ASX ANNOUNCEMENT

Date: 12 March 2021
Number: 738/12032021

DRILLING UNDERWAY AT THE APSLEY PORPHYRY COPPER-GOLD PROSPECT, LACHLAN FOLD BELT, NSW.

- **Drilling is underway at Apsley to test combined soil geochemistry and IP chargeability and resistivity anomalies.**
- **The IP anomalies occur within the core zone of a large 2,000 m long by 500 m wide soil geochemistry anomaly defined by copper-gold-platinum-palladium, a metal assemblage characteristic of alkalic porphyry deposits such as Cadia-Ridgeway.**
- **The core is surrounded by a halo of zinc-lead-manganese covering several square kilometres and together these define a text book example of a "zinc doughnut", a pattern well recognised and understood in porphyry copper-gold exploration and present around major deposits globally.**
- **An initial programme of 3,000 metres of RC drilling is planned.**

Drill Rig on Traverse 6,390,200 mN.

Impact Minerals Limited (ASX:IPT) is pleased to announce that drilling is underway at the Company's Apsley Prospect within its 100% owned Commonwealth project in the Lachlan copper-gold province of New South Wales.

The reverse circulation (RC) drill programme will test a number of high priority coincident IP geophysical and soil geochemistry anomalies that have many of the characteristics of those around major porphyry copper-gold deposits around the world (ASX Releases 10th August 2020 and 16th February 2021).

The Apsley Prospect covers a large and significant soil geochemistry anomaly which comprises a core zone 2,000 metres long and 500 metres wide with coincident copper-gold-platinum and palladium anomalies which is surrounded by a larger zone or halo of zinc-lead and manganese. Together these zones define a soil anomaly that covers nearly four square kilometres (ASX Release 10th August 2020).

The IP anomalies, which start close to surface, extend to considerable depth and appear to link up along trend, all lie within the soil geochemistry anomaly and support Impact's contention that the whole area is potentially part of one large mineralised system.

Drilling will focus on five priority traverses which show an excellent correlation between the IP and the soil geochemistry results. The chargeability, resistivity and soil geochemistry results for the first two traverses to be tested are shown in Figure 1 together with the proposed location of drill holes to test the various anomalies.

On Traverse 6,390,200 mN two very strong chargeability anomalies, separated by a resistivity anomaly, extend from surface to a depth of at least 300 metres. The anomalies lie directly below strong geochemical responses dominated by gold, platinum and palladium and together these define a target zone up to 600 metres wide (Figure 1).

On Traverse 6,390,600 mN a very strong chargeability anomaly extends from surface to a depth of about 200 metres, where it is possibly truncated by a low-angle structure which separates it from a deeper resistivity anomaly. The anomalies lie directly below strong geochemical responses dominated by copper, platinum and palladium and together these also define a target zone that is up to 600 metres wide (Figure 1).

Similar relationships are also self-evident on the other three priority traverses (Figure 2). In addition, similar correlations but with weaker IP and soil geochemistry responses are present on most of the other traverses.

The chargeability anomalies in particular can be tracked across numerous traverses thus implying continuity to the anomalies over hundreds of metres of trend in places. Figure 3 shows an interpretation of the extent of the chargeability anomalies on an image of the airborne magnetic data over the Apsley target. The correlation with the copper-gold-platinum-palladium core of the soil geochemistry anomaly and mapped porphyry intrusions is very evident (ASX Release 10th August 2020).

