



EPM 13361 West Kilkivan

**Annual & Final Report for the Period
6 February 2002 to 5 February 2013**

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1.0 SUMMARY

EPM 13361 was granted to Australian Resource Management P/L (ARM) on the 6th February 2002 in respect of 97 sub-blocks for a three-year term expiring 5th February 2005. The tenement was re-assigned to Navaho Mining P/L on 12th January 2006. Subsequent annual relinquishments left 9 sub-blocks for the 2009/10 year. The tenement was re-assigned to Barlyne Mining P/L on the 14th of July 2010. A further four sub-block reduction in January 2011 reduced the EPM to 5 sub-blocks. A nil relinquishment was lodged in December 2011. A full surrender of the tenement was lodged 10-12-2012.

The EPM consists of 2 non-contiguous blocks just west of Kilkivan near Elginvale in the south.

The area is considered prospective for precious and base-metal deposits in shear-related and intrusive related gold or Au/Cu porphyry settings.

During the **2006/7** period, Navaho Mining NL carried out a small drilling program at Peenam with encouraging results. Best results were **48m @ 0.23 ppm Au & 0.22% Cu** from 16m to 64m.

During the **2007/8** year, as the price of platinum and palladium increased, Navaho Mining undertook further geochemical surveys throughout the ultra-basic rocks on the tenement targeting PGE's, however the results were disappointing. Fifty-six stream sediment samples were taken. A helicopter VTEM survey was conducted over the Elginvale area.

During the **2008/9** tenure period exploration was focussed on the northern part of the EPM with rock chip and soil sampling conducted just north of Blacksnake at Kilkivan, centred on the Jubilee and Livingstone historic copper prospects and preparations including tracks and drill pads were also made for a 300m diamond drill hole at Peenam, planned to intersect the porphyry Cu-Au system coinciding with a magnetic high previously drilled only to shallow depths by D'Aguilar.

During **2009/2010**, an angled 288m diamond core hole (PEED1) was drilled to test an interpreted porphyry Cu-Au system coinciding with outcropping copper mineralisation and a magnetic high previously drilled only to shallow depths. Three shallow vertical RC holes were also drilled to test the magnetic anomaly below alluvial cover (Table 1).

Exploration during **2010/2011** comprised magnetic inversion modelling, re-logging of the core with magnetic susceptibility measurement and five core samples were submitted for petrographic preparation, description and interpretation.

During the **2011/2012** year of tenure, soil sampling over the Miss Blackburn target area. A total of 174 soil samples were collected and several spot high Au anomalies.

During the **2012/2013** year of tenure, no further ground work was carried out and the tenement was surrendered in full.

2.0 INTRODUCTION

EPM 13361 was granted to Australian Resource Management P/L (ARM) on the 6th February 2002 in respect of 97 sub-blocks for a three-year term expiring 5th February 2005. The tenement was re-assigned to Navaho Mining P/L on 12th January 2006. Subsequent annual relinquishments left 9 sub-blocks for the 2009/10 year. The tenement was re-assigned to Barlyne Mining P/L on the 14th of July 2010. A further four sub-block reduction in January 2011 has reduced the EPM to 5 sub-blocks. A 2 year renewal was also lodged. A full surrender of the tenement was lodged 10-12-2012.

This Annual & Final report describes the results of exploration carried out during the 11 years of tenure ending 5th February 2013 and is presented in fulfilment of the statutory conditions attached to the Permit.

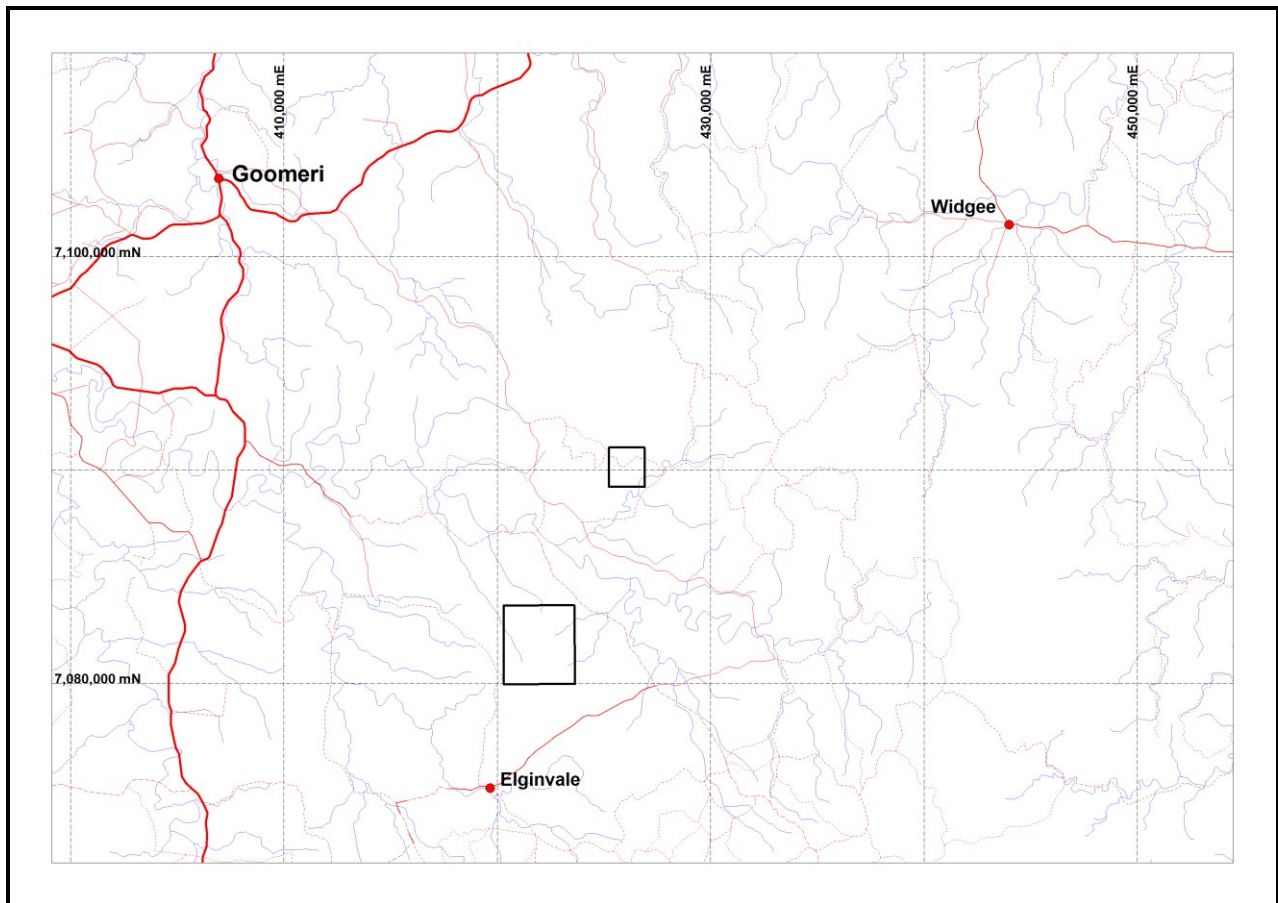


Figure 1. Location of EPM 13361

3.0 EXPLORATION

3.1 Year 2002-4

Reports for the first two years are no longer on the server due to a back-up failure but the database indicates 13 rock-chips were sampled. Rock-chips from the historical Jubilee and Livingstone copper workings reported up to 12,300ppm Cu. Four samples were taken from the quartz vein at the Court-le-Roi prospect on the station of the same name. One sample reported 6.5 ppm gold. Other samples were roadside regional samples and reported no anomalies.

