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## **LARGE-SCALE TARGETS READY TO BE DRILLED AT HAWKS NEST AND MT JUMBO**

- Hawks Nest drilling programme ready to begin in April 2017 after approval granted. This programme includes 22 RC/AC holes varying from 80m to 225m depth within the Hawks Nest tenement (E38/3127), aimed at testing a combination of geochemical, IP, historical drilling, old workings and interpreted structural and intrusive targets.
- Many other individual magnetic targets HN6 to HN35 are currently being inspected in the field for follow up geochemistry and potential drilling. Two large-scale (greater than 1km) targets prospective for large gold deposits will also be investigated after interpretation of a recently completed 260 line-km ground magnetic survey.
- Further drilling is also being planned to test both the gold and silver potential of the 600m strike extension of the Mt Jumbo structure from E38/3100 onto E38/3127.
- Field programmes for Mertondale E37/1258 and Christmas Well P37/8687–8694 are underway, mainly assessing numerous targets.

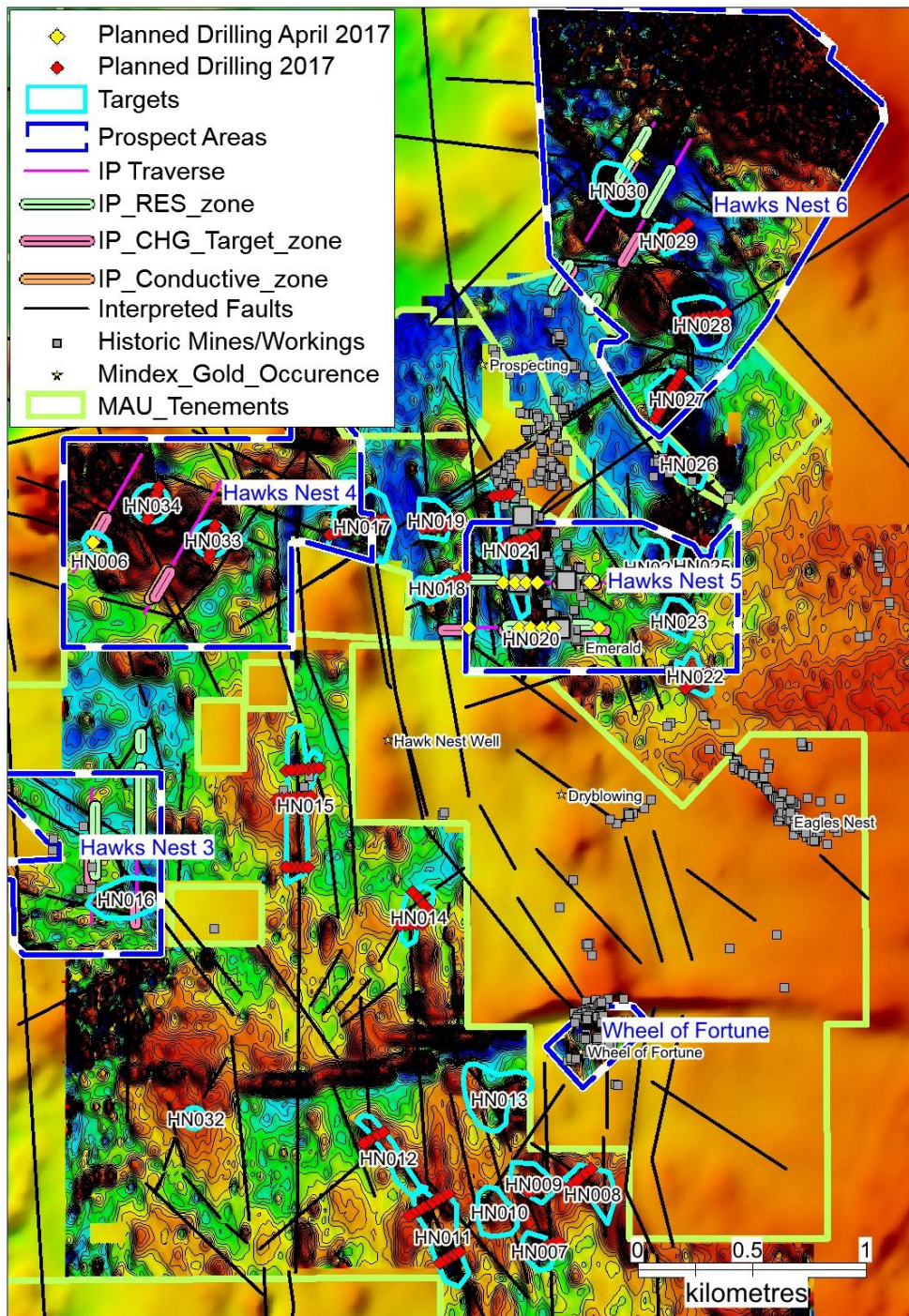
### **Hawks Nest E38/3127 Many Existing and New Large-scale Targets Being Tested**

After a recent Programme of Work (PoW) approval, drilling is planned to start in April and will include 22 RC/AC holes ranging from 80 to 225m in depth, testing 5 existing targets within the E38/3127 Hawks Nest Prospects 3,4,5 and 6 (Figures 1 to 5) and the SW part of the Mt Jumbo shear zone. This drilling will focus on extensions of known mineralised workings and previous anomalous drilling, I.P. chargeable zones, structural and intrusive style zones interpreted from detailed ground magnetic surveys.