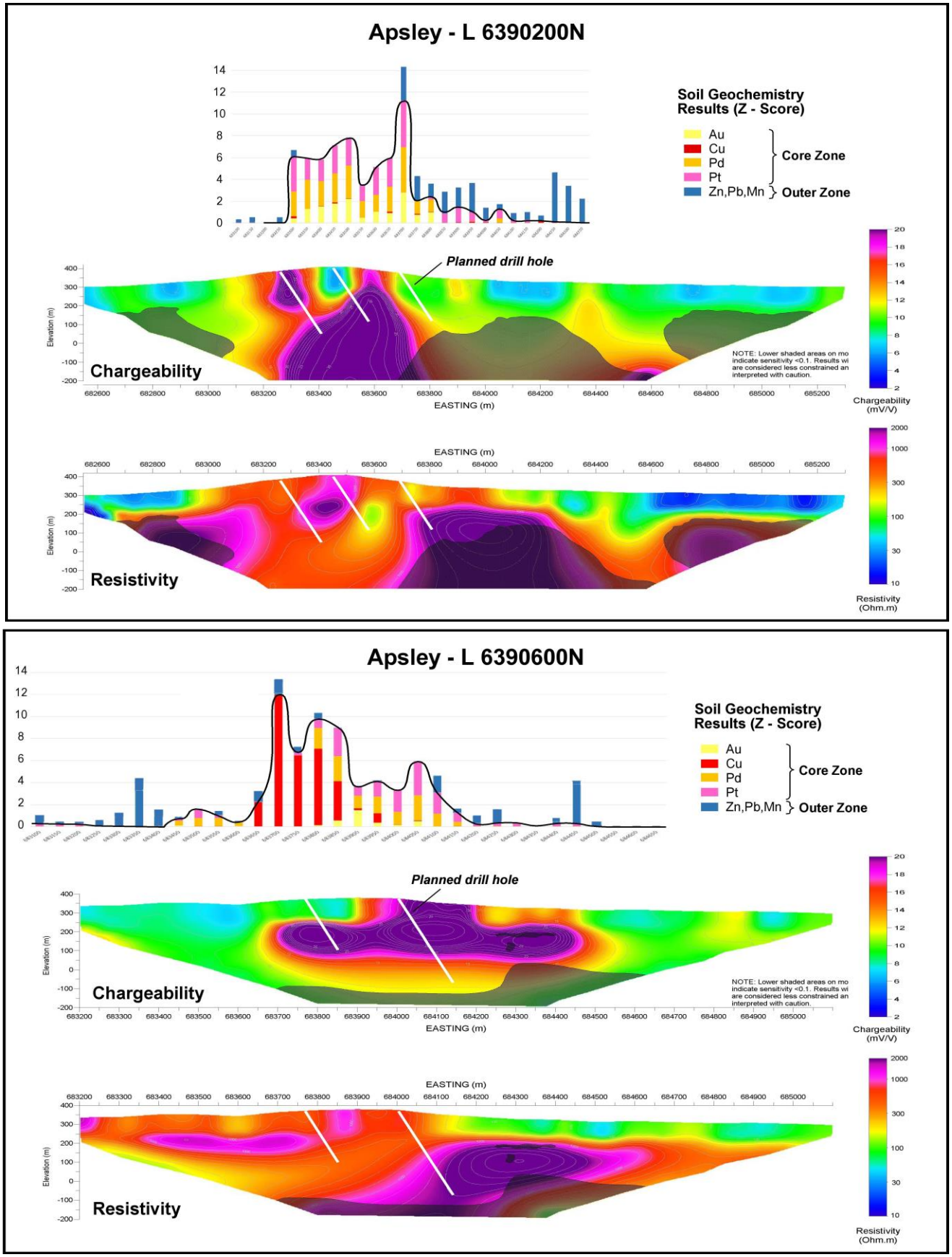

Figure 1. IP and Soil Geochemistry results shown as stacked bar charts of the Z scores for Traverses 6,390,200 mN and 6,390,600 mN.