3.2 Year 2004-5

Further rock-chip sampling at Livingstone's and Jubilee was carried out. Thirty-four samples were collected during the year, most from the historical copper prospects. It was concluded that gold values in the area were subdued (max 0.63ppm Au), whilst copper anomalies were strong up to 0.8%.

The historical cinnabar workings were ground inspected during the year.

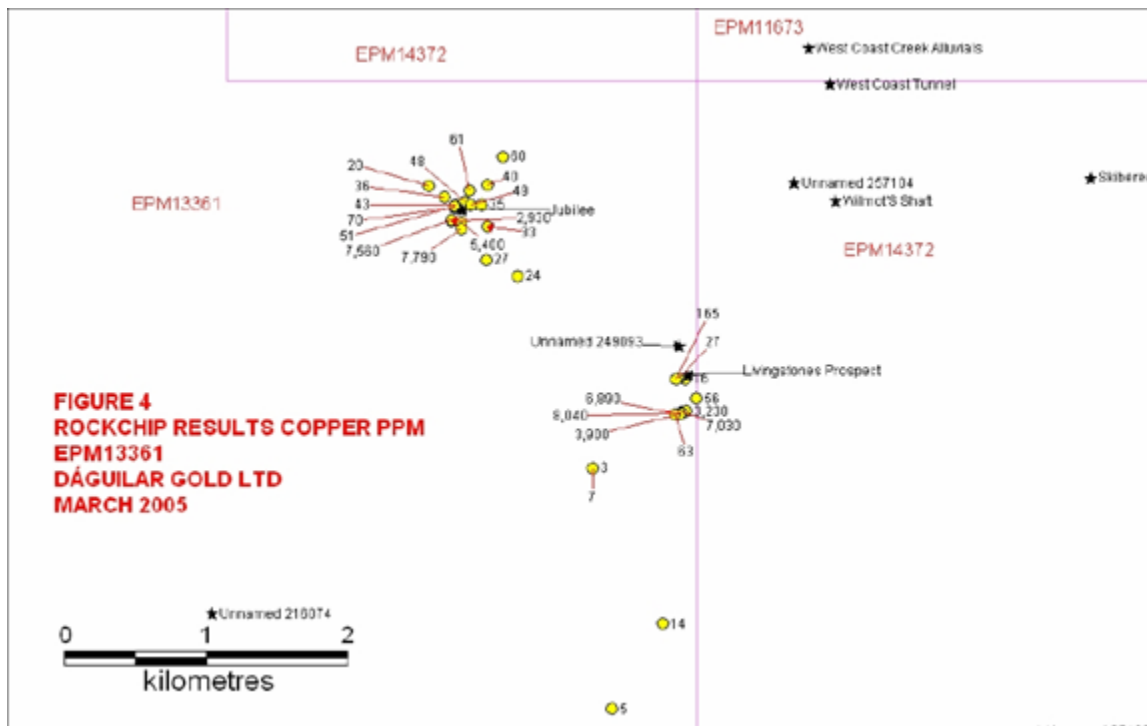


Figure 2. Rock-chip results (Cu ppm) and locations at Livingstones and Jubilee Prospects

3.3 Year 2005-6

Twenty rock-chips were taken from the Peenam, Alma Vale, Cinnabar, and A-Flat Creek areas. One multi-phase quartz vein was anomalous from Peenam with 3.82 ppm Au and 3,210ppm Cu.

Sixty-seven stream sediment samples were taken from, Peenam, White Rocks and Cinnabar areas during the year. Weak gold anomalies to 5 ppb Au were reported from White Rocks and Peenam.

Two soil grids were established during the year. A total of 206 soil samples were collected from Peenam and Cinnabar. Only 2 samples reported >2ppb Au from Cinnabar.

The first grid at Peenam was encouraging with 76 samples collected and 12 reporting > 1ppb Au with a maximum to >3ppb. A second grid was established with 22 samples and only 3 samples reporting <1ppb Au with the others up to 7ppb Au and anomalous copper.

Results of work carried out at Cinnabar were disappointing and no further work was planned.

Encouraging gold results in rocks and soils from Peenam led to a proposed a 3 hole RC drilling program for the next period.

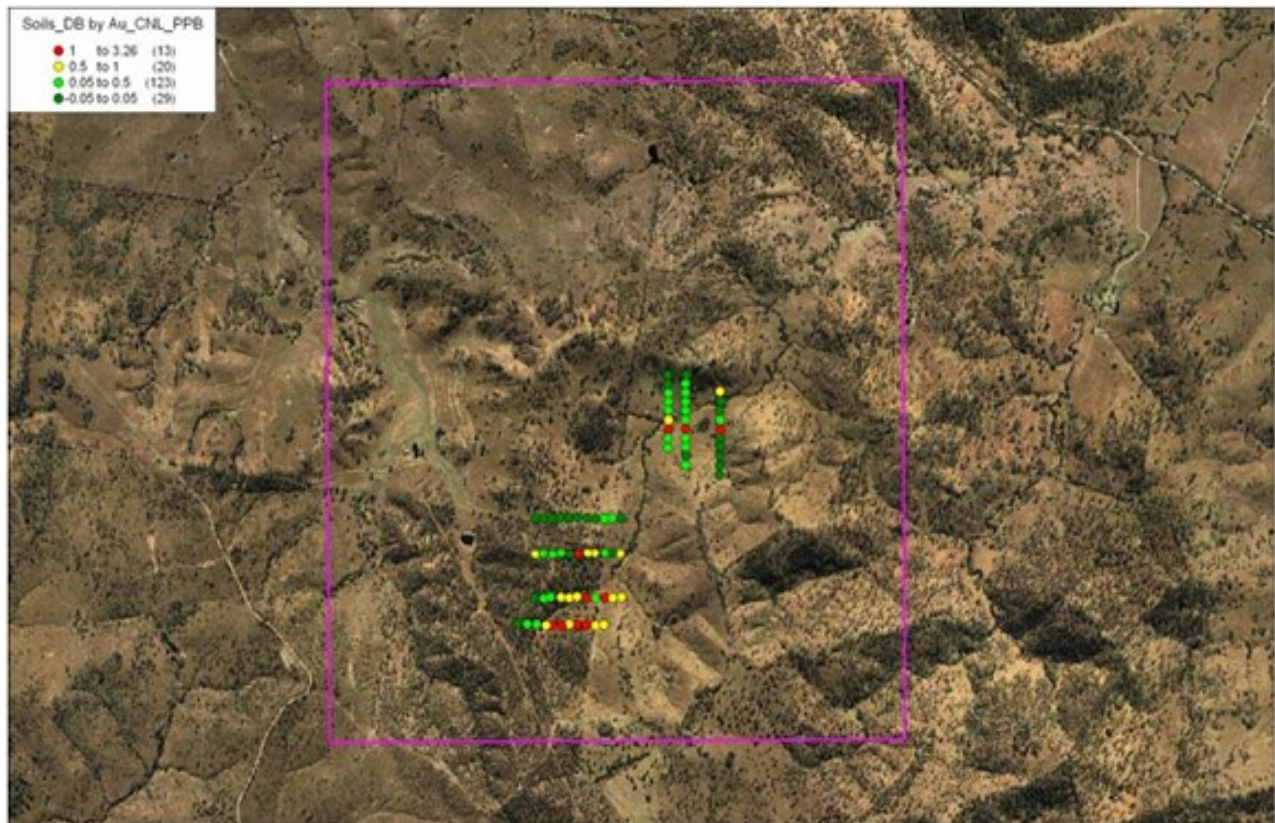


Figure 3. Orthophoto of soil sampling Au results (ppb), Peenam

3.4 Year 2006-7

The Peenam gold anomaly was first found by BHP Minerals Ltd in 1986. Rock-chip, soil sampling and drilling followed (16 RC holes). Best results from drilling were 106m at 0.16 g/t Au. No further work was undertaken.