A recently completed 260 line-km detailed ground magnetic survey at 50m line spacing has shown up numerous detailed structures and interpreted Ironstones and circular positive and negative remanently magnetized multiple zones up to 400m in diameter. New magnetic targets HN22 to HN30 make up a Z-shaped mostly N–S linear zone over 2.5km in length. The 500m-long Eagle Nest historical workings extend from the SE part of this Z-shaped structure and there are some workings within the central part of this structure as well (Figure 1). This structure is currently being mapped prior to future geochemical sampling and drilling. In addition, near the northern end of this structure an interpreted Ironstone (Target HN30) with an associated I.P chargeable

zone is being tested with a deep 200m RC hole (Figures 1, 8 and 9). This 2.5km long Z-shaped structural zone is prospective for large-scale deposits.

A second large-scale zone 2km to the SW has well-defined N–S structures intersecting a well-defined NW structure with several interpreted ironstones associated over an 1km × 500m area. New ground magnetic Targets HN7 to HN12 are present within this zone which are also being mapped prior to any follow up geochemical sampling and drilling.



**Figure 1. Hawks Nest E38/3127 Ground Magnetic Image showing Hawks Nest Prospects 3 to 6 and individual Ground Magnetic Targets HN6 to 34**

Existing targets which are being drill tested are further described in the following summaries for Hawks Nest Prospects 3 to 7.



## Hawks Nest 3 deep-seated I.P. target under gold-rich supergene blanket

There is extensive sericite alteration of porphyry and unusual rock types including dolomitic rocks within this target. There is also an extensive supergene zone at 30–40m depth over 400m x 300m with 17 historical drill holes having grades above 1g/t Au, with a high value of 1m @ 13g/t Au. Two long IP lines designed to define any deeper mineralisation source below the supergene zone have defined a strong chargeability anomaly which is planned to be tested by a 200m deep drill hole (Figures 2, 3).