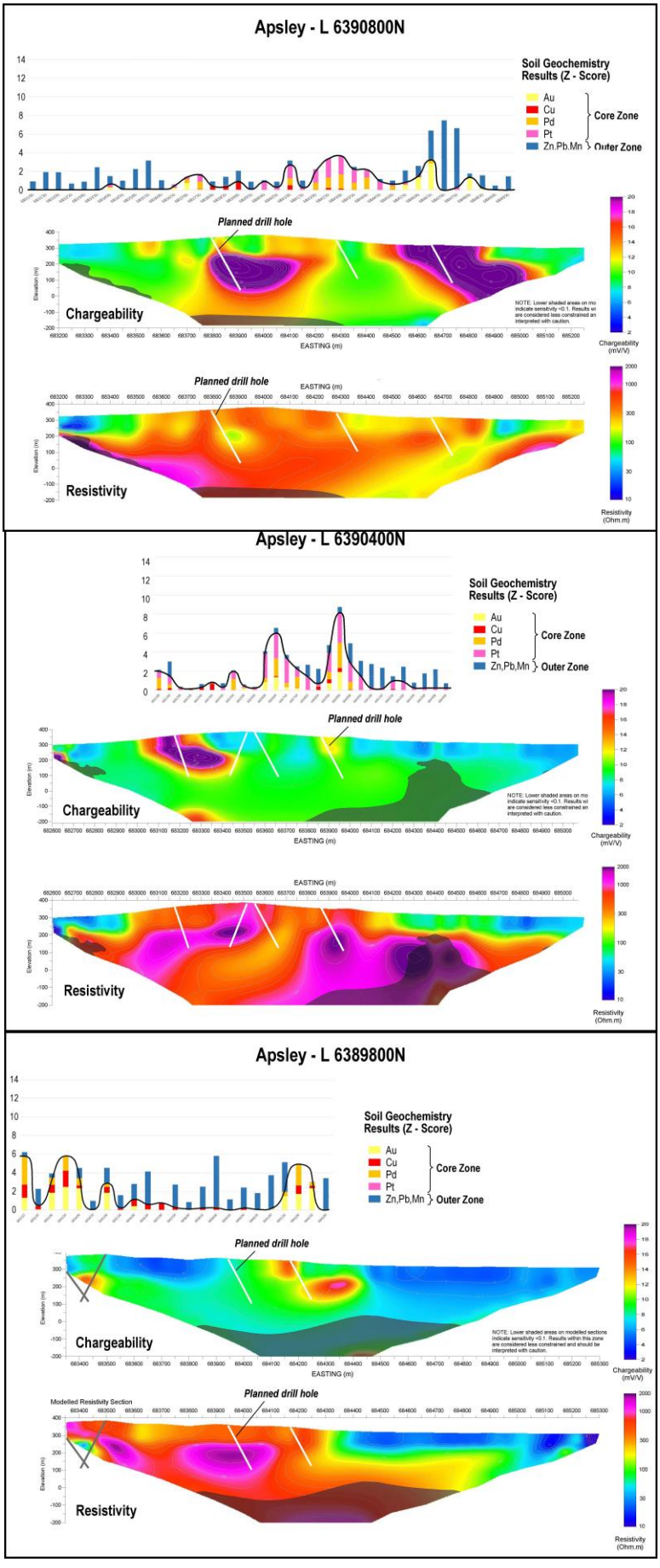

Figure 2. IP and Soil Geochemistry results for Traverses 6,389,800 mN, 6,390,400 mN and 6,390,0800 mN