Work carried out during the period included-

- 6 Stream Sediment Samples
- 56 Soil Samples
- 2 Rock-Chip Samples
- 3 RC Drill-holes for 342m

All surface samples were from the Peenam area looking for mineralization extensions and in-filling sampling gaps missed by BHP.

Best results from Peenam drilling were **48m @ 0.23 ppm Au & 0.22% Cu** from 16m to 64m.

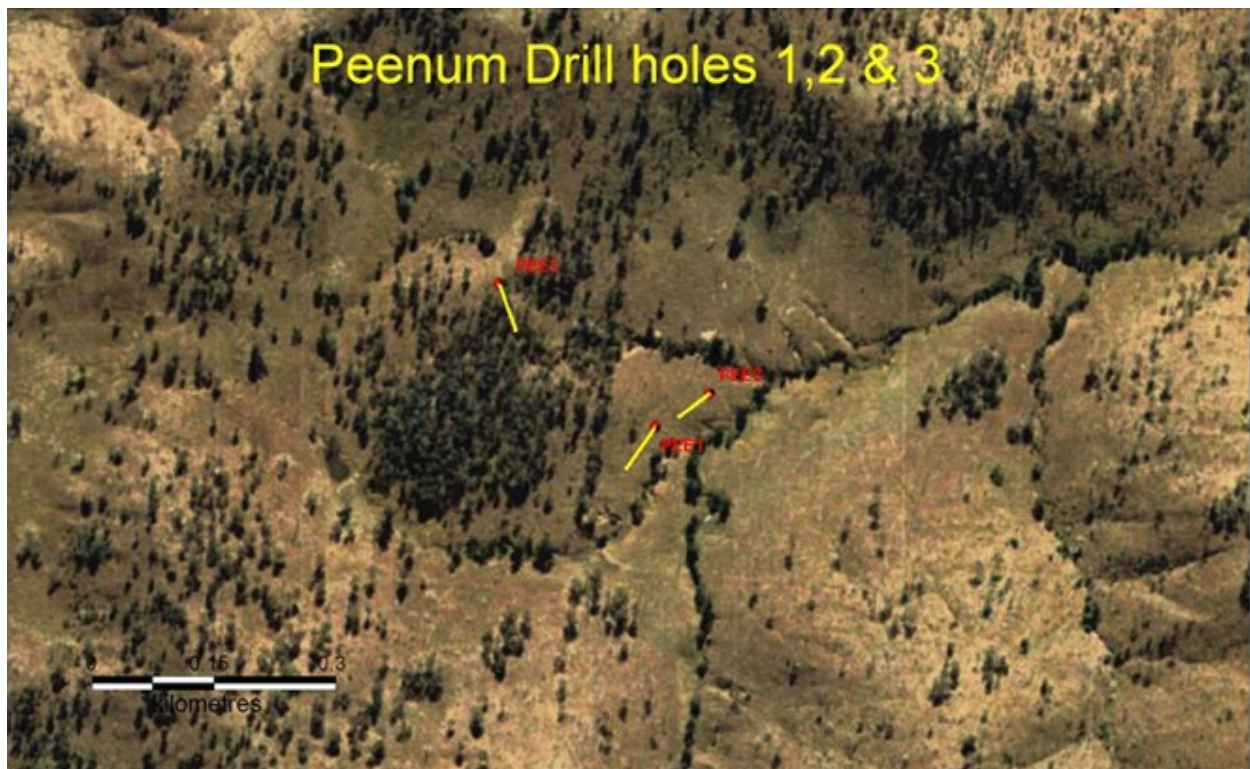


Figure 4. Orthophoto Map with Peenam Drill-holes

3.5 Year 2007-8

During the 2007/8 year, as the price of platinum and palladium increased, Navaho Mining undertook further geochemical surveys throughout the ultra-basic rocks on the tenement targeting PGE's, however the results were disappointing. Fifty-six stream sediment samples were taken.

Fifty-six stream sediment samples were taken with best results of 6 ppb platinum and 25 ppb palladium.

A helicopter VTEM survey was conducted over the Elginvale area.

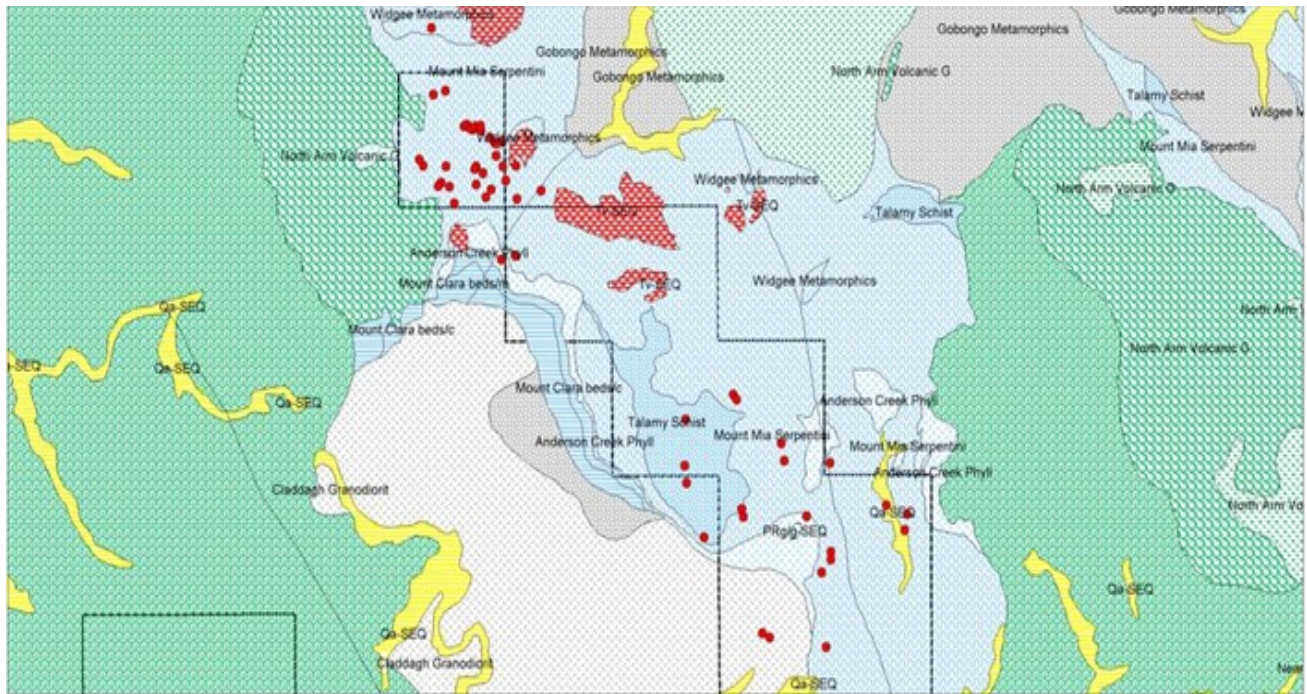


Figure 5. Stream Sediment Samples in Mt Mia Serpentine, EPM 13361

3.6 Year 2008-9

During the 2008/9 tenure period exploration was focussed on the northern part of the EPM with rock chip and soil sampling conducted just north of Blacksnake at Kilkivan, centred on the Jubilee and Livingstone historic copper prospects and preparations including tracks and drill pads were also made for a 300m diamond drill hole at Peenam, planned to intersect the porphyry Cu-Au system coinciding with a magnetic high previously drilled only to shallow depths by D'Aguilar.

