

## ASX ANNOUNCEMENT

### ASX: IPT

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### Priority Nickel Targets Identified at Yarrabubba Joint Venture Project, WA

#### SUMMARY

- Regional soil geochemistry at the Yarrabubba Joint Venture Project near Meekatharra in Western Australia has defined 7 priority targets for nickel mineralisation;
- The Yarrabubba Project covers a large (>50 km) diameter meteorite impact structure that has similar geological features to those at the large Sudbury mining camp in Canada that has produced about 20% of the World's nickel;
- In addition one target each for gold, tin and porphyry molybdenum-copper-zinc style mineralisation have also been identified;
- None of these 10 areas have been drilled. Selection of areas for drilling to be done in the March Quarter 2010;
- Detailed follow-up mapping and soil sampling is in progress to define specific drill targets;
- Impact Minerals has a 20% share of the Yarrabubba Project and is in Joint Venture with CITIC Nickel Australia Pty Ltd (60%) and four private investors (20%).

Market Cap

A\$25m (\$0.27 p/s)

Issued Capital

93,403,328

#### Directors

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Chairman

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Managing Director

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## The Yarrabubba Impact Structure

Impact Minerals' 20%-owned Yarrabubba Project has all of the geological characteristics of the World Class Sudbury mining camp in Canada which has produced about 20% of the World's nickel. It is generally accepted that a major meteorite impact occurred at Sudbury and that this gave rise to the many large nickel-copper-PGE deposits in that area.

The Yarrabubba Joint Venture tenements cover 1,218 sq km. Within these there is a very large magnetic low in regional airborne magnetic data and distinctive geological structures indicative of shock metamorphism have been interpreted (in published scientific papers) to be caused by a major meteorite impact. The feature in this area is referred to as the Yarrabubba Impact Structure.

Interpretation of close-spaced airborne magnetic data flown by the Yarrabubba Joint Venture has defined in more detail the large magnetic low (Figure 1). It is at least 50 km long and up to 15 km wide and is interpreted to be caused by both the meteorite impact and by subsequent related hydrothermal alteration that may form mineral deposits within the intensely fractured rocks. The alteration has caused extensive magnetite destruction and development of sericite, a white mica.

The airborne magnetic data has also revealed multiple radial and concentric structures prospective for deposits of nickel, copper and platinum group metals, similar to those which host nickel deposits at the Sudbury mining camp (Figure 1).

### Soil Results

Two soil geochemistry programmes have been completed at Yarrabubba: a regional survey that covered about 80% of the project area at a sample spacing of 500 metres by 500 metres (previously reported) and a follow up survey consisting of 135 samples taken along 11 single traverses at a sample spacing of 100 metres. The samples were submitted for multi-metal analysis by the MMI-M partial digest method at SGS Laboratories in Perth.

The soil results have defined (Figure 1):

1. Seven targets for nickel, with nickel-in-soil values of between 5 and 50 times background and with coincident cobalt-in-soil responses of up to 93 times background. Of these:
  - five are coincident with the concentric and radial faults within or close to the large magnetic low, all of which are interpreted to be directly caused by the impact event; and
  - two overlie interpreted remnants of greenstone belt rocks and major faults in the granite bedrock. These areas are prospective for nickel deposits hosted by ultramafic rocks in the greenstone belts as well as for nickel sulphides related to the impact structure.
2. One target for gold with gold-in-soil responses of up to 36 times background that covers the western margin and strike extensions of gold bearing structures in the Barrambie greenstone belt to the East.

3. One target for tin with tin-in-soil responses of up to 25 times background that covers major concentric faults interpreted to be related to the impact event.
4. One large area of interest 6 km by 5 km in dimension with coincident weak to moderate responses for molybdenum (5 to 35 times background), zinc (10 to 46 times background), and copper (up to 7 times background). This polymetallic signature occurs within the large magnetic low close to the interpreted centre of the impact structure and is of interest for porphyry-style mineralisation.