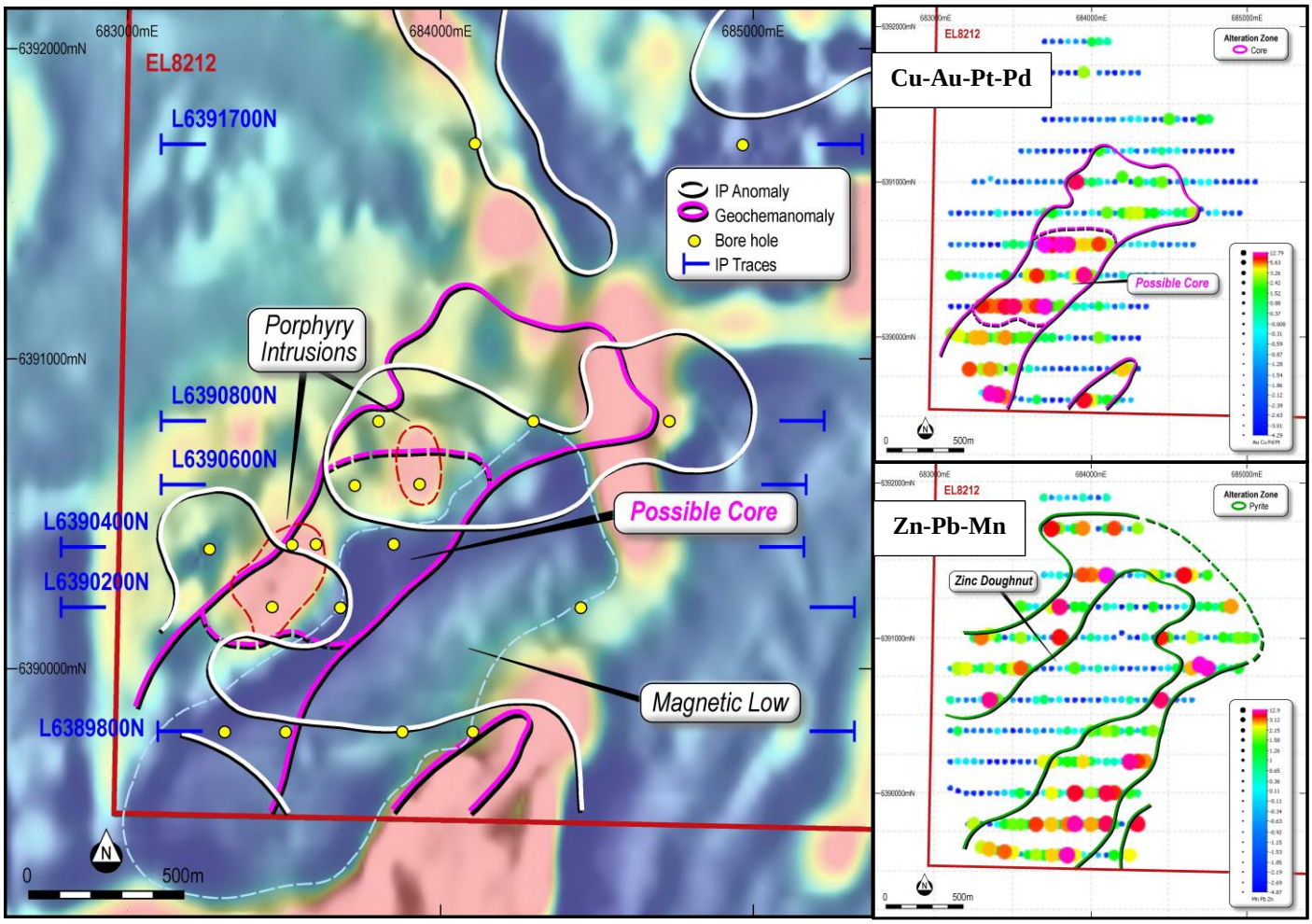

Figure 3. Image of airborne magnetic data over the Apsley prospect with more magnetic units shown in warmer colours showing the interpreted outlines of the chargeability anomalies and the core of the soil geochemistry anomaly. Note also the coincidence with the isolated magnetic anomalies that are targets for the parent porphyry intrusions to any copper-gold mineralisation. Planned drill holes are shown in yellow.
For reference the results of the soil geochemistry survey (shown as additive Z-scores) are also shown. The core zone of copper-gold-platinum-palladium (top right) is surrounded by an outer zone of zinc-lead-manganese thus defining a classic zinc doughnut. In addition the outer zone is also in part coincident with a significant magnetic low which may reflect replacement of magnetite in the host rocks by pyrite as may be expected in outer alteration zones of porphyry systems (for further discussion of these results and the zonation around porphyry copper-gold deposits see ASX Releases 10th August 2020 and 16th February 2021). Apsley is a text book area for the discovery of a major porphyry copper-gold deposit.