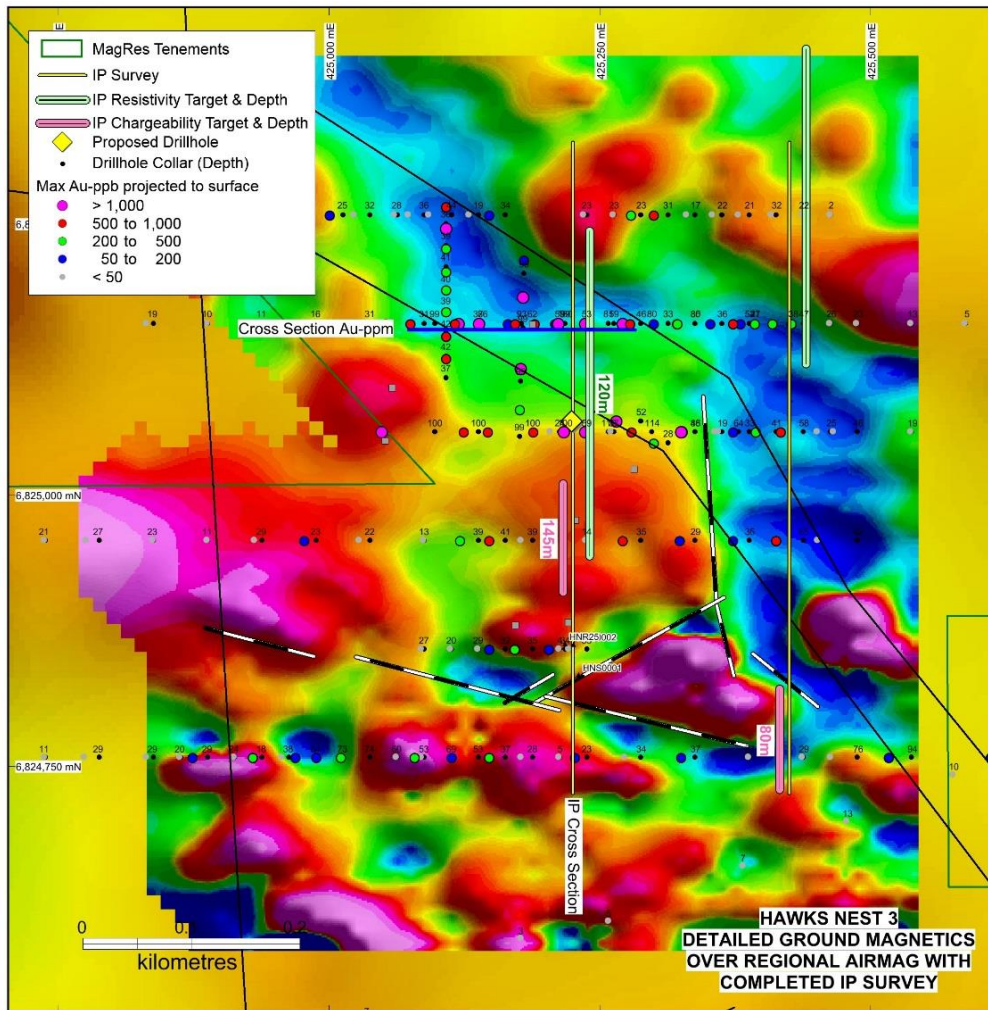


Figure 2. Detailed Ground Magnetics, IP, Historical and proposed Drilling

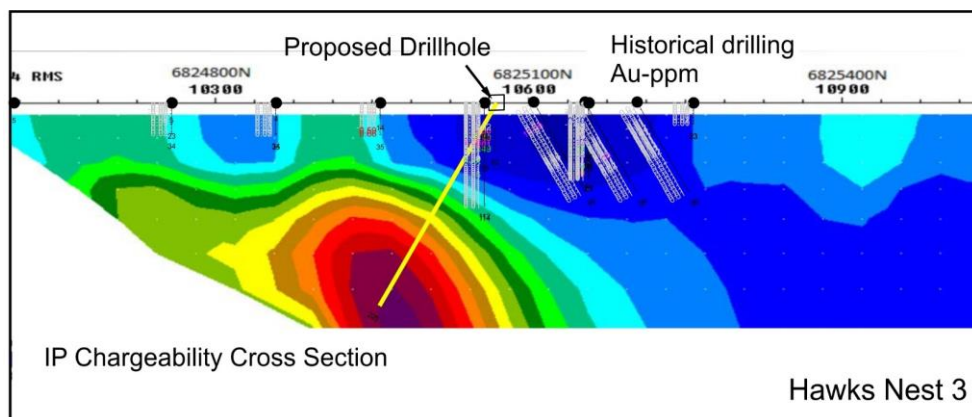


Figure 3. IP Chargeability Cross Section Showing Targets

## Hawks Nest 4 deep-seated I.P. target testing gold-rich ironstone

Well defined mafic units with WNW structures with shallow workings. HNR17 rock chip had a high value of 51.7g/t within an ironstone.

IP lines designed to test for deeper mineralisation have located a strong chargeable zone associated with the steeply dipping ironstone. This combined Ironstone and IP target will be tested with a 200m hole (Figures 4, 5).

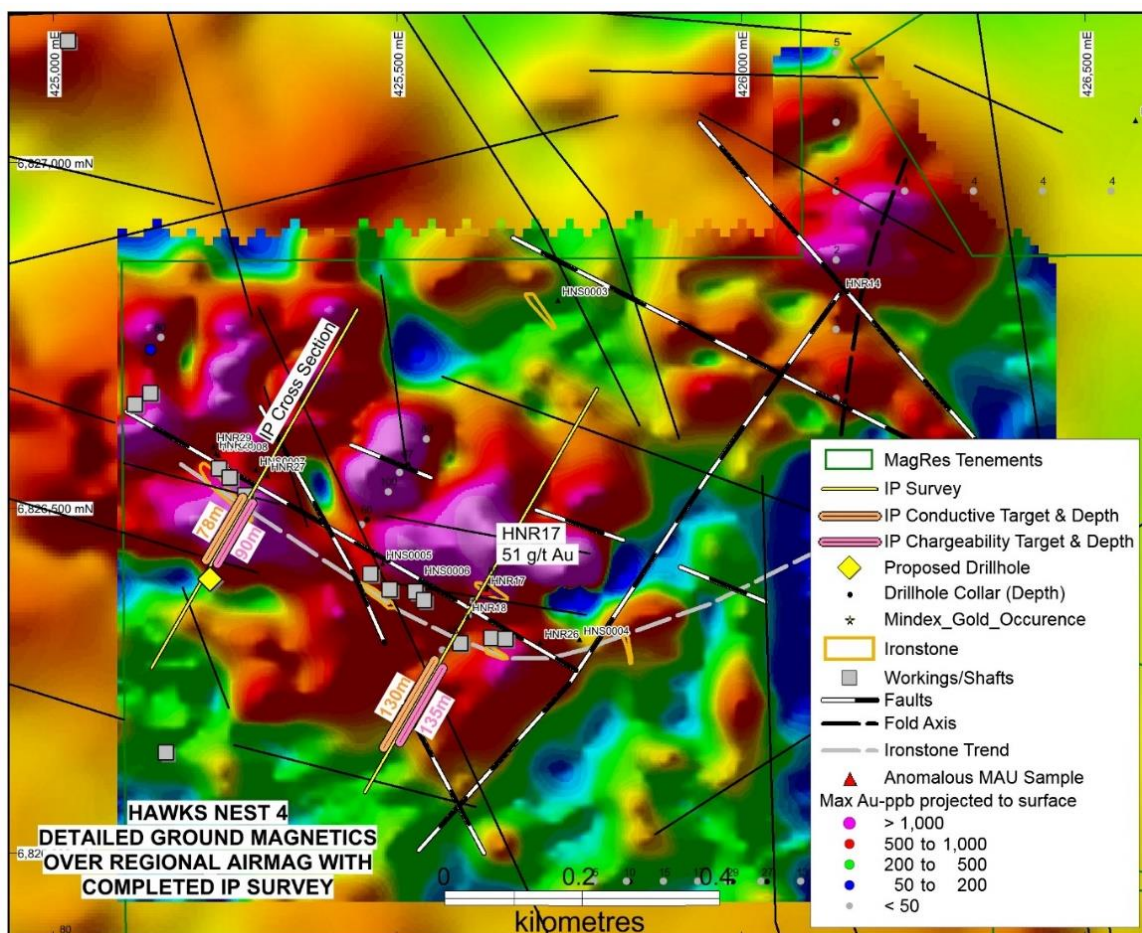


Figure 4. Detailed Ground Magnetics, Completed IP, Historical, Proposed Drilling and Interpretation

