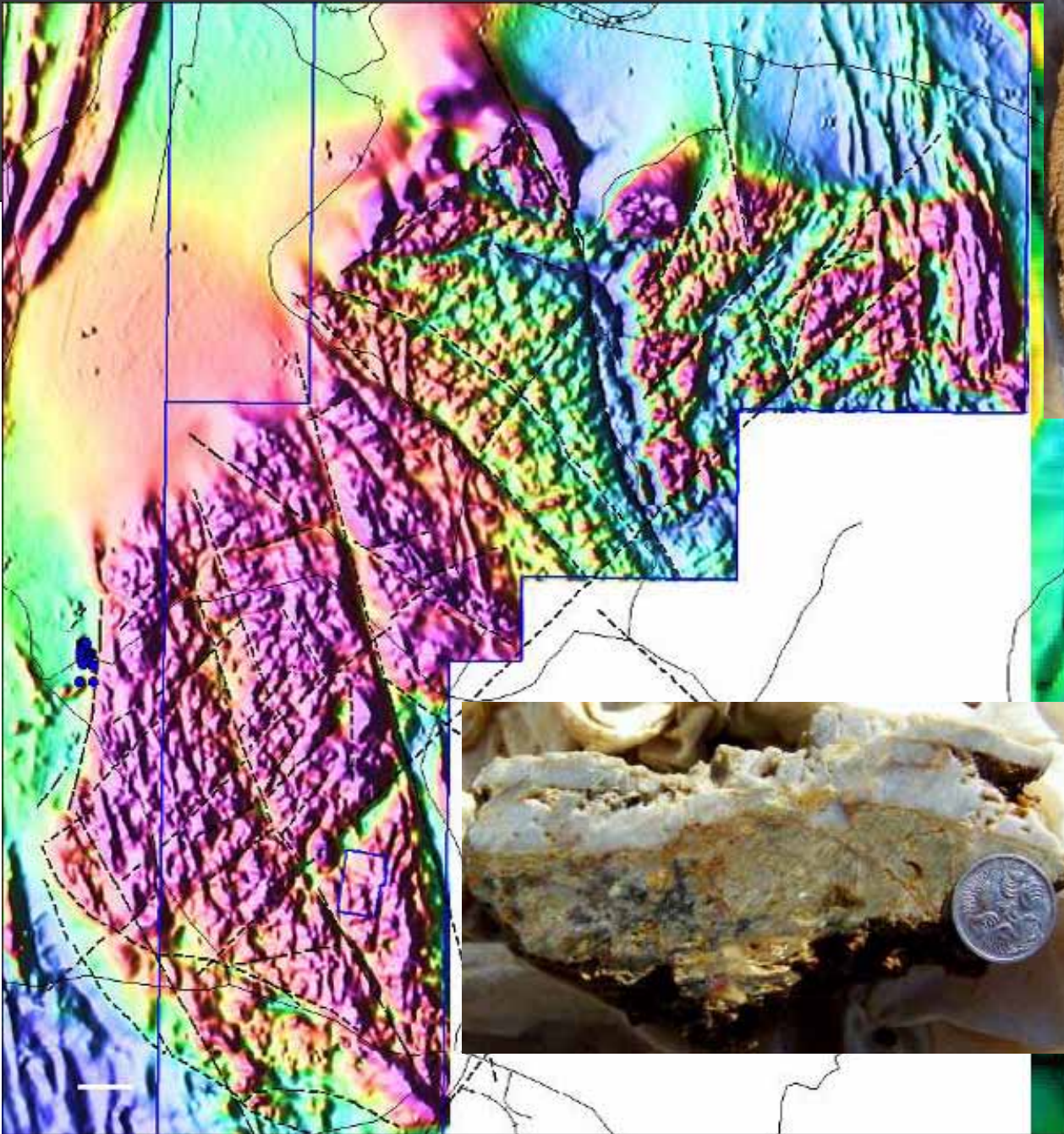
# 1:250,000 GEOLOGY



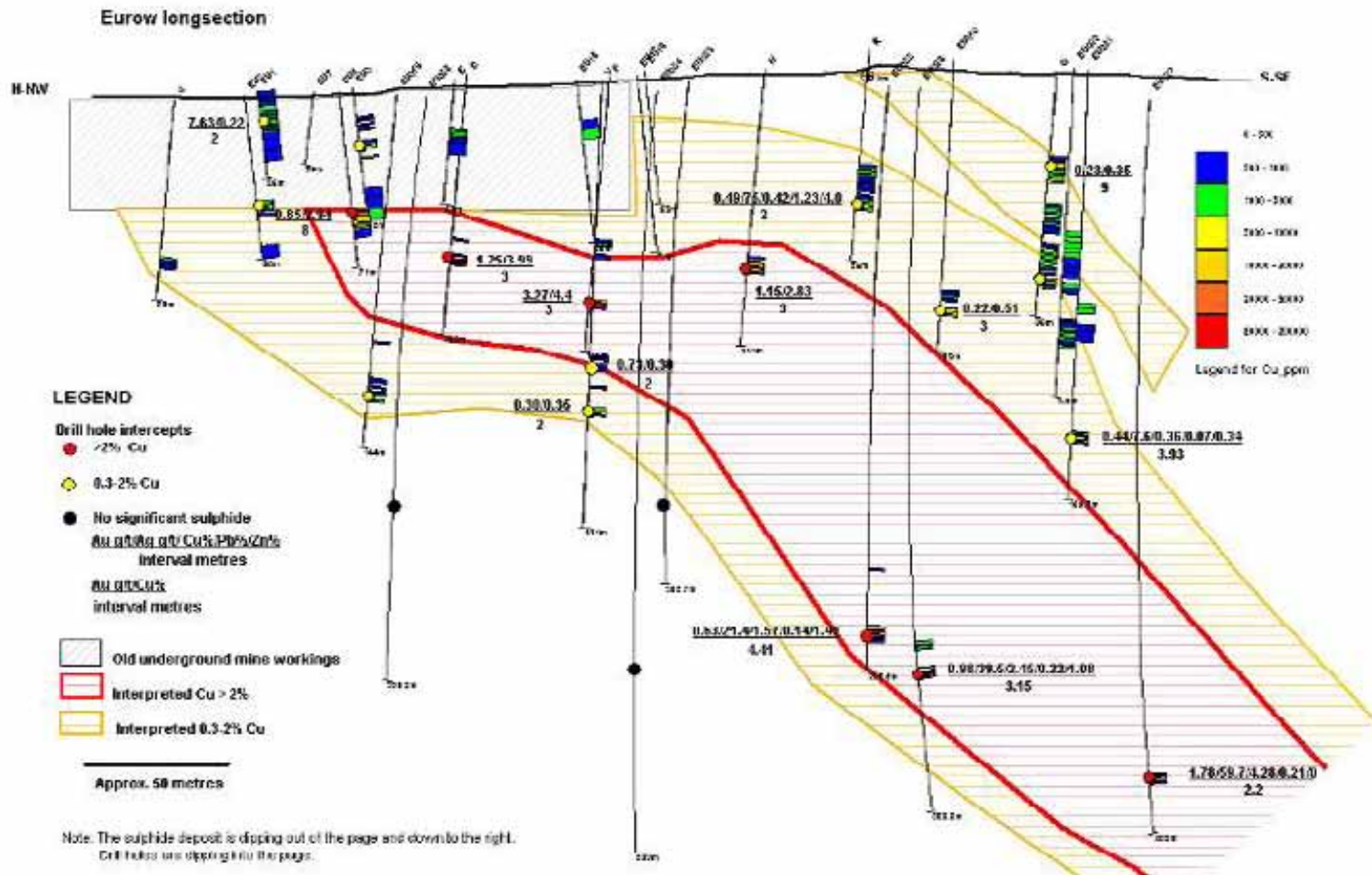
# NSW DPI digital geology



# MAGNETICS - RTP



# Eurow long section



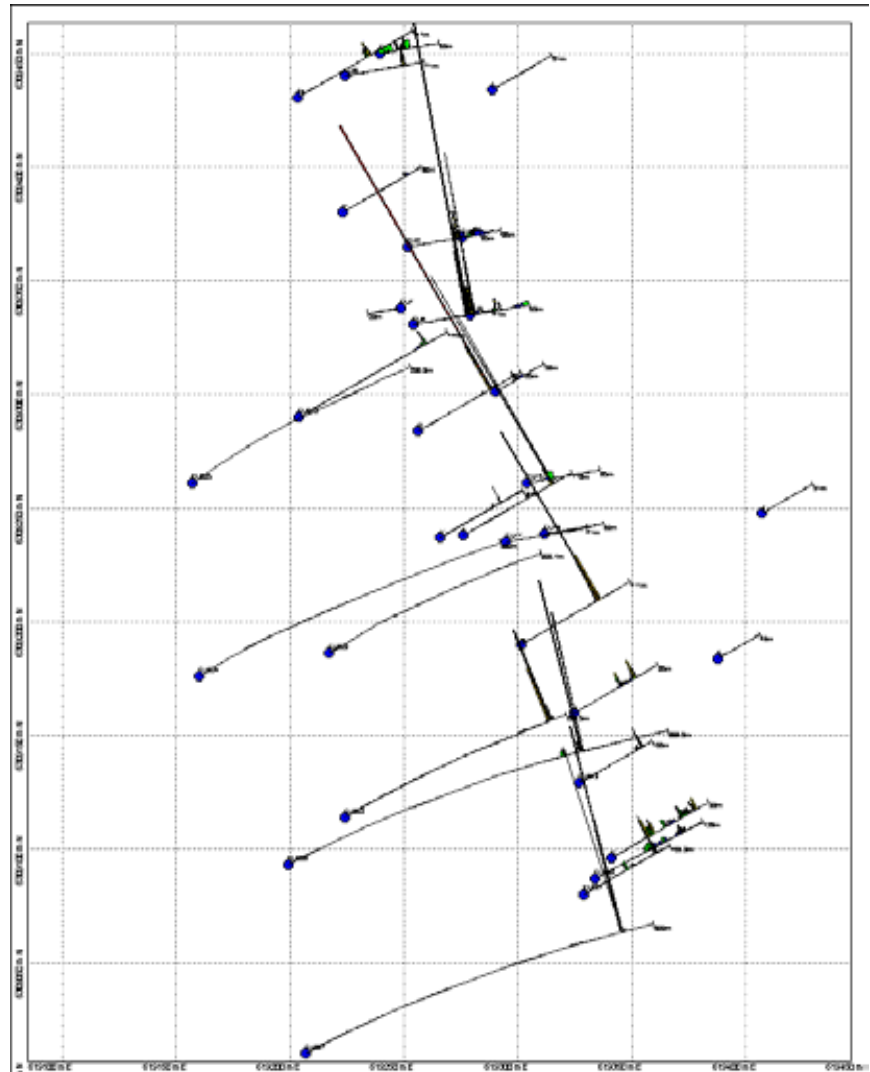
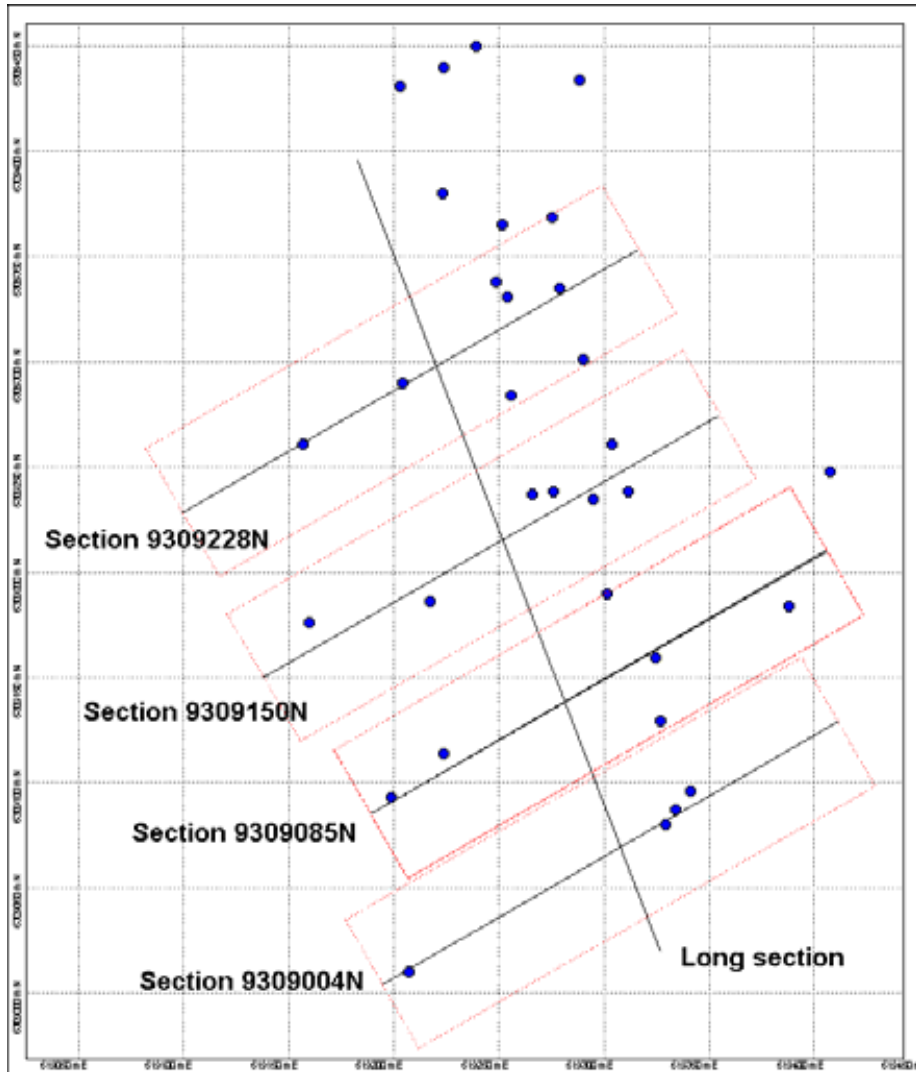
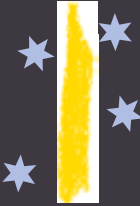


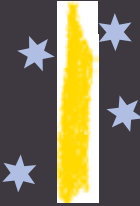