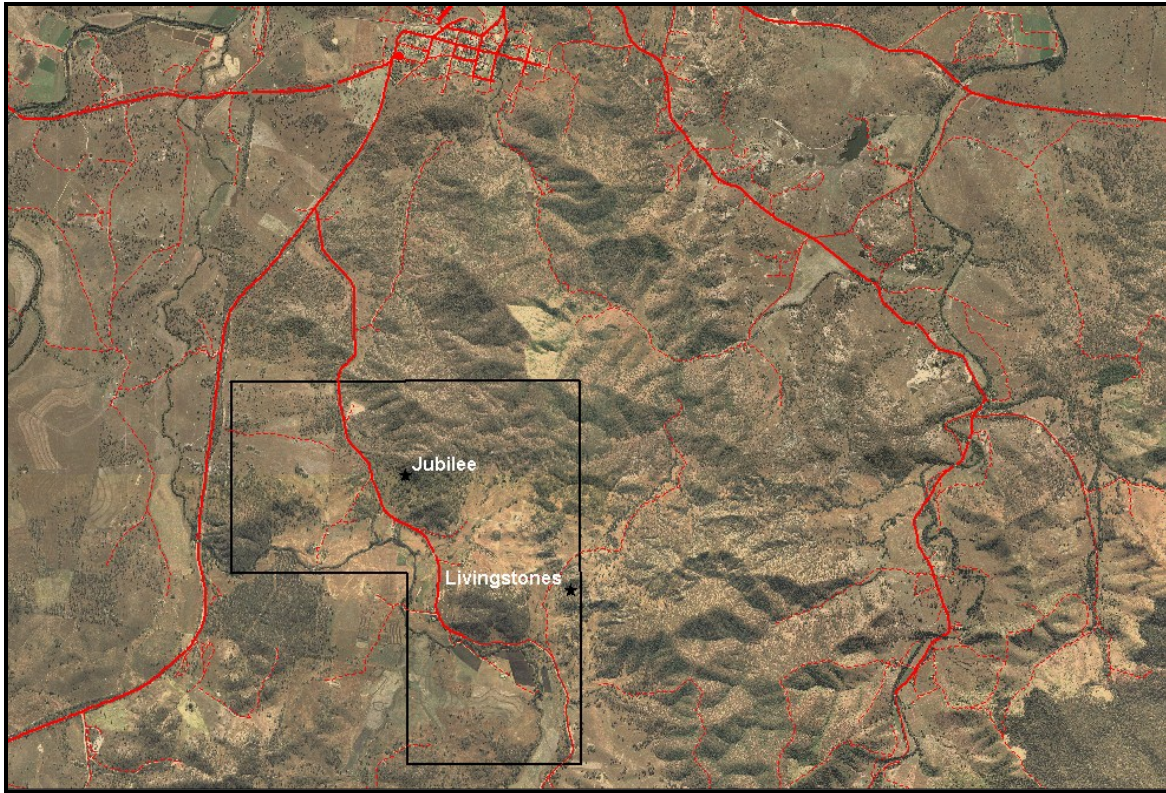


Figure 6. Location of Jubilee and Livingstone Prospect Area.

This is an interesting area with rock chip samples returning significant grades of Co, Cu, Au, Ag. Regionally it is mapped as the Mount Mia Serpentinite and is structurally "cross-cutting". The recent reconnaissance work however suggests that the area is quite complex with tuffs, flows, dykes, shearing etc. present.

A grid comprising of 278 soil samples was collected with the best gold result at 0.041ppm Au. The maximum 3,500 ppm copper was reported.

Nine opportunistic rock-chips were collected during the soil sampling program. Best was 1.14 ppm Au and 2.97% Cu.

3.7 Year 2009-10

During the current tenure period an angled 288m diamond core hole (PEED1) was drilled to test the outcropping copper mineralisation. Three shallow vertical RC holes were also drilled to test the magnetic anomaly below alluvial cover.

From the base of oxidation at 18 metres until the end of the hole at 287.8 metres, finely disseminated pyrite and minor chalcopyrite as well as vein and fracture fill sulphide occurs in a porphyritic andesitic breccia

The main copper gold mineralisation is hosted within a quartz – chalcopyrite – magnetite vein phase, with potassic alteration ranging from vein selvages to pervasive, that overprints the disseminated phase.

The high pyrite to chalcopyrite ratio and the distribution of more volatile and distal peripheral element assemblages (arsenic antimony lead and zinc) suggest that the hole was drilled into the edge of a porphyry system, in an outer alteration zone hosting only low grade copper gold mineralisation.

Assay results were disappointing with less than 0.1 ppm Au overall and 800 ppm Cu.