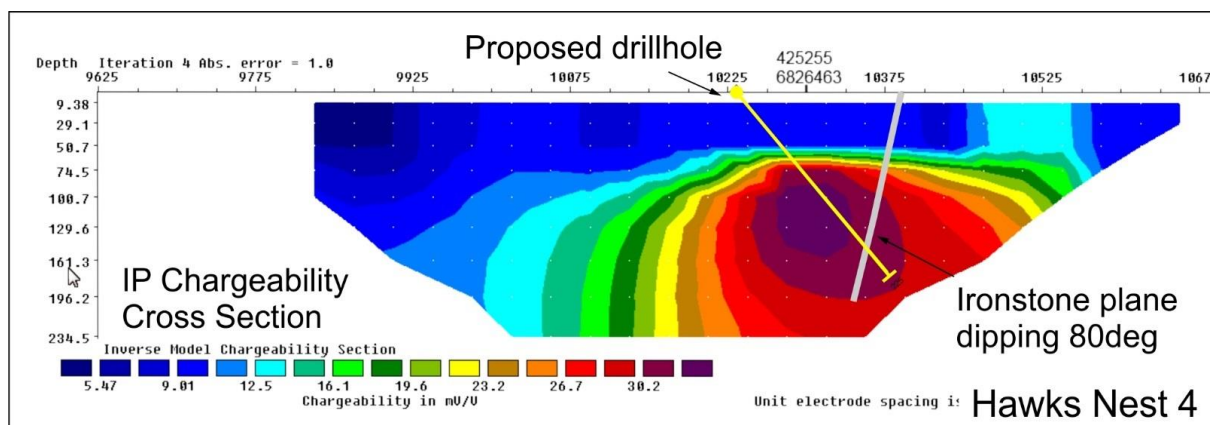


Figure 5. IP Chargeability Cross Section showing Ironstone and proposed drillhole



## Hawks Nest 5 shallow I.P. targets under Emerald workings

A prominent NS 800m × 150m sheared banded amphibolite has several interpreted intersecting structures with a number of NS and NW trending workings associated. Surface sample of 1.6g/t Au in working within NS workings. Two long I.P. lines to test the NS shear zone and two separate NW parallel workings referred to as the Emerald workings. The I.P. has defined three separate chargeable resistive zones. Two of these zones are associated with the Emerald workings and an extensive drilling programme is proposed some of which are shown on the below IP section (Figures 6, 7).

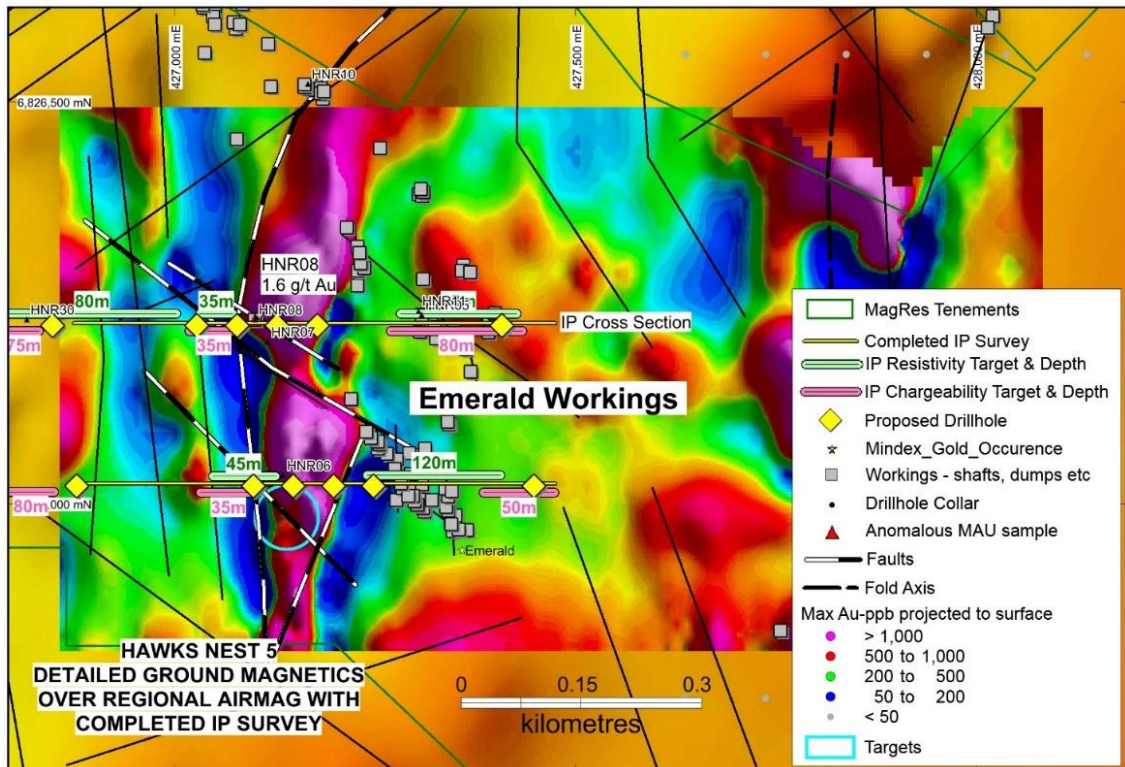


Figure 6. Detailed Ground Magnetics, Completed IP, Historical, Proposed Drilling and Interpretation