# High grade sulphide zone metal composition



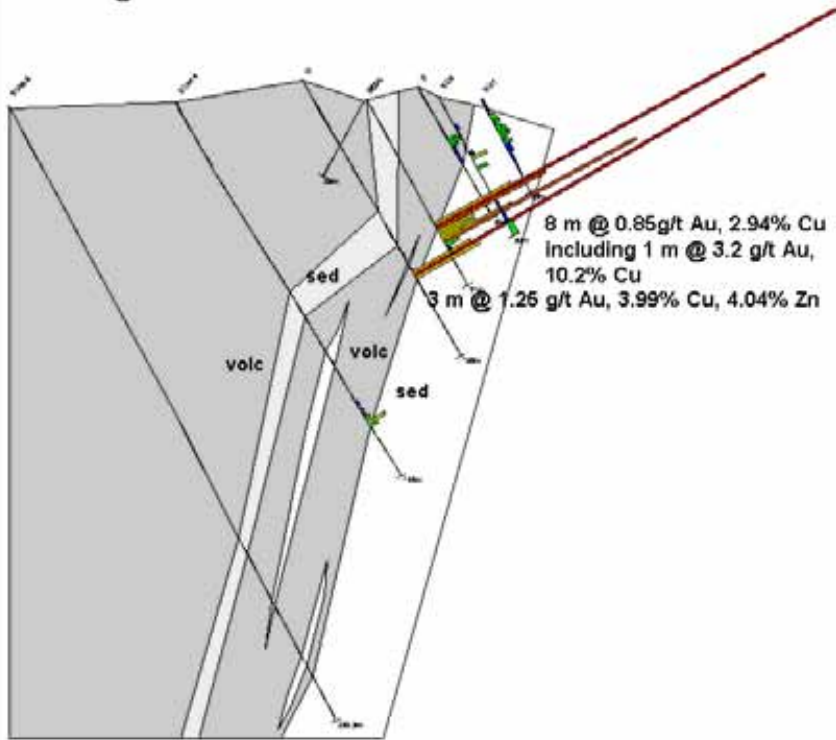
- **Dominant pyrite and pyrrhotite**
- **Up to several percent chalcopyrite**
- **Minor sphalerite (but with zone of several percent Zn over 100 m strike length)**
- **Very minor galena**
- **Gold – generally 1-2 g/t**
- **Silver – variable up to 80 g/t**
- **Associated trace As, Bi, Co, Cd, Mo, Sb**