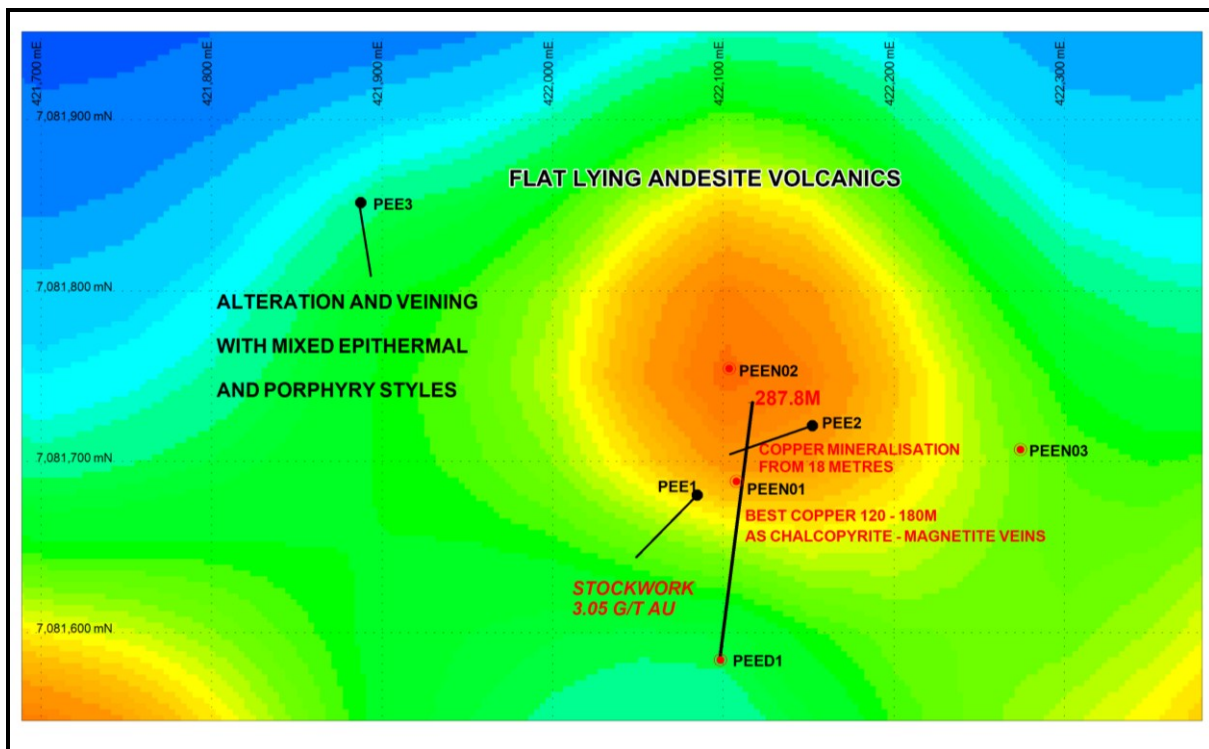


Figure 7. Location of drillholes on TMI.

3.8 Year 2010-11

Exploration during **2010/2011** comprised magnetic inversion modelling, re-logging of the core with magnetic susceptibility measurement and five core samples were submitted for petrographic preparation, description and interpretation.

3.8.1 Petrographic Study

During the current year of tenure, the core from drill hole PEED01 was re-logged and magnetic susceptibility was measured. Several core samples were selected for petrographic investigation by consultant Paul Ashley who described the samples as representing a suite of calc-alkaline, I-type intrusives.

Four of the core samples had undergone pervasive potassic alteration and veins hosting disseminated magnetite, pyrite and chalcopyrite were hydrothermally introduced during the potassic alteration event. Early veins contain trace pyrite, chalcopyrite and magnetite with later quartz-rich veins containing pyrite, coarser chalcopyrite and magnetite.

Professor Ashley concluded that the alteration-mineralisation characteristics in the core samples are consistent with derivation from part of a porphyry Cu system. It was suggested that the core samples may represent part of the wall rock or intrusive mass responsible for generating the porphyry system. This suggests that the main mineralized part of the porphyry system has not yet been found.

3.8.2 Magnetic Inversion Modelling

3D magnetic inversion modelling was conducted within the EPM by geophysicist Kate Nelson from Geodiscovery. The region was covered by the regional Qld government Gympie survey, flown at 400m line spacing and 80m flying height. A VTEM survey was also acquired by D'Aguilar Gold at Elginvale in 2007. This survey was flown at 200m line spacing (NS) and both electromagnetic and magnetic data was acquired. The magnetic modelling was undertaken on both the regional government data (larger region) as well as a smaller region using the magnetic data collected with the Elginvale VTEM survey. Conclusions are summarised below.

- The available regional magnetic data (400m line spacing) was sufficient to model the depth to source, depth extent, attitude and dip of causative magnetic bodies in 3D. The openfile company data (200m line spacing) has also provided additional detail where available, but results should be treated with caution due to data quality issues.
- The magnetic modelling indicates the magnetic anomaly has been drill tested - it has around 200m depth extent (appendix 1 and 3D pdf). The tilt derivative is very useful to identify regional structures (mainly NW trending).
 - Four anomalous regions were highlighted in this dataset, two are located within EPM13361.
 - Anomaly 1: Small, discrete magnetic anomaly coincident with broad resistive zone. The resistive signature is typical of porphyry systems. Whilst the magnetic feature does appear to be drill tested, the VTEM does indicate a resistive feature approximately 1km EW by 0.5 km NS so further potential for mineralisation may exist.

- Anomaly 4: is an intense magnetic anomaly located on a prominent NW trending structure.

Geodiscovery recommended that existing geological and geochemical data be reviewed over the geophysical regions of interest and IP data be acquired over the geologically favourable anomalies to ascertain the presence of conductive mineralisation.

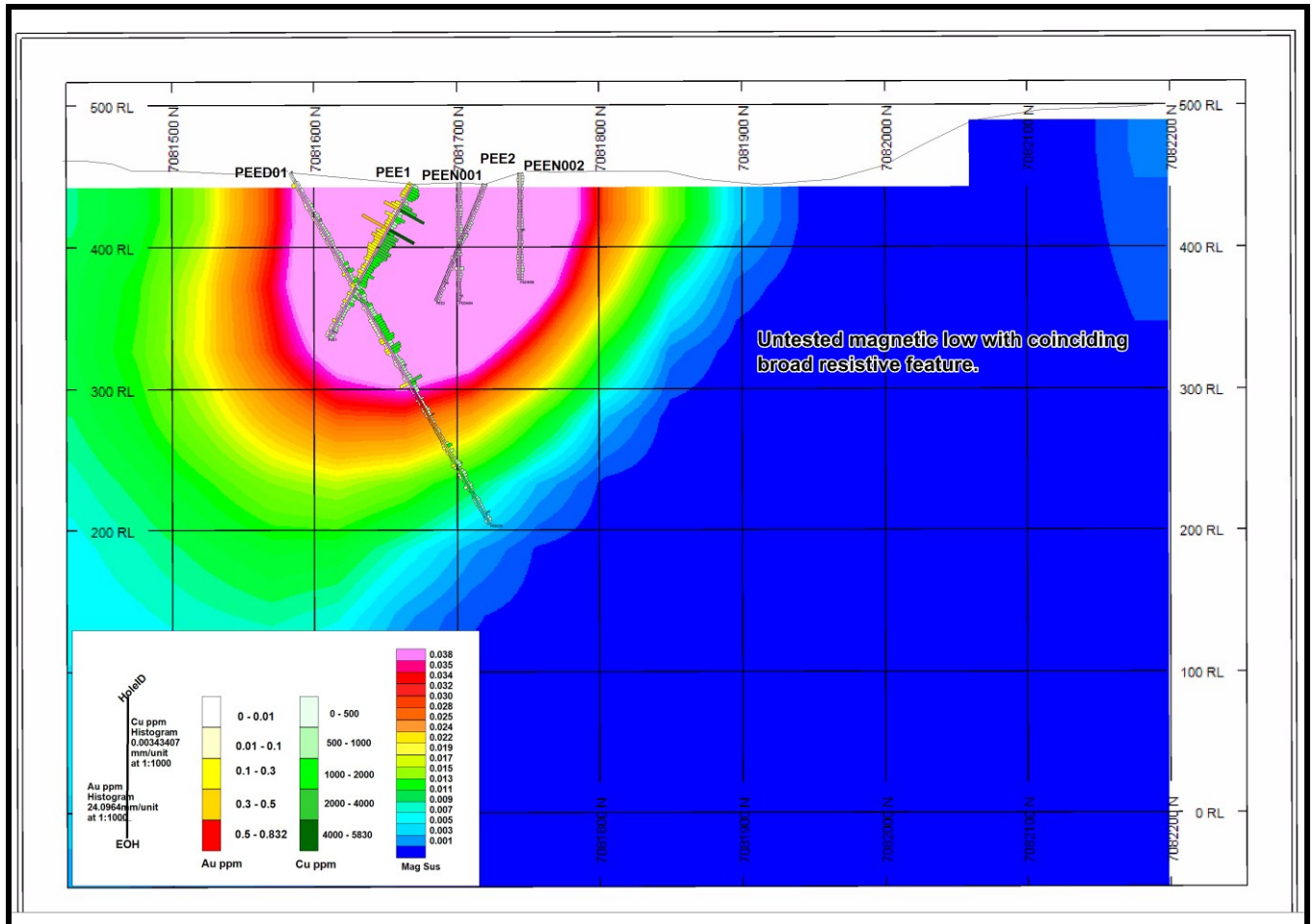


Figure 8. N-S Section on magnetic slice. Note untested magnetic low with coinciding broad resistive feature.