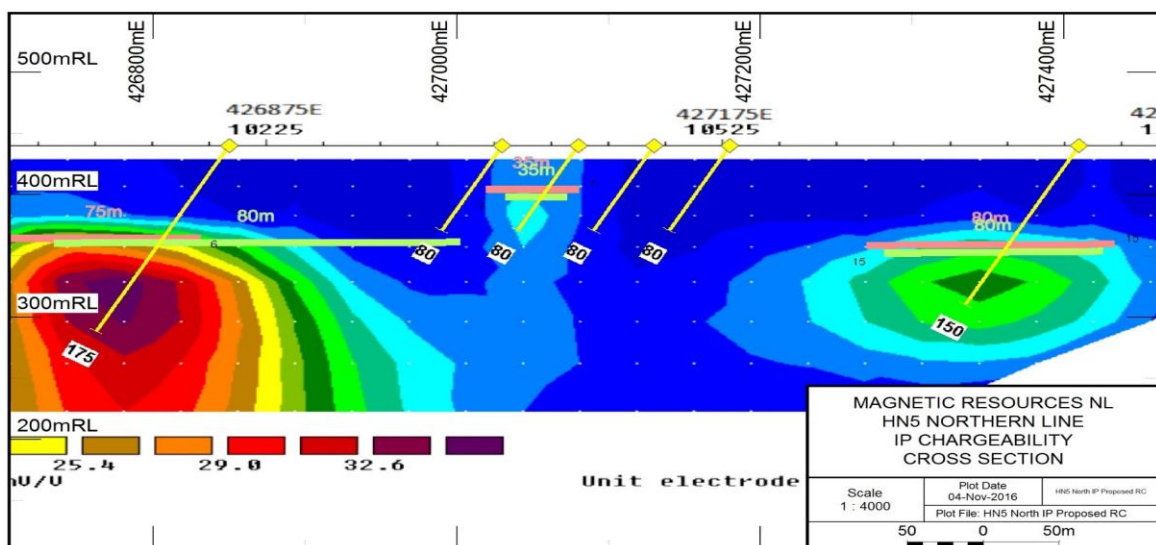


Fig. 7. IP Chargeability Cross Section Showing Targets and Proposed Drilling

## Hawks Nest 6 deep-seated I.P. target testing northern part of 2.5km-long Z structure

Two circular interpreted mafic units with a 400m diameter are like the intrusive-style Wallaby and Jupiter gold deposits. Numerous strongly magnetic interpreted ironstones are located along a 2.5km Z-shaped structure. Two targets shown below are at intersection of NS, NNW and NNE structures. IP lines testing for deeper gold mineralisation have located a medium strength chargeable zones which will be tested by a 200m drill hole (Figures 8, 9).

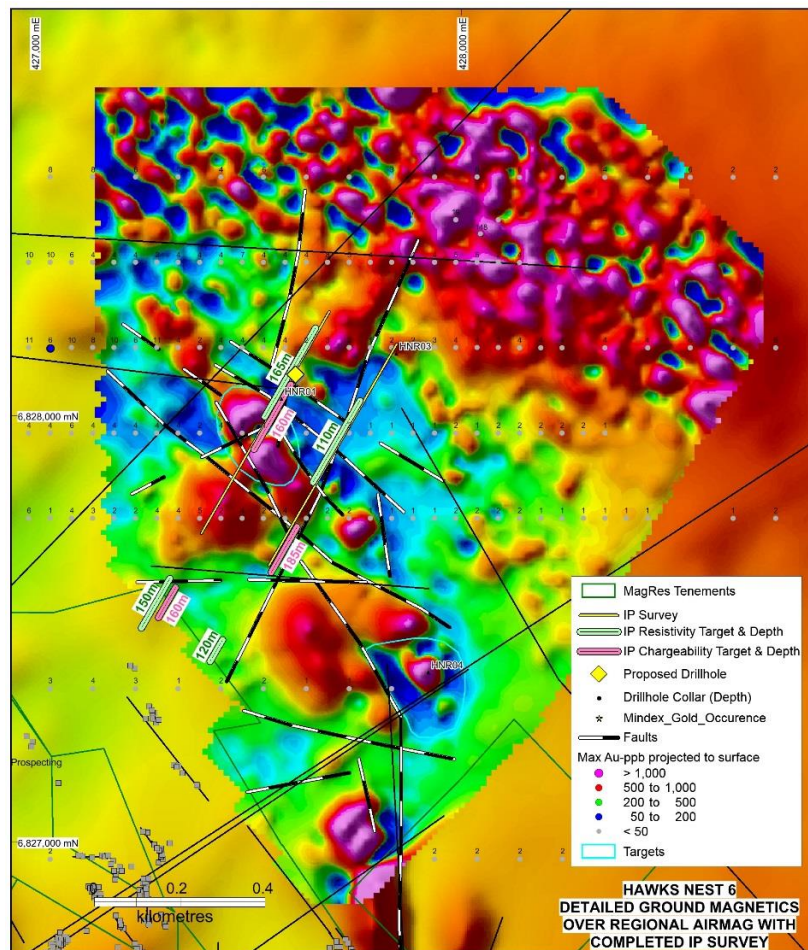


Fig. 8. Detailed Ground Magnetics, IP, Historical, Proposed Drilling and Interpretation

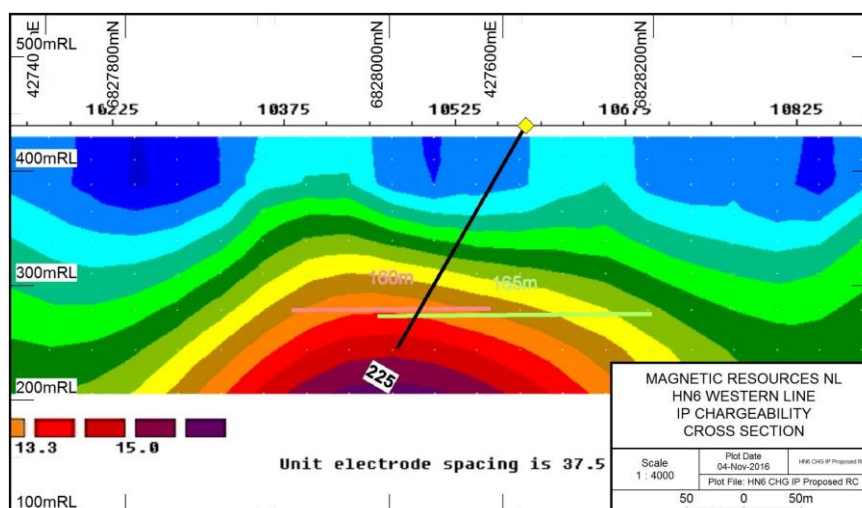


Fig. 9. IP Chargeability Cross Section Showing Targets and Proposed Drilling



## Planned drilling of southwest part of Mt Jumbo Shear Zone

As previously reported (MAU December 2016 ASX Quarterly Report), Magnetic completed four drill holes (including two with diamond tails) over a 700m strike length of the Mt Jumbo shear zone to the west of the Mt Jumbo East tenements (Figs 10 & 11). The drilling intersected a deeply weathered sequence of altered mafic volcanics, ironstones, pyritic carbonaceous shales and ultramafics, with two of the holes bottoming in a massive carbonate unit.