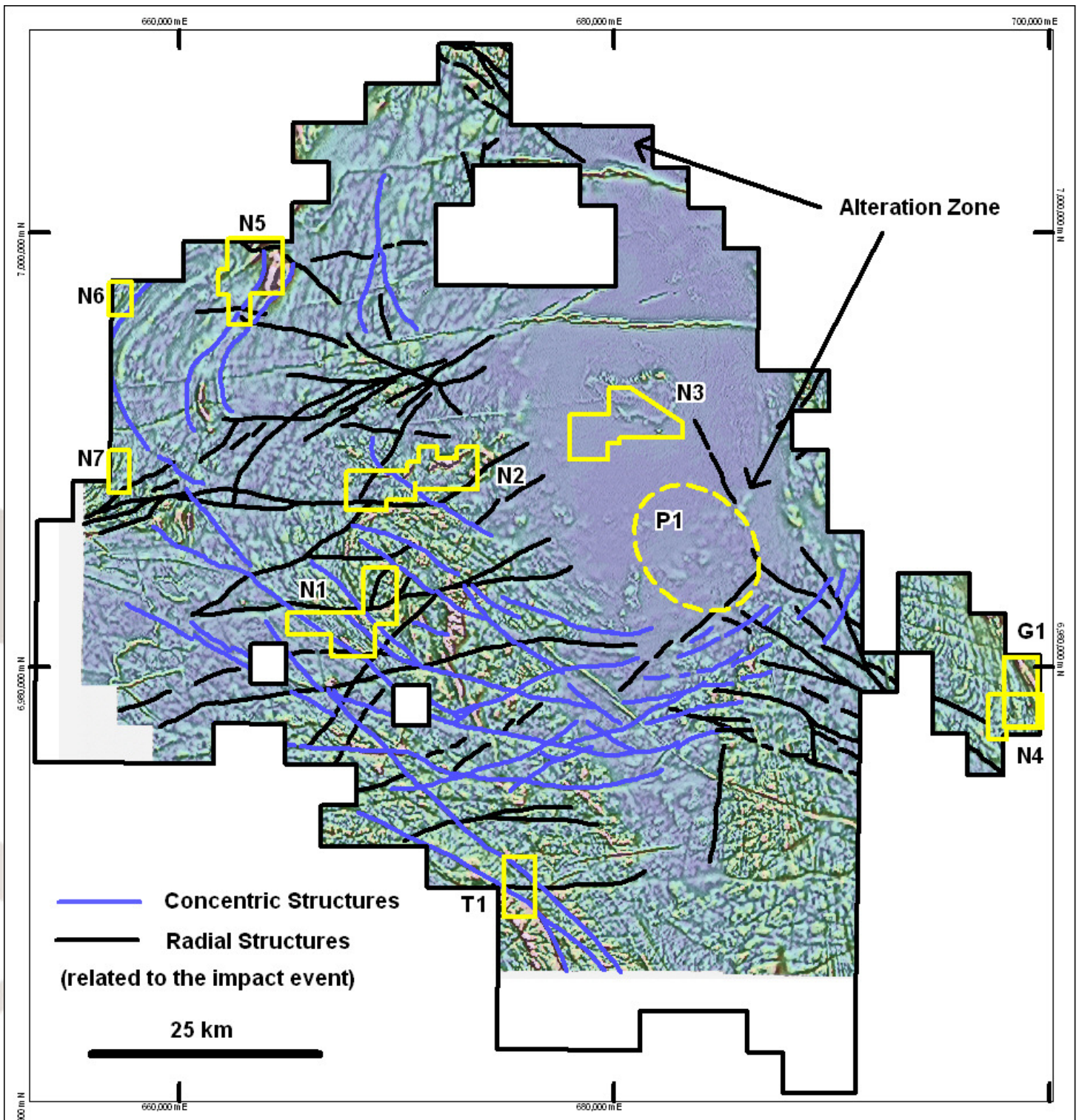
Follow up detailed mapping and further soil sampling to define specific drill targets on the nickel targets and to verify the targets for the other metals is in progress.

Selection of targets for drilling will be done in the March Quarter 2010. There has been no previous drilling for nickel or the other metals in this area.



**Dr Michael G Jones**  
**Managing Director**

*The review of exploration activities and results contained in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works full time for Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.*



**Figure 1.** Image of the second vertical derivative of airborne magnetic data over the Yarrabubba Impact Structure showing the YBJV tenement outline and targets for nickel (N1-N7), gold (G1), tin (T1) and porphyry-style (P1) mineralisation.