- EUROW DRILL HOLE PLAN WITH SECTION ENVELOPES
- DRILL HOLE PLANE W/ TRACE & Cu GRADE HISTOGRAM

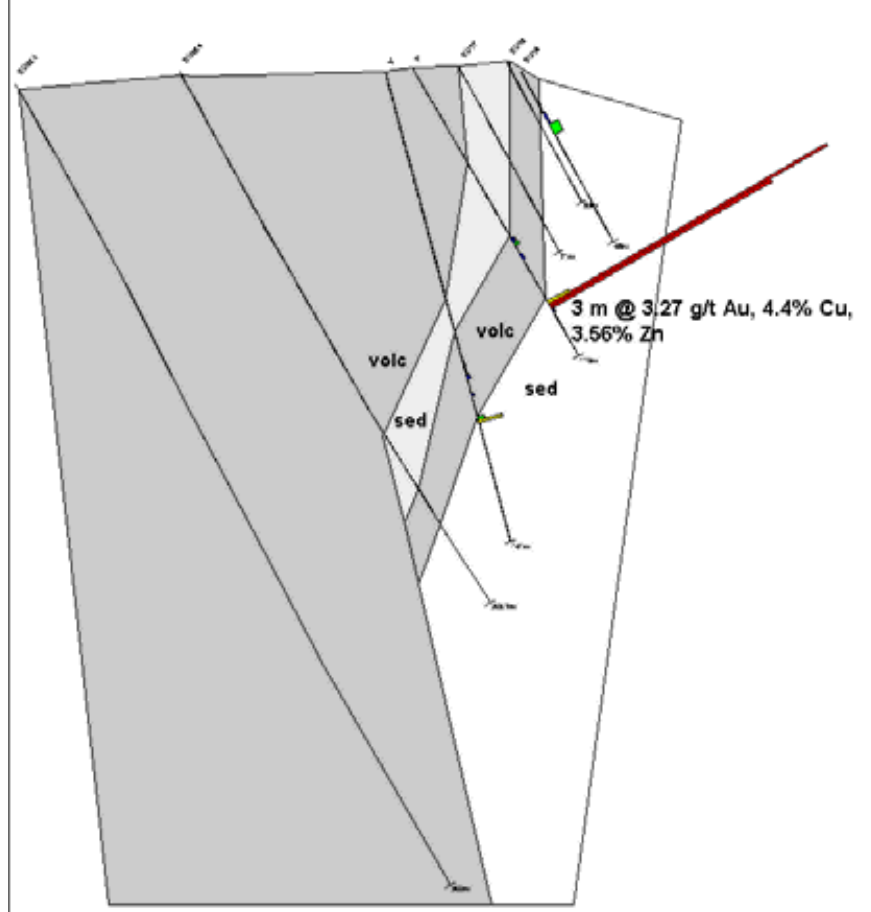




**Section 6309228N**  
Looking north-northwest

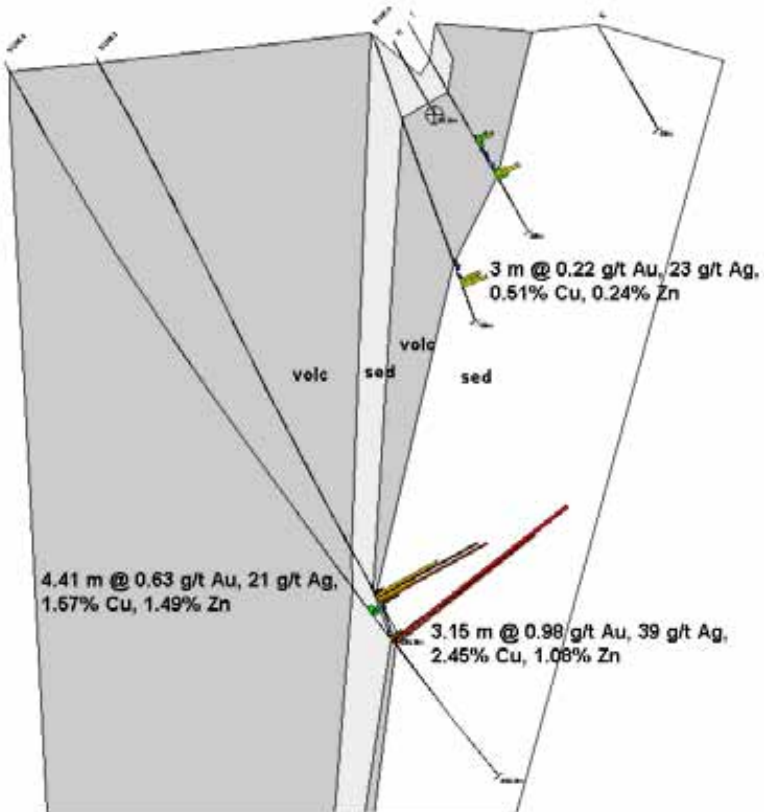


**Section 6309150N**  
Looking north-northwest

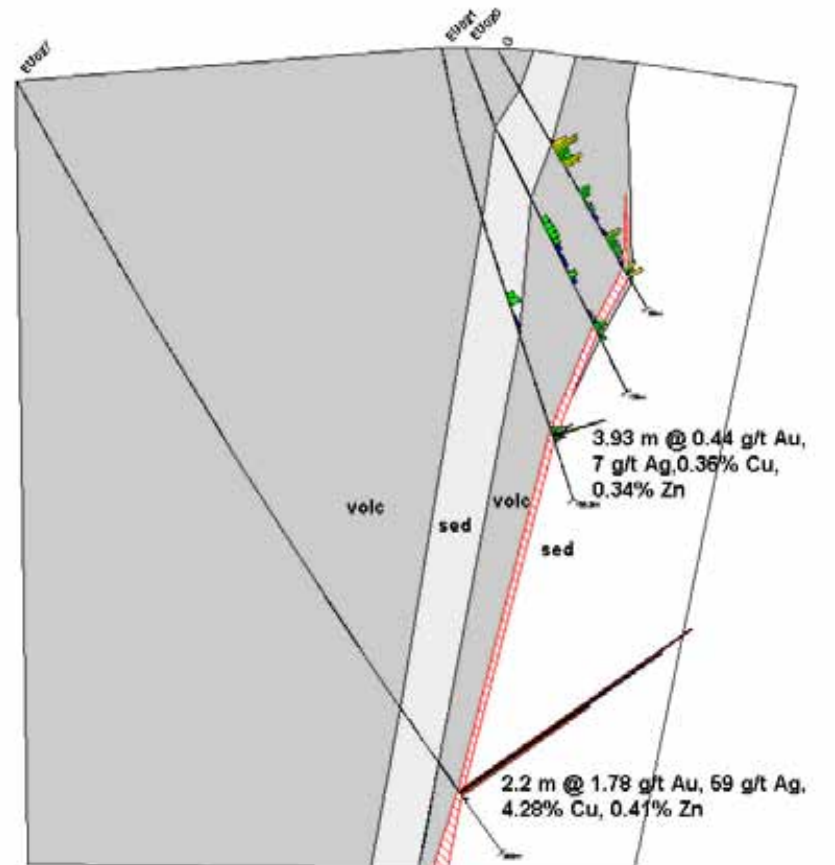




Section 6309085N  
Looking north-northwest



Section 6309004N  