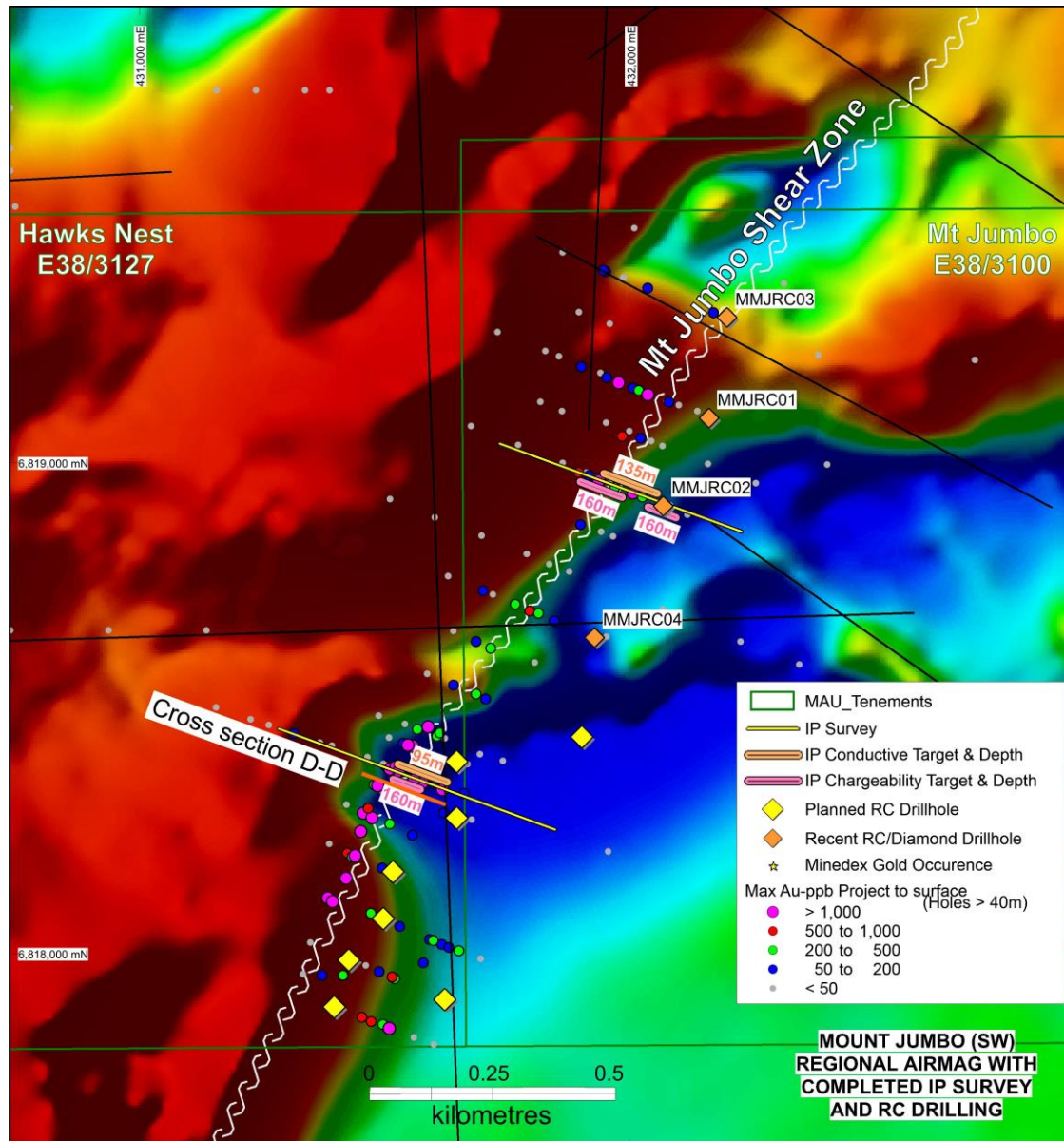


Figure 10 Mt Jumbo Historical drilling, detailed aeromagnetics, completed I.P. and RC holes

Core recoveries in MMJRC-01 were highly variable because of the weathered and altered nature of the bedrock. Fourteen samples of the water return were taken at the collar of the hole for the poor recovery section in pyritic carbonaceous shale and secondary ironstone between 173.0 and 190.9m and filtered to form sludge samples. The sludge samples contain highly anomalous silver values more than 100g/t but gold values are uniformly low. Owing to the nature of the sludge samples they are considered to give only a general indication of grade because of mixing of the drilling

fluid in the drill string, however the results do suggest that the core loss material is enriched in silver.

There is evidence of silica–pyrite alteration in some of the carbonaceous shale horizons within the core with high silver grades ranging from 10.7 to 116g/t Ag together with some anomalous molybdenum and tungsten values (up to 46ppm Mo and 304ppm W) occur in MMJRCD-01. The high silver values are associated with pyritic carbonaceous shale, secondary ironstone and weathered mafic volcanics in a zone of variable core recovery. Gold values are low with a maximum of 0.7m @ 0.11 g/t Au from 182.2m in MMJRCD-01 and 2m @ 0.14 g/t Au from 162m in MMJRCD-02.