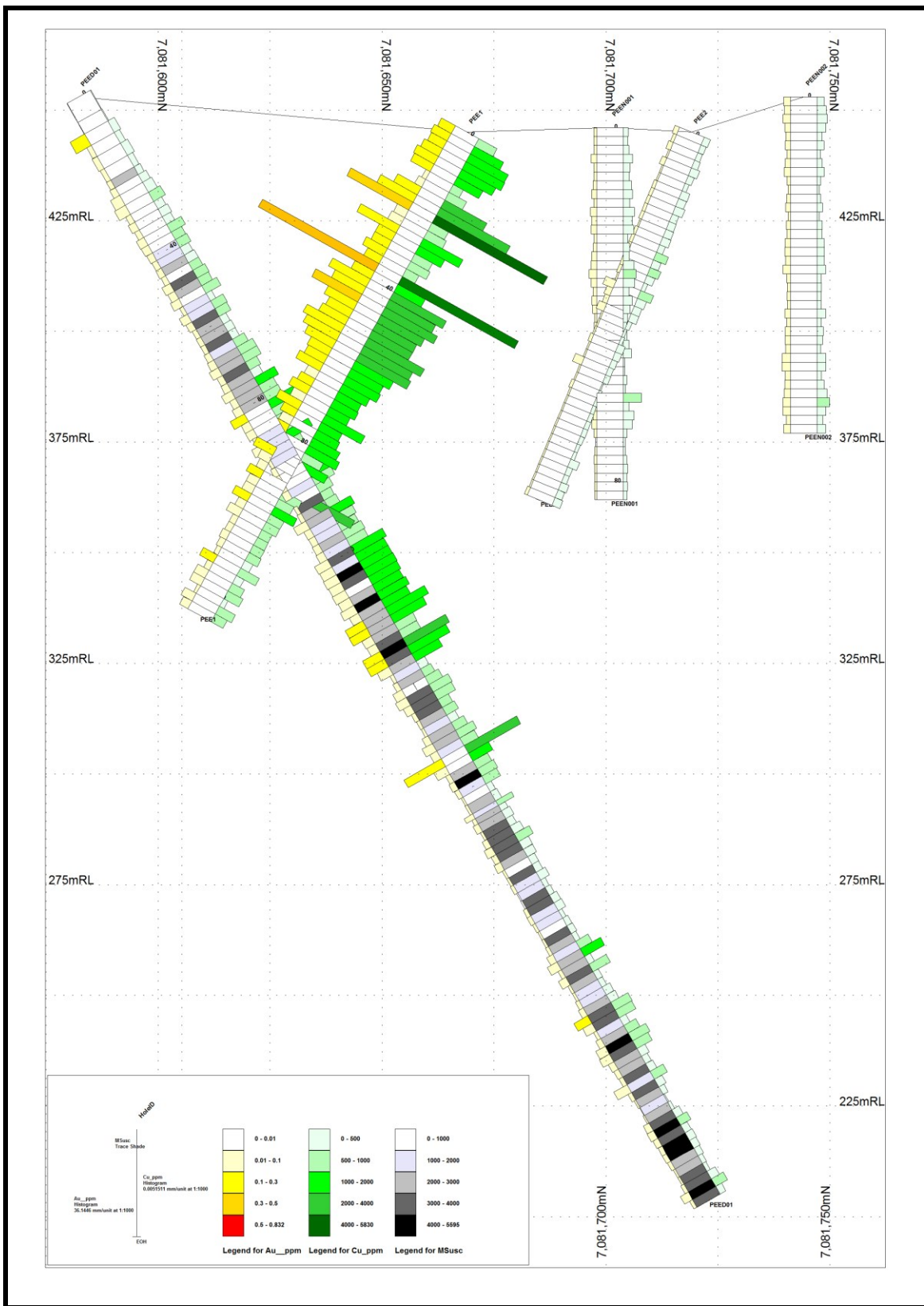


Figure 9. Cross-section PEED01 with Au-Cu assays and magnetic susceptibility

3.8.3 Other Targets

Geodiscovery's work also outlined several untested targets that require further investigation. These are circled in Figure 10. Another circular magnetic low was identified at the historic Miss Blackburn prospect (Figure 11).