Looking north-northwest

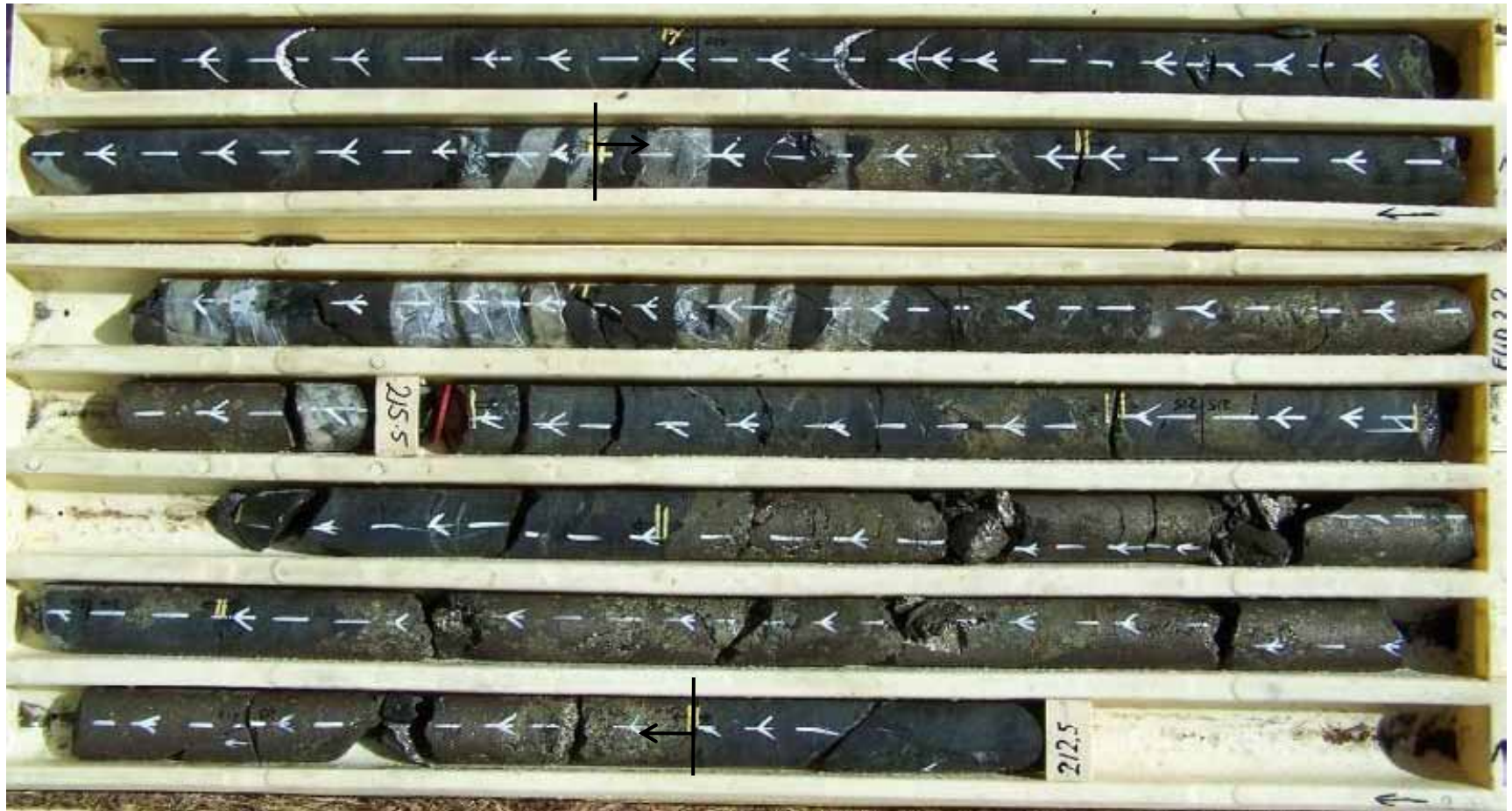


# Gossan subcrop on strike south of old mines



**EU022**

**4.41 m @ 0.63 g/t Au, 2 g/t Ag, 1.57% Cu, 1.49% Zn**



# EU026 SULPHIDE ZONE

3.15 m @ 0.98 g/t Au, 39 g/t Ag, 2.45% Cu, 1.08 % Zn



EU027

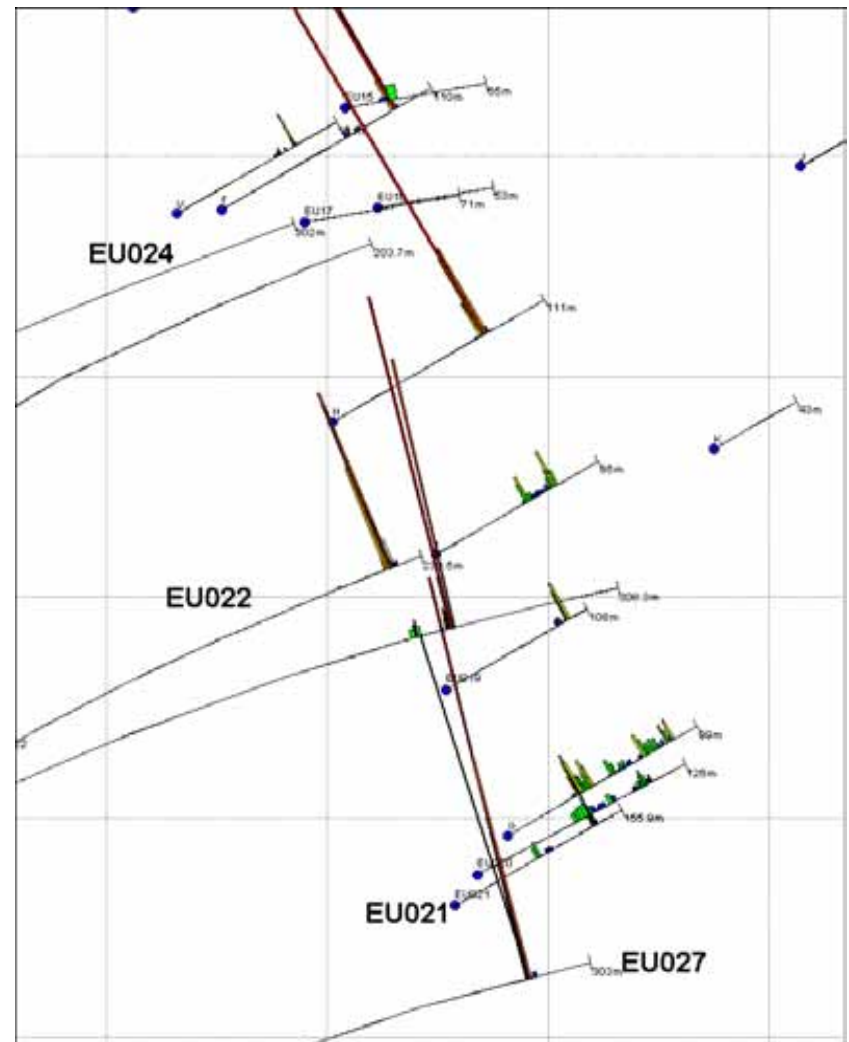
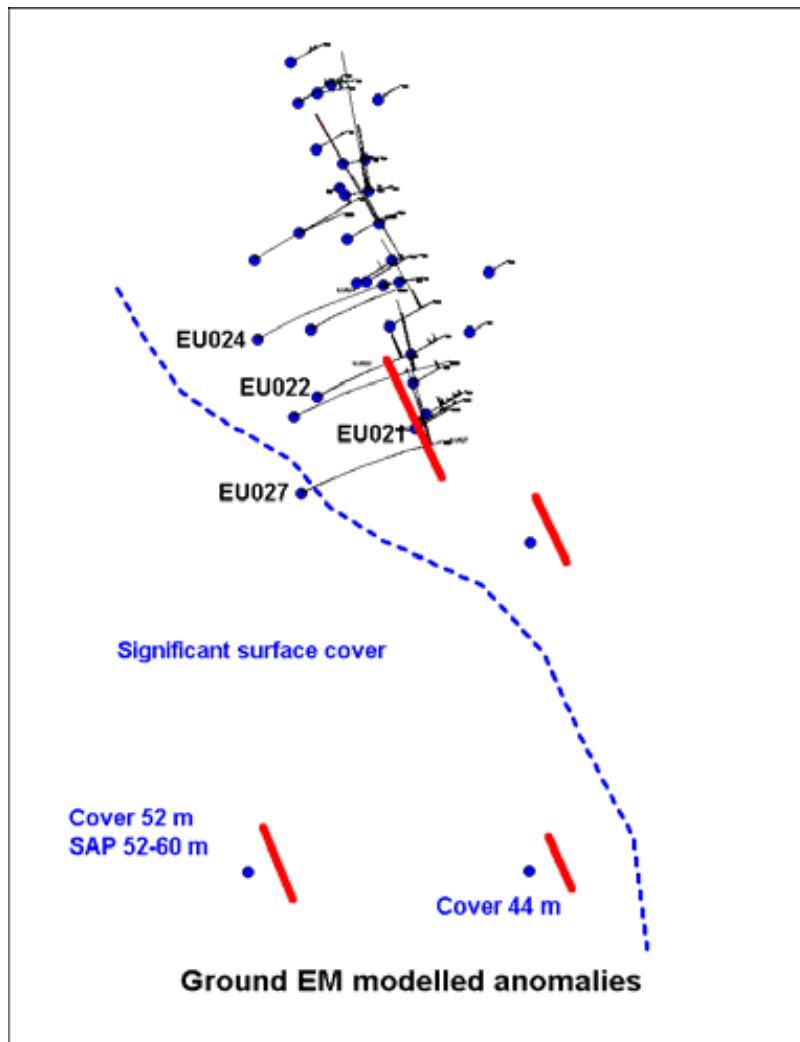
2.2 m @ 1.78 g/t Au, 59 g/t Ag, 4.28% Cu, 0.41% Zn