The Mt Jumbo structure trends SW into the Company's Hawks Nest exploration licence E38/3127 as evidenced by historical gold drill intersections. Further drilling is being planned to test both the gold and silver potential of this 600m strike extension, which contains higher grades and thicker gold zones including 15m @ 2.4g/t from 96m in hole AXC013, including 5m @ 3.9g/t from 100m and 3m @ 9.1g/t from 138m in hole AXC014 (Fig. 11).

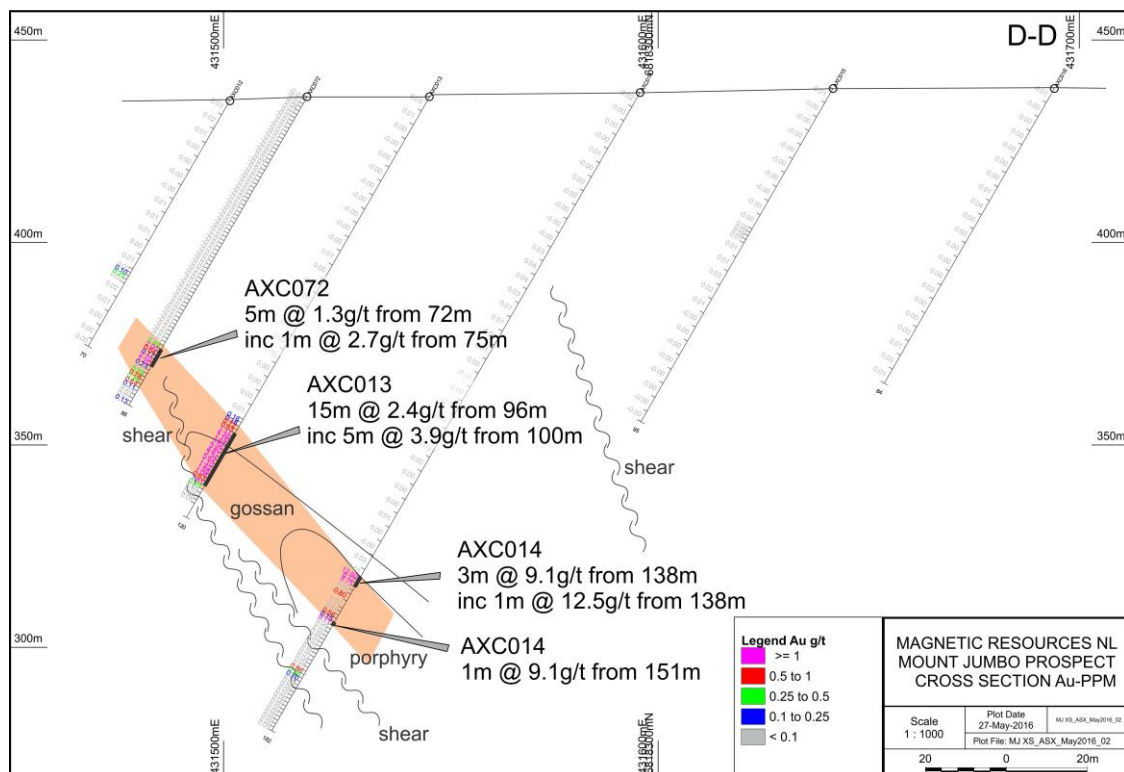
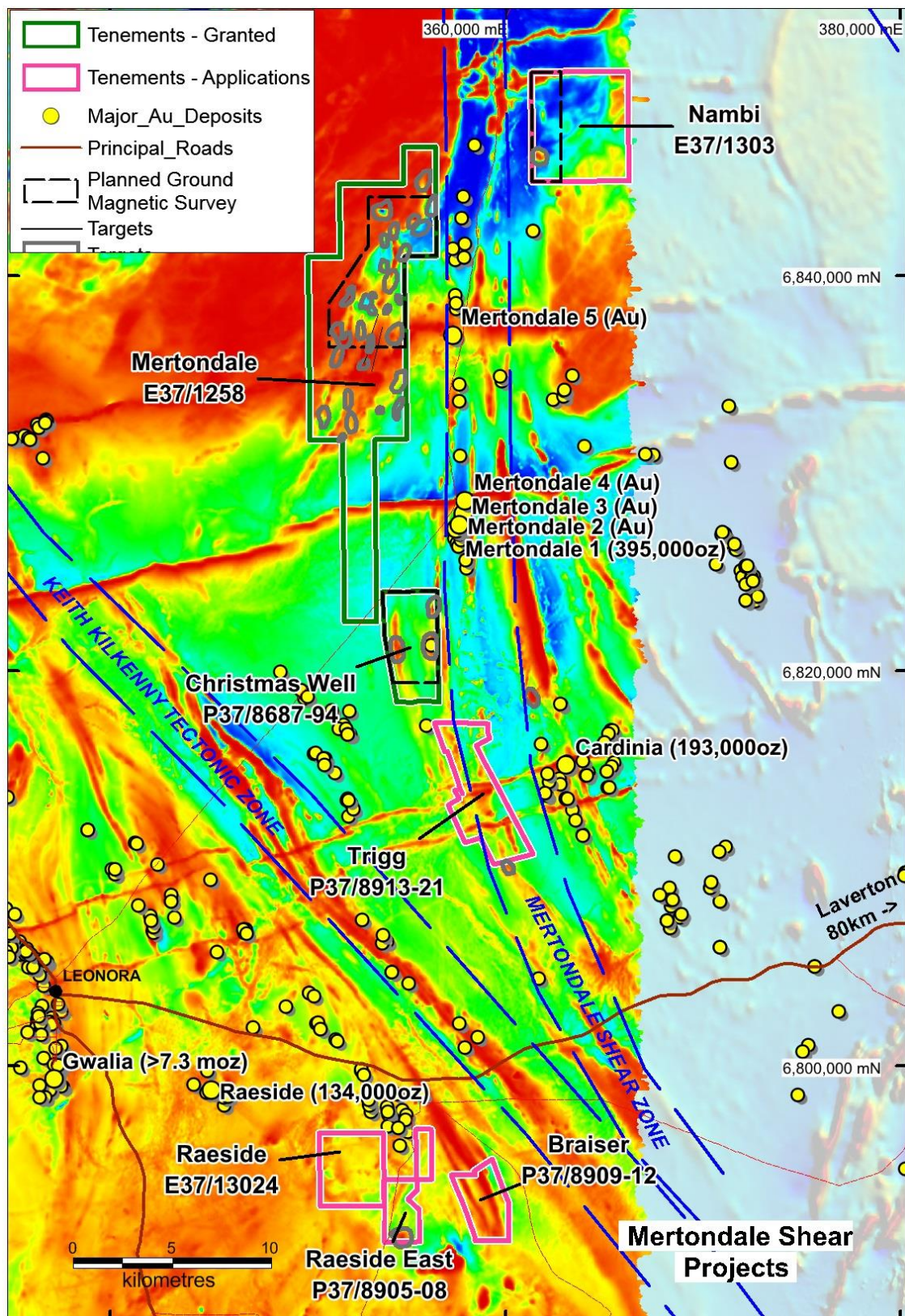