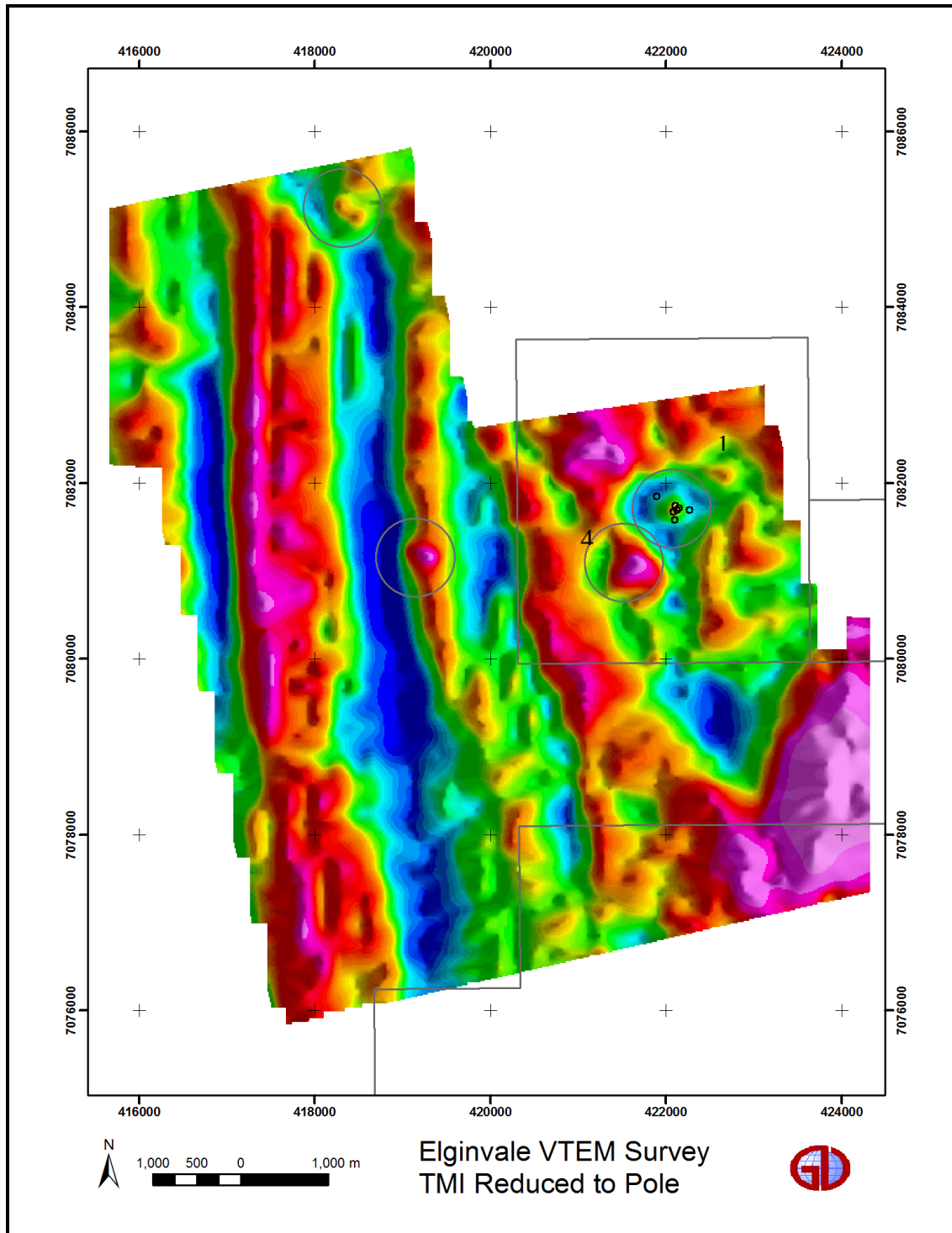


Figure 10. Elginvale VTEM Survey Reduced to Pole

3.9 Year 2011-12

During the **2011/2012** year of tenure, soil sampling over the Miss Blackburn target area. A total of 174 soil samples were collected and several spot high Au anomalies

Field work was focussed on the northern sub-block of the EPM adjacent to the Kabunga goldfield which contains a circular magnetic low target within an area of magnetic ultrabasic serpentinite. Previous stream sediment geochemistry in the area revealed some very low order gold anomalies. Rock chip sampling over 50m of an approximately 5m wide NW trending gossan outcrop returned up to 1.12g/t Au, 77.7g/t Ag, 0.24% Cu, 0.85% Pb, 610ppm Sb and 658ppm Bi.

Soil samples were collected over the Miss Blackburn magnetic target at 200m line spacing by 50m sample spacing. Several spot Ni, Co, Sb, Pb and Zn anomalies and spot Au geochemical anomalies were revealed. Two of the Au anomalies may be of significance as these are open to the north and west and south and west respectively.

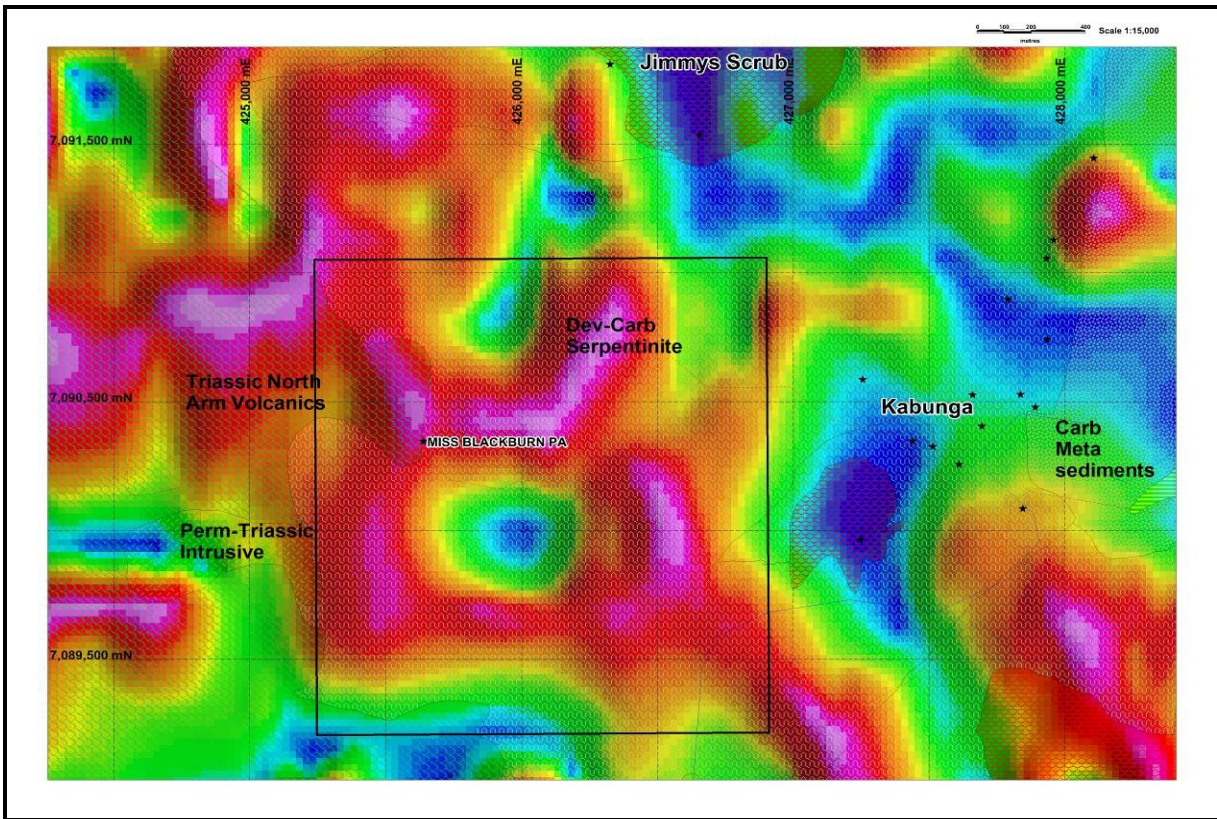


Figure 11. Miss Blackburn prospect circular mag low within magnetic serpentinite.

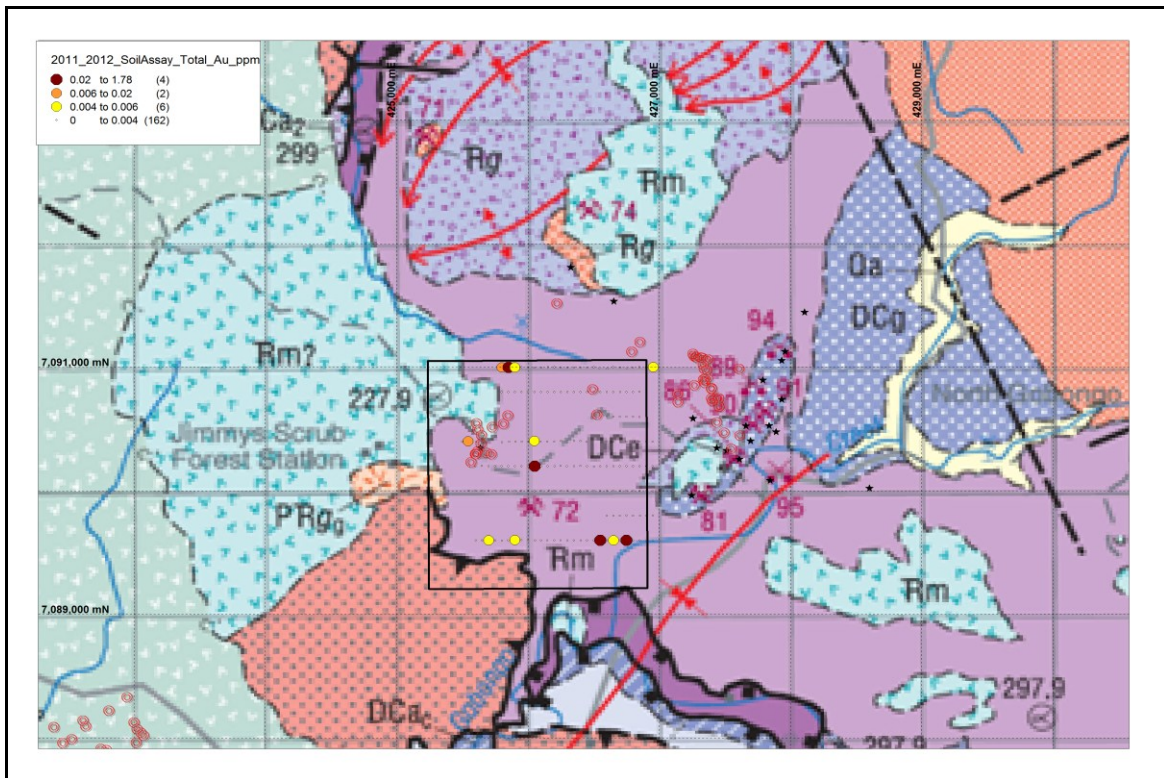


Figure 12. Au thematic on government 100k geology map.