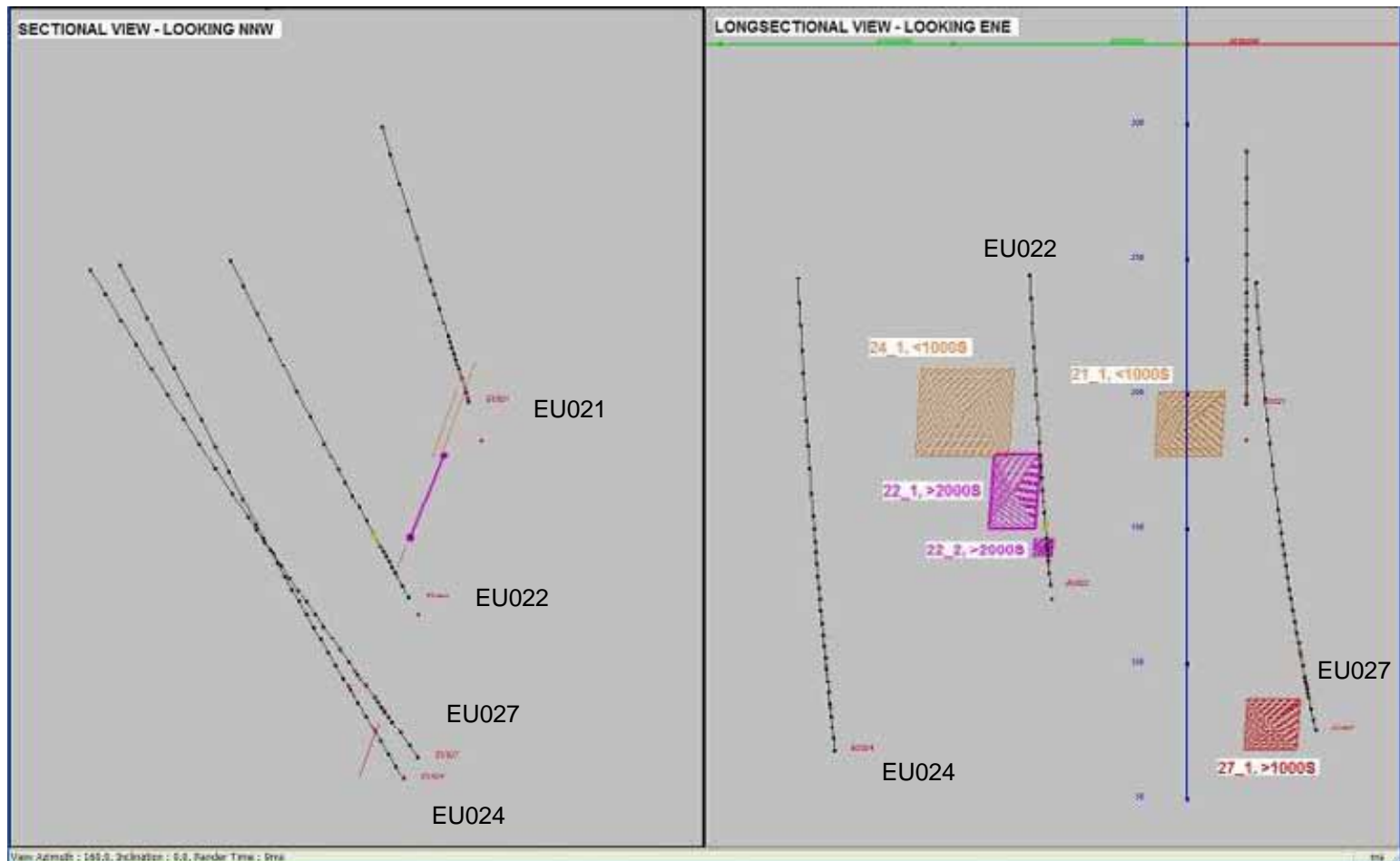
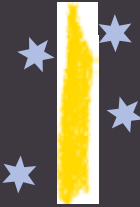
# Ground EM and DHEM

## Ground EM model biased towards NW trending SW dipping plates

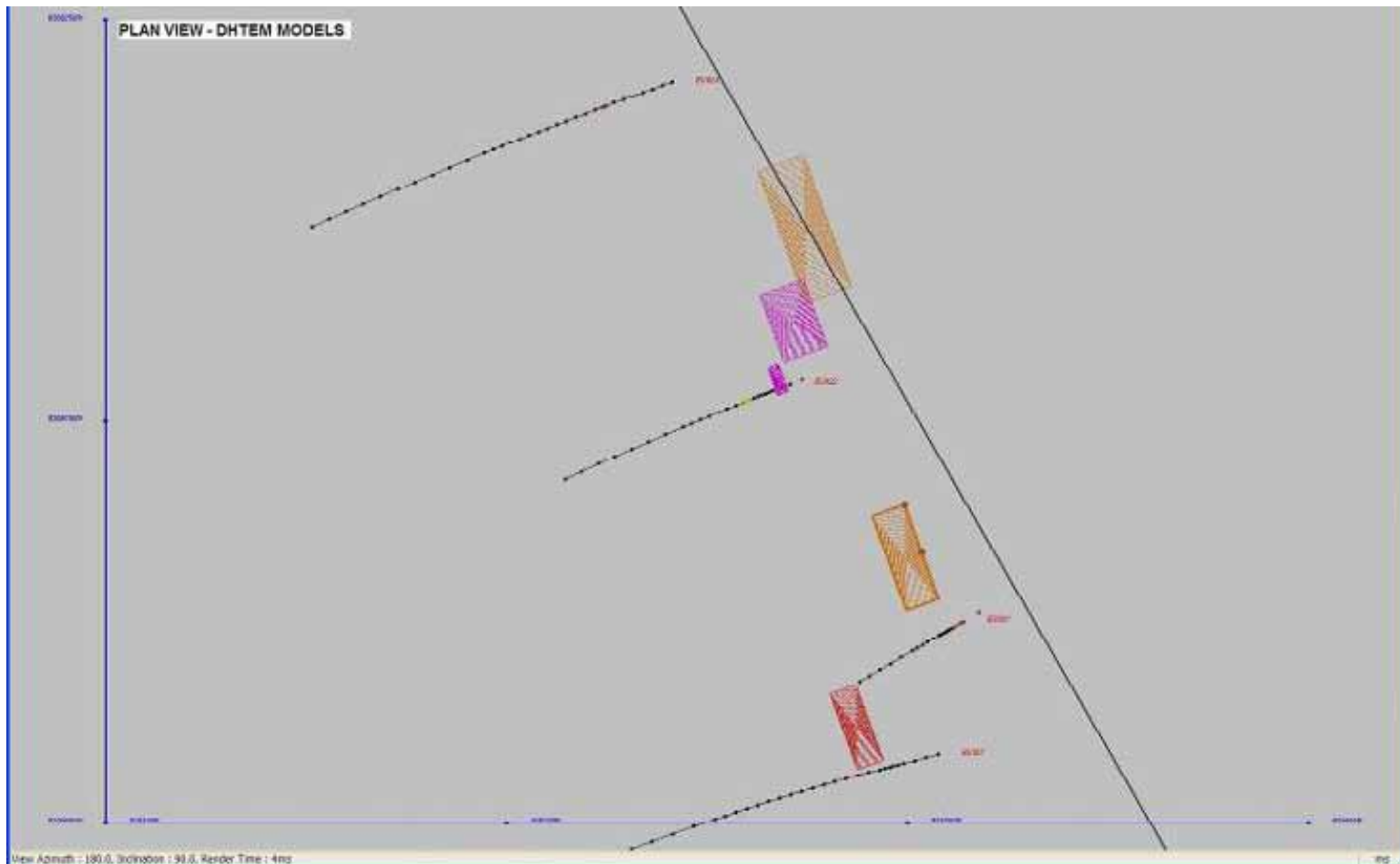


# DHTEM – despite obvious in-hole conductors only off-hole conductors picked up

## Conclusion – survey results highlight thicker sulphide



# DHTEM – plan view





- Possible models for further exploration include:
  - VMS – seafloor deposition and related sub-seafloor replacement and infill
  - Stratabound replacement and vein/breccia infill at depth related to intrusion
  - Combination of replacement and vein styles