Figure 11. Historical drilling cross section D-D within southern part of the Mt Jumbo Shear

## Mertondale and Christmas Well Pipeline of Targets

Field programs have commenced at Mertondale and Christmas Well assessing a pipeline of structural targets parallel to the Mertondale Shear Zone (Fig. 12), to define follow up methodology, e.g. soil sampling or shallow geochemical drilling.





**Figure 12. Mertondale and Christmas Well targets**

Executive Director George Sakalidis commented “we are excited that the approvals are finally in place and the major 22-hole drilling programme is set to commence in April. We are testing both the existing prospects Hawks Nest 3 to 6 as well as large-scale kilometer-plus structural/intrusive targets, which have potential for large-sized gold deposits. We are assessing these new large-scale zones in the field, which interestingly, have many interpreted prospective ironstones associated with these

structures. These ironstones are often altered and gold mineralized. Follow up sampling and drilling programmes are currently being coordinated. The Mertondale and Christmas Well programmes as well as The Mt Jumbo SW shear extension drilling programme have also been initiated. A very busy period ahead for Magnetic Resources.”

## **Background**

The Leonora–Laverton district is well endowed with world-class gold deposits. A regional study by the Company has so far identified a total of 10 Project areas totaling 375km<sup>2</sup> that have the potential to host large-scale deposits. These tenements are within 50km of existing gold operations, opening the possibility for toll treating.

The Gold tenements now held or applied for by Magnetic include: Mt Jumbo E38/3100 and P38/4201 (17km<sup>2</sup>); Mt Jumbo East P38/4317–24 (11.5km<sup>2</sup>); Mt Ajax E38/3209 (4km<sup>2</sup>); Kowtah P39/8694–8697 and P39/5617 (9km<sup>2</sup>); Hawks Nest E38/3127 (144km<sup>2</sup>); Hawks Nest East E38/3205 (11km<sup>2</sup>); Mertondale E37/1258 (81km<sup>2</sup>); Christmas Well P37/8687–8694 (14km<sup>2</sup>); Nambi E37/1303 (27km<sup>2</sup>); Raeside E37/1304 (24km<sup>2</sup>); Raeside East P37/8905–08 (7km<sup>2</sup>); Braiser P37/8909–12 (8km<sup>2</sup>); Trigg P37/8913–21 (16km<sup>2</sup>).

The objective of Magnetic Resources’ gold exploration program is to identify large gold deposits of 1Moz or greater utilising the geological and geophysical characteristics of the known surrounding deposits. This belt is well endowed with over 34Moz (mined plus resources) being second to the Kalgoorlie region in WA.

Many large deposits are present including: Wallaby (>7.1Moz mined plus resource), Sunrise Dam (>10Moz mined), Granny Smith (>2Moz mined), Gwalia (7.3Moz mined plus resource), Westralia (2.4Moz mined plus resource) and Jupiter (1.3Moz mined resource). The Mt Jumbo and Hawks Nest tenements are only 10km and 20km north of the Wallaby deposit respectively.

Work planned by the Company will be focused on extensions of any known mineralised zones within the tenements identified by previous exploration, and on large scale localised features identified by geological and geophysical interpretation, that are prospective for large scale deposits which appear to be largely untested.

Initial work over targets identified is expected to include gold soil geochemistry and ground magnetics, which in some cases can identify near-surface mineralisation. The Company will also examine the effectiveness of any historical work including assessment of whether the drill depth was adequate.

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### **COMPETENT PERSON'S STATEMENT**

Information in this report that relates to Exploration is based on information reviewed or compiled by George Sakalidis BSc (Hons) who is a member of the Australasian Institute of Mining and Metallurgy. George Sakalidis is a director of Magnetic Resources NL. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. George Sakalidis consents to the inclusion of this information in the form and context in which it appears in this report.