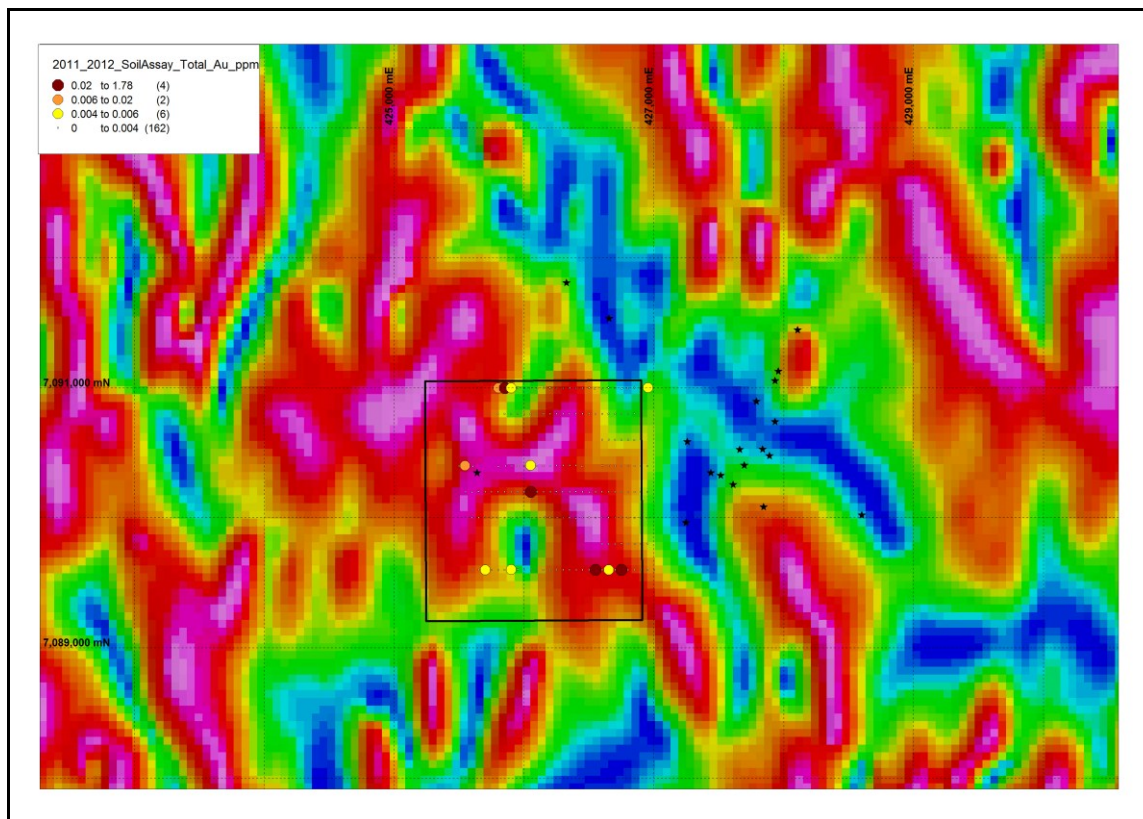


Figure 13. Soil sample assay results for gold (ppm) at Miss Blackburn Prospect

4.0 Year 2012-13

During the **2012/2013** year of tenure, no further ground work was carried out and the tenement was surrendered in full.

Table 1 – Drilling Statistics

Dhole ID	UTM WGS-84- East	UTM WGS-84- North	Elevation	Azimuth- Mag	Azimuth- True	dip	depth	date
PEE-1	422084	7081673	454	215	225	60	126	16-Mar-06
PEE-2	422151	7081714	448	233	243	60	96	21-Mar-06
PEE-3	421892	7081848	491	160	170	60	120	24-Mar-06
PEED01	422098	7081582	453	vert	vert	60	287.8	16-Nov-09
PEEN01	422127	7081699	446	vert	vert	0	84	14-Dec-09
PEEN02	422103	7081747	453	vert	vert	0	76	14-Dec-09
PEEN03	422264	7081695	449	vert	vert	0	60	15-Dec-09

5.0 CONCLUSIONS AND RECOMMENDATIONS

Further review by Geodiscovery of the magnetic modelling of the VTEM magnetic dataset and magnetic susceptibility logs led to the following conclusions. The modelling indicates a discrete magnetic body with a depth extent of around 250m – 300m and a magnetic susceptibility of around 0.04 SI units (or 4000×10^{-5}). The logged susceptibility values from hole PEED01 range between around $1000 - 4000 \times 10^{-5}$ SI (0.01 – 0.04 SI), with an average susceptibility over entire hole of around 0.03 SI units. Thus the measured drill-hole susceptibilities confirm the modelling results. It has been confirmed that the drill hole intersected the southern portion of the magnetic body.

- There is no clear correlation between the magnetic susceptibility and Cu/Au mineralisation in hole PEED01. There does appear to be some correlation between magnetic susceptibility and % sulphides which may indicate an association between magnetic susceptibility with the presence of pyrite and /or pyrrhotite (pyrite can be moderately magnetic and pyrrhotite is v magnetic). This means that while increased magnetic response may indicate increased sulphides – it does not necessarily indicate the presence of Cu / Au.
- Hole PEE1 located central to the magnetic body intersected good Cu / Au mineralisation. PEE2 located on the eastern margin of the magnetic body did not intersect Cu / Au mineralisation. Hole PEE3 is located to the NW of the magnetic body did intersect some Cu/Au mineralisation.
- Hole PEEN03 is located to the east of the magnetic body and intersected >1% sulphides but low Cu / Au values. This may indicate the presence of chalcopyrite (non-magnetic) and / or pyrite and pyrrhotite.

Geodiscovery's modeling of the geophysical data and conclusions from Professor Ashley's petrographic work indicate that the main part of the porphyry system at Peenam has not yet been discovered.

It is recommended that the gaps in soil geochemistry over the untested magnetic low be filled in with further sampling in order to outline any anomalies.

Further drilling is recommended to test the magnetic low and to further test the central magnetic high feature. A step-back inclined hole from PEED01 and a vertical hole over the Au-Cu intersection in PEE1 will further test the central magnetic target.

It is recommended that soil geochemistry and reconnaissance geological work is conducted over Geodiscovery's anomaly 4 and over the Miss Blackburn anomaly.