# Pink sphalerite as groundmass in coarse grained volcaniclastic with abundant quartz eyes.



Bottom 215.06 half NQ core

EU022



# Detail of interpreted mass flow sulphide breccia overlying silica layer. Distance between drill intersections is 80 m.



Bottom 216.0 m – half NQ core

EU022



Bottom 278.0 m - NQ core

EU027

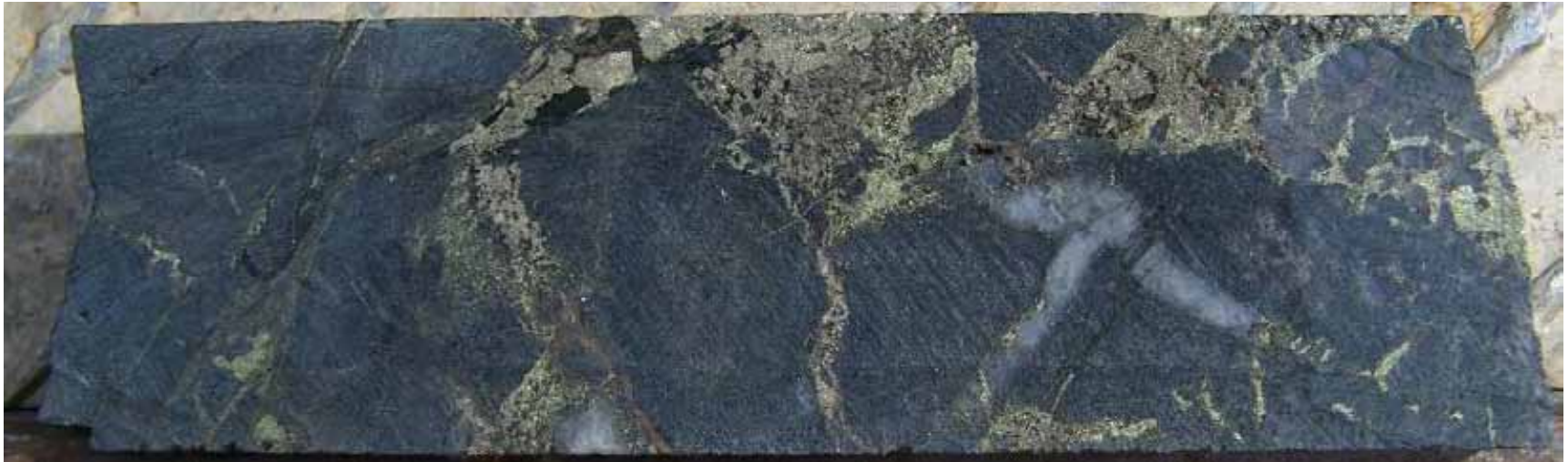


# Minor brecciation with silica infill and later brecciation with sulphide infill.



Bottom 215.2 m - half NQ core

EU022



# Banding in massive sulphide



Bottom 247.0 m - NQ core



Band with quartz eyes

EU026

Bottom 215.65 m - half NQ core



Quartz eyes

EU022



# Margin of sulphide zone



Bottom 131.08 m – NQ core

EU021



reworked volcanic w/  
quartz eyes

chlorite layer w/  
quartz eyes

“incomplete”  
massive sulphide  
layer

sphalerite  
groundmass

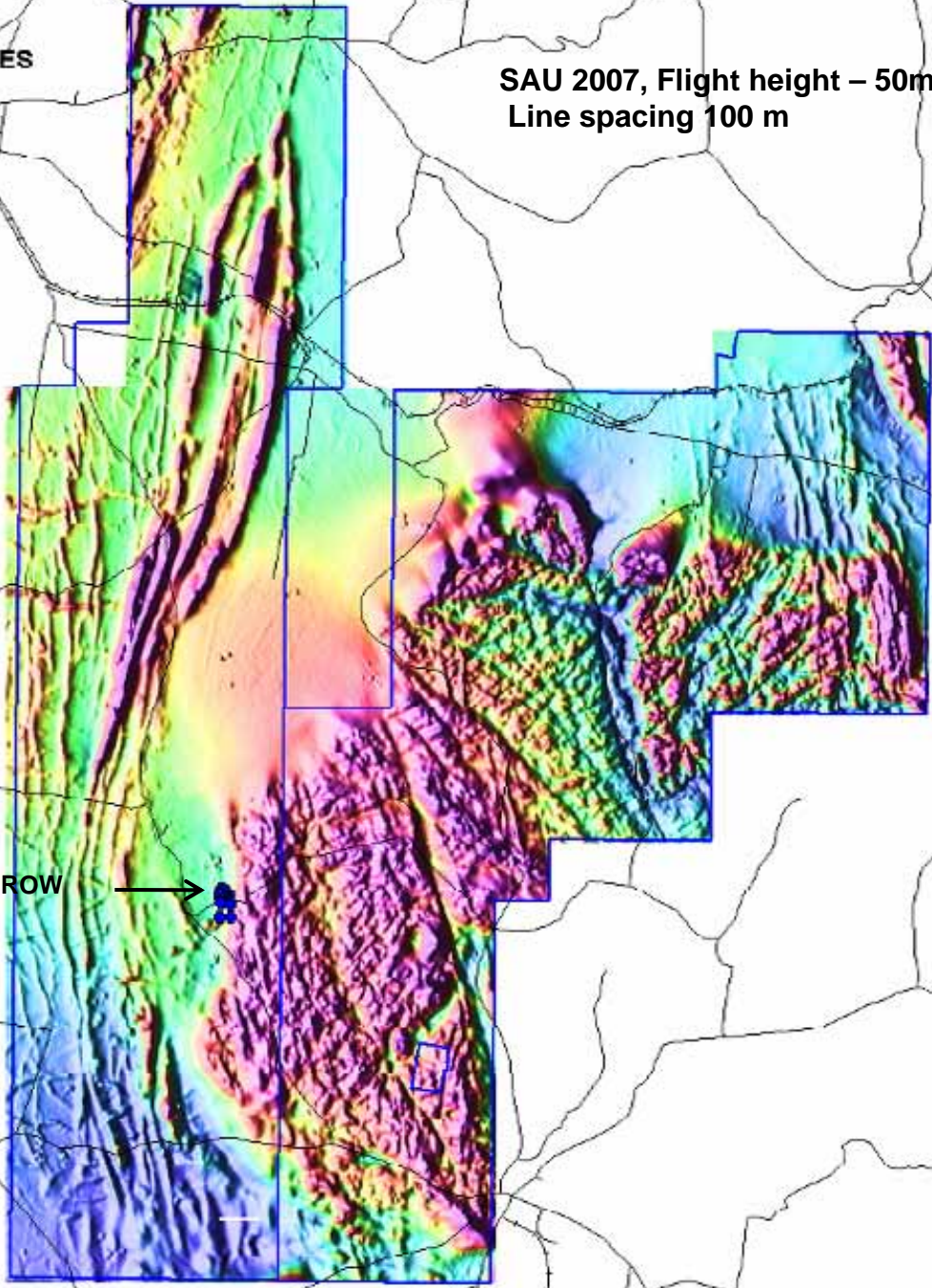
PARKES

SAU 2007, Flight height – 50m  
Line spacing 100 m

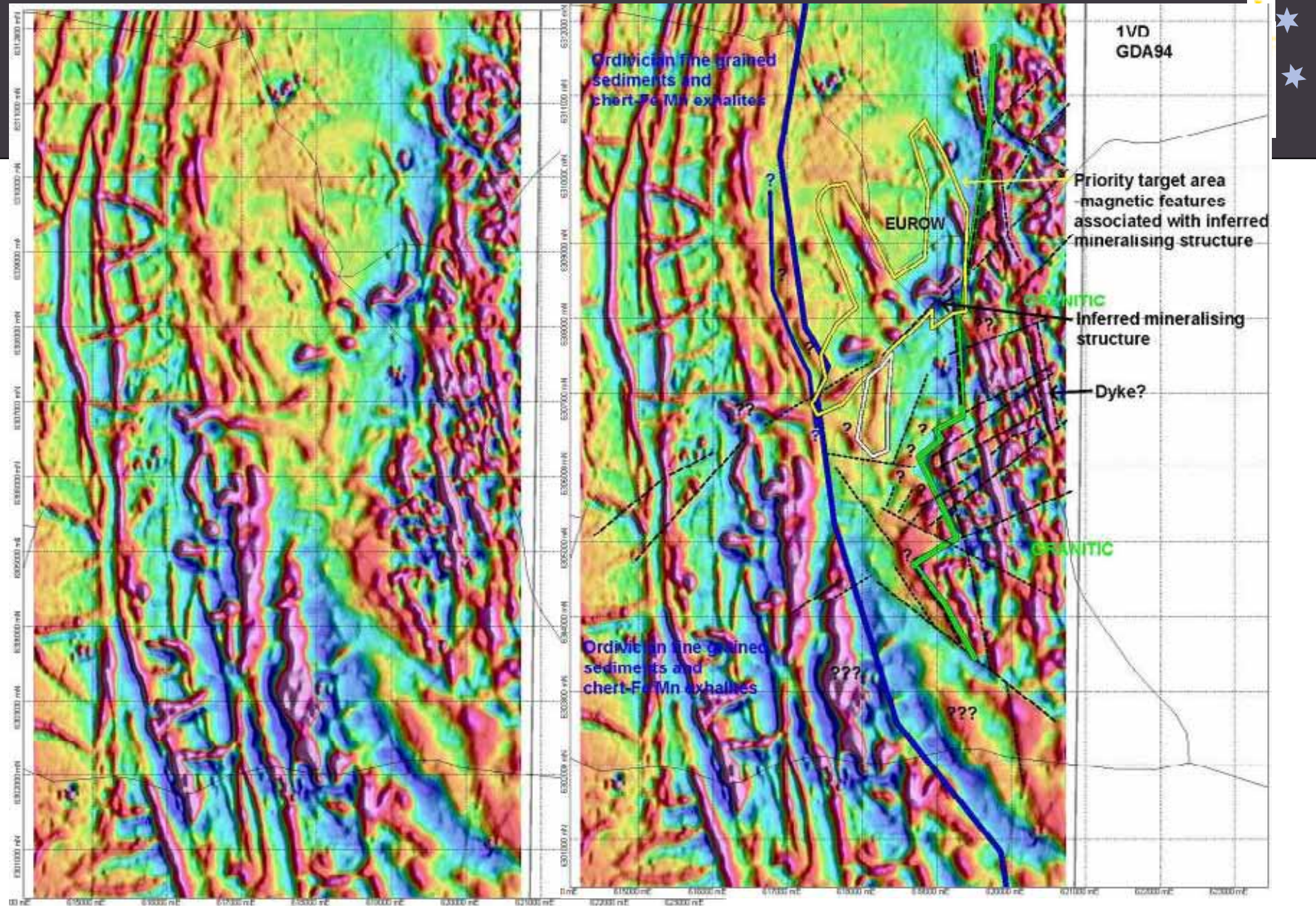
EUROW



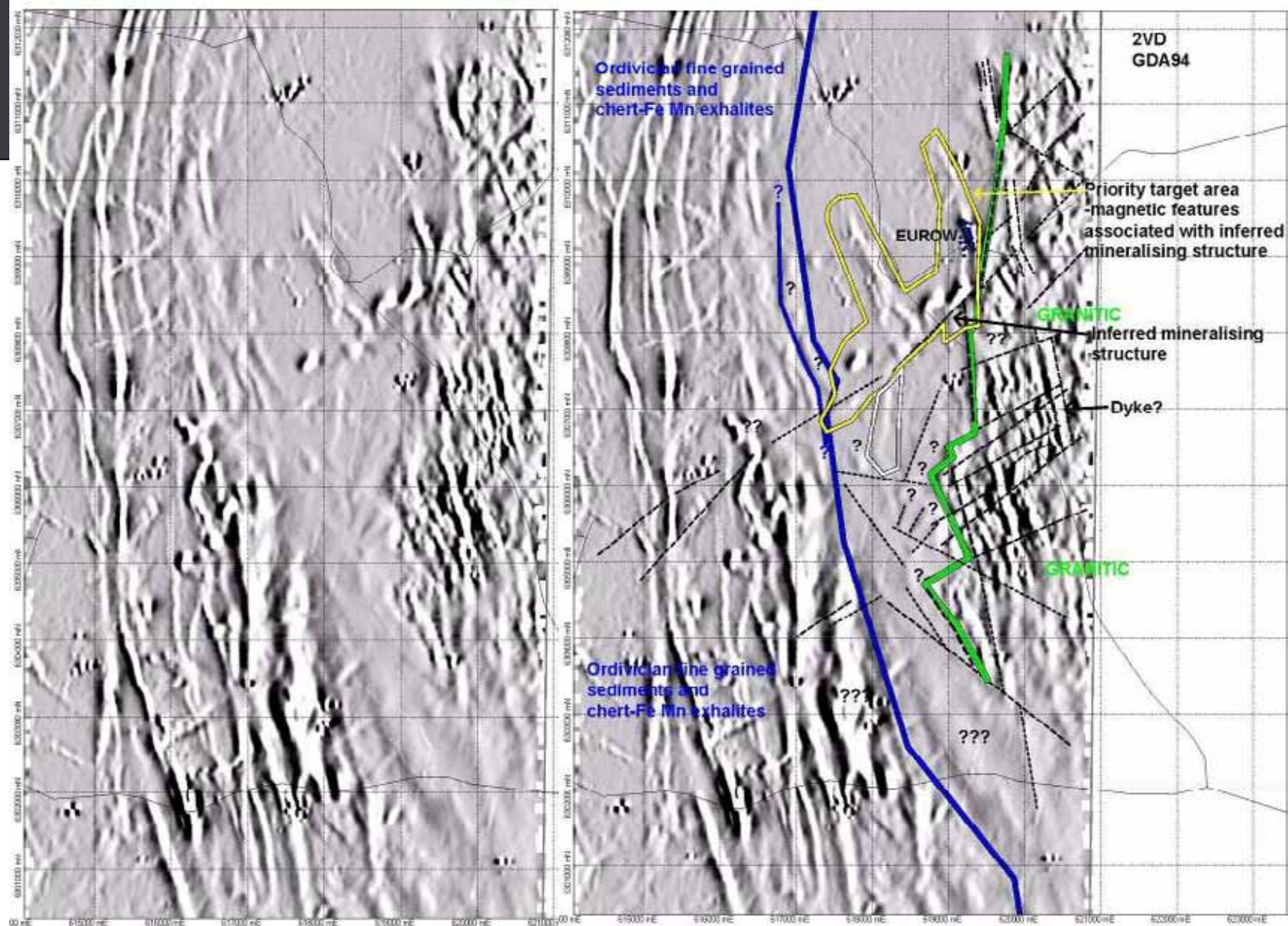
MAGNETICS - RTP



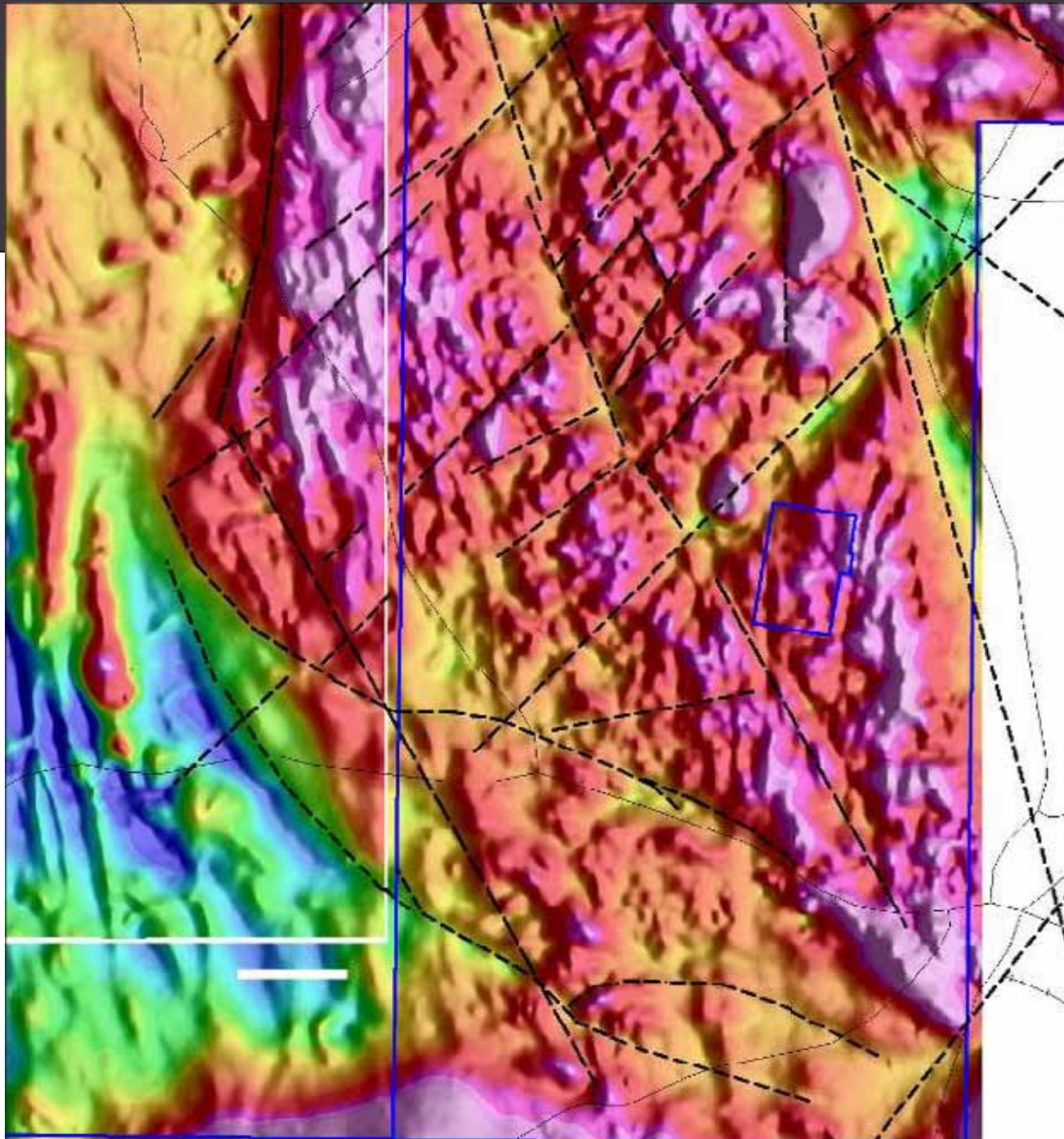
# Magnetics – 1VD



# MAGNETICS – 2VD



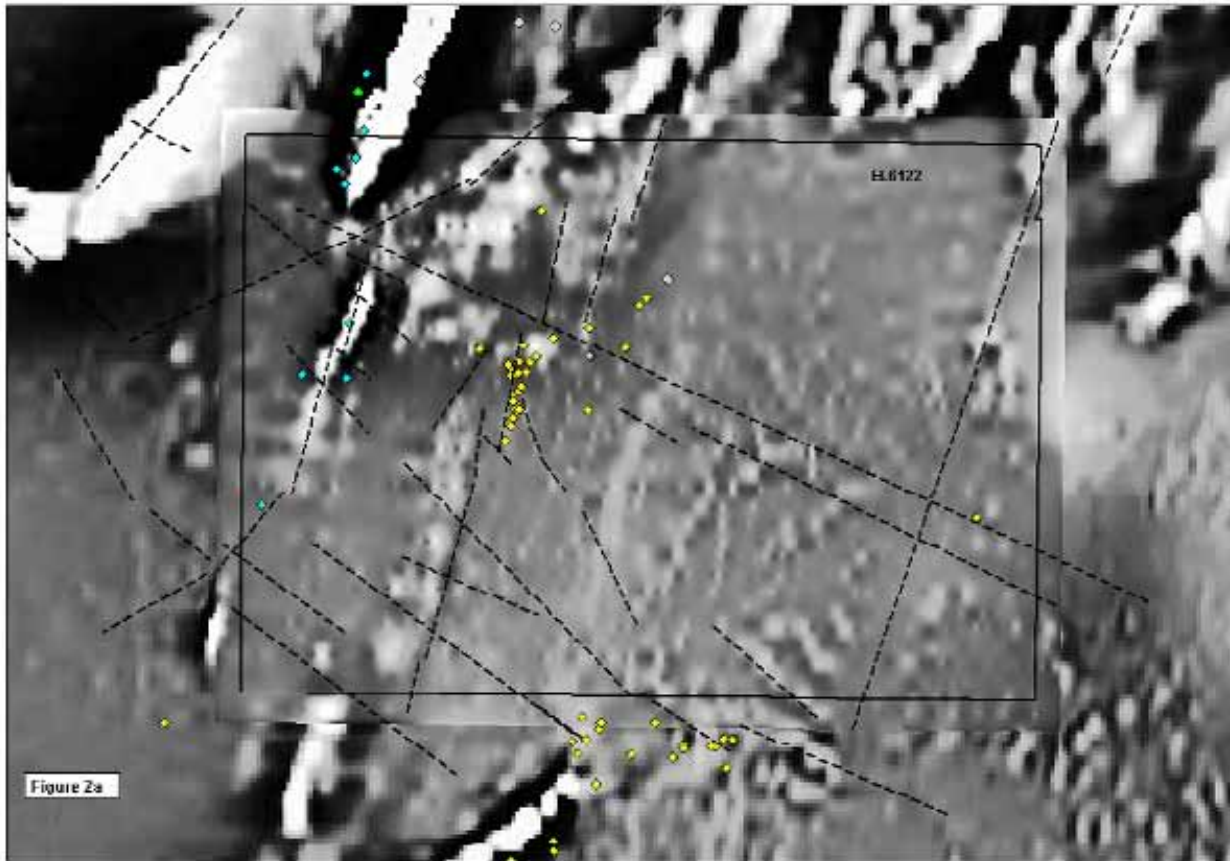




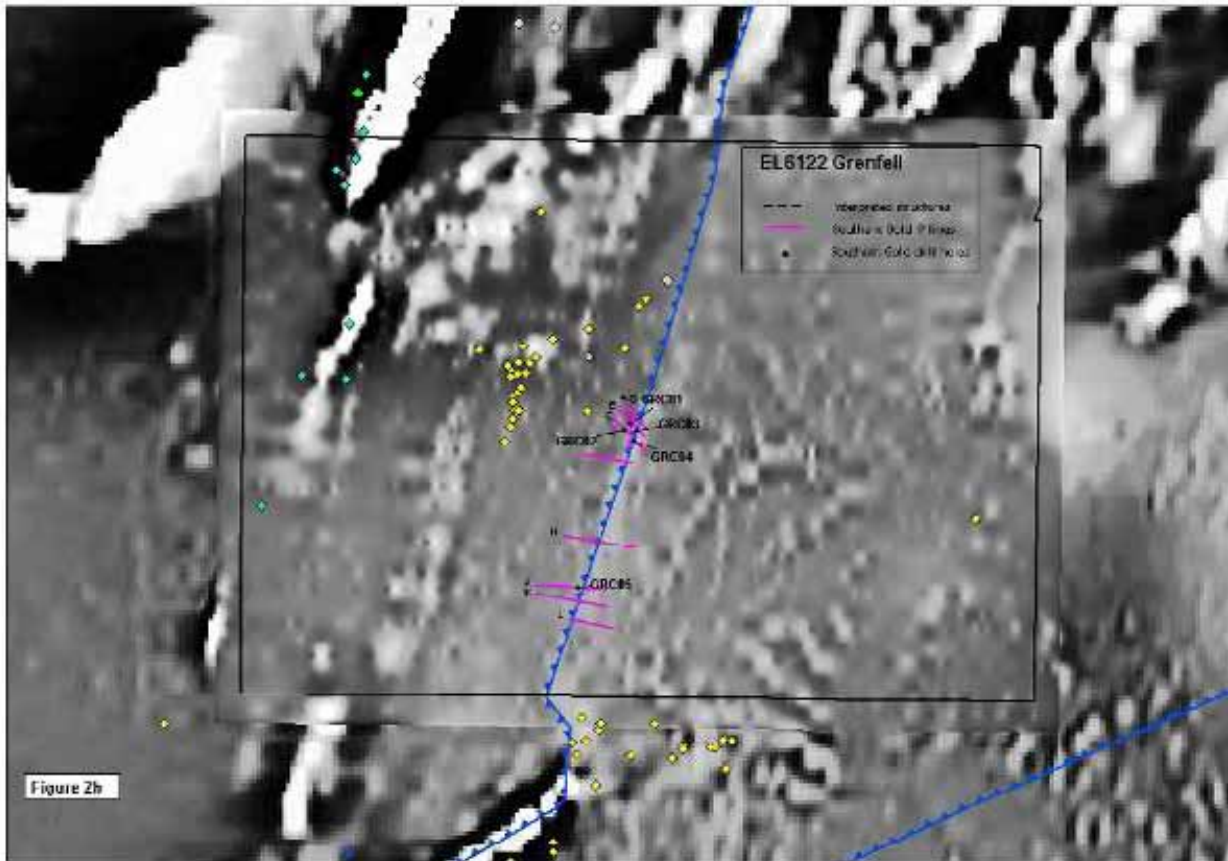
TMI



Southern Gold Limited  
EL6122 Grenfell



# Southern Gold Limited EL6122 Grenfell





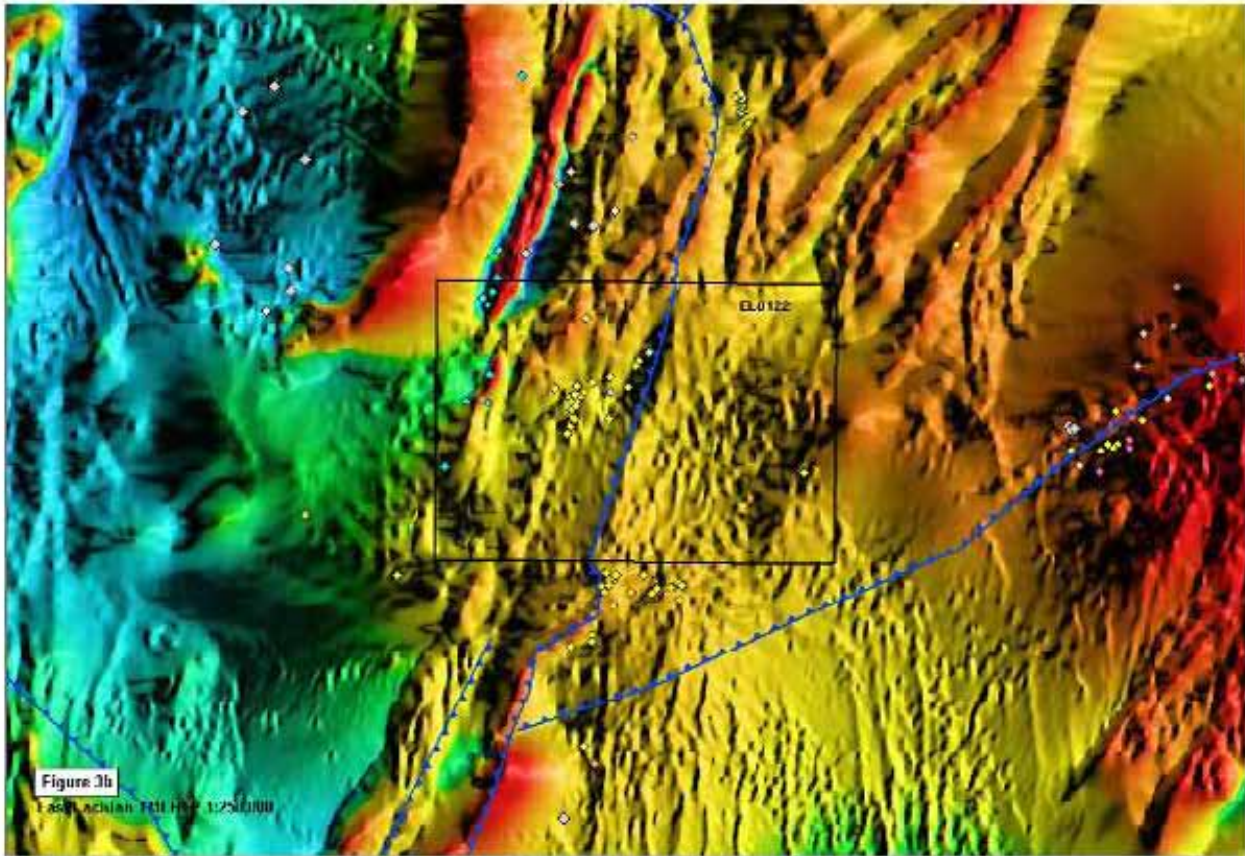


Figure 3b  
1:800,000