Discussion

Work by Impact has shown that the Apsley area contains many characteristic features associated with giant alkaline copper-gold deposits of which Cadia-Ridgeway and North Parkes are the type examples in the Lachlan Fold Belt. These include:

1. Widespread copper-bearing shoshonite host rocks of Ordovician age (a specific high potassium alkaline volcanic and intrusive rock).
2. Rock chip samples and soil geochemistry anomalies with metal assemblages and alteration minerals characteristic of the inner to outer zones of large porphyry copper-gold deposits.
3. The presence of platinum and palladium together with the copper and gold anomalism in the core of the soil anomaly. Platinum group metals are commonly considered diagnostic metals in alkalic porphyry copper-gold deposits.
4. A so-called "zinc doughnut" evident in the soil geochemistry data, a characteristic pattern that is well understood and seen around many significant porphyry copper-gold deposits globally. An example around the Wafi-Golpu deposit in PNG which is of a similar size to that at Apsley is described at the end of this report.
5. An association with magnetic anomalies that may represent the parent intrusion to the system or "skarn' alteration directly associated with copper-gold mineralisation as is seen at the recent Boda discovery of Alkane Resources Limited (ASX:ALK) and ASX Releases 22nd November 2019, 23rd April 2020, 23rd June 2020, 10th August 2020).

For reference a schematic model and detailed description of the metal assemblages and alteration zones around a porphyry copper deposit is given at the end of this report. The model is widely used in exploration for this style of deposit.

The IP data and its spatial coincidence with the soil geochemistry and magnetic data adds immensely to the prospectivity of the Apsley area and further supports Impact's contention that the entire area may be part of one very large mineralised system (ASX Release 10th August 2020).

COMPLIANCE STATEMENT

This report contains no new Exploration Results.

Dr Michael G Jones
Managing Director

COMPETENT PERSONS STATEMENT

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 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 2012 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.

The Role of Zonation in Exploration for Porphyry Copper-Gold Deposits

A key driver in the exploration for porphyry copper-gold deposits is to develop an understanding of the nature and distribution of the distinct zones of commodity metals, pathfinder metals and associated alteration minerals that form around such deposits in order to provide vectors to the high grade cores.

These zones, shown in Figure 4, are well understood in the scientific literature and are widely used in exploration models for porphyry deposits in the Lachlan Fold Belt and elsewhere. Impact has modified the diagram to show the location of the main ore zones and the outer pyrite shell both of which are commonly detectable by electrical geophysical techniques such as Induced Polarisation.

From top to bottom the zones and associated metal assemblages are as follows:

1. Advanced argillic zone: thallium (Tl), lithium (Li), antimony (Sb) and arsenic (As).
2. Upper phyllic zone: bismuth (Bi), tellurium (Te) and selenium (Se).
3. Lower phyllic zone: tin (Sn), tungsten (W) and molybdenum (Mo).

   The phyllic zone is also characterised by extensive pyrite. The pyrite will generally replace pre-existing magnetite in the parent rocks and accordingly the alteration systems around many porphyry copper-gold deposits are associated with marked lows in magnetic survey data.

4. Potassic zone: This zone contains the copper (Cu) and gold (Au) ore. It is commonly centred on the parent porphyry intrusion which may contain magnetite and be recognisable as a discrete high in magnetic data.

   In addition, it is well documented that the inner zones of alkalic porphyries world-wide commonly contain platinum group metals (PGM), palladium in particular. This is particularly the case at North Parkes. PGM's have not been widely used as an exploration tool in porphyry copper-gold exploration in the Lachlan Fold Belt.

5. The entire porphyry copper-gold system is surrounded by an outer propylitic zone which is characterised by a wide range of metals as well as pyrite. The propylitic and phyllic zones are commonly associated with a metal assemblage of zinc-lead-manganese. In many major porphyry copper-gold deposits this produces a characteristic "zinc doughnut" where zinc and related metals are not present over the core of the porphyry but form a distinctive ring or annulus of base metals around the core of the porphyry.

All of these features were potentially recognised in Impact's soil geochemistry survey and airborne magnetic data (ASX Release 10th August 2020). The new IP data has shown that the core area may also contain significant disseminated sulphide, further supporting the model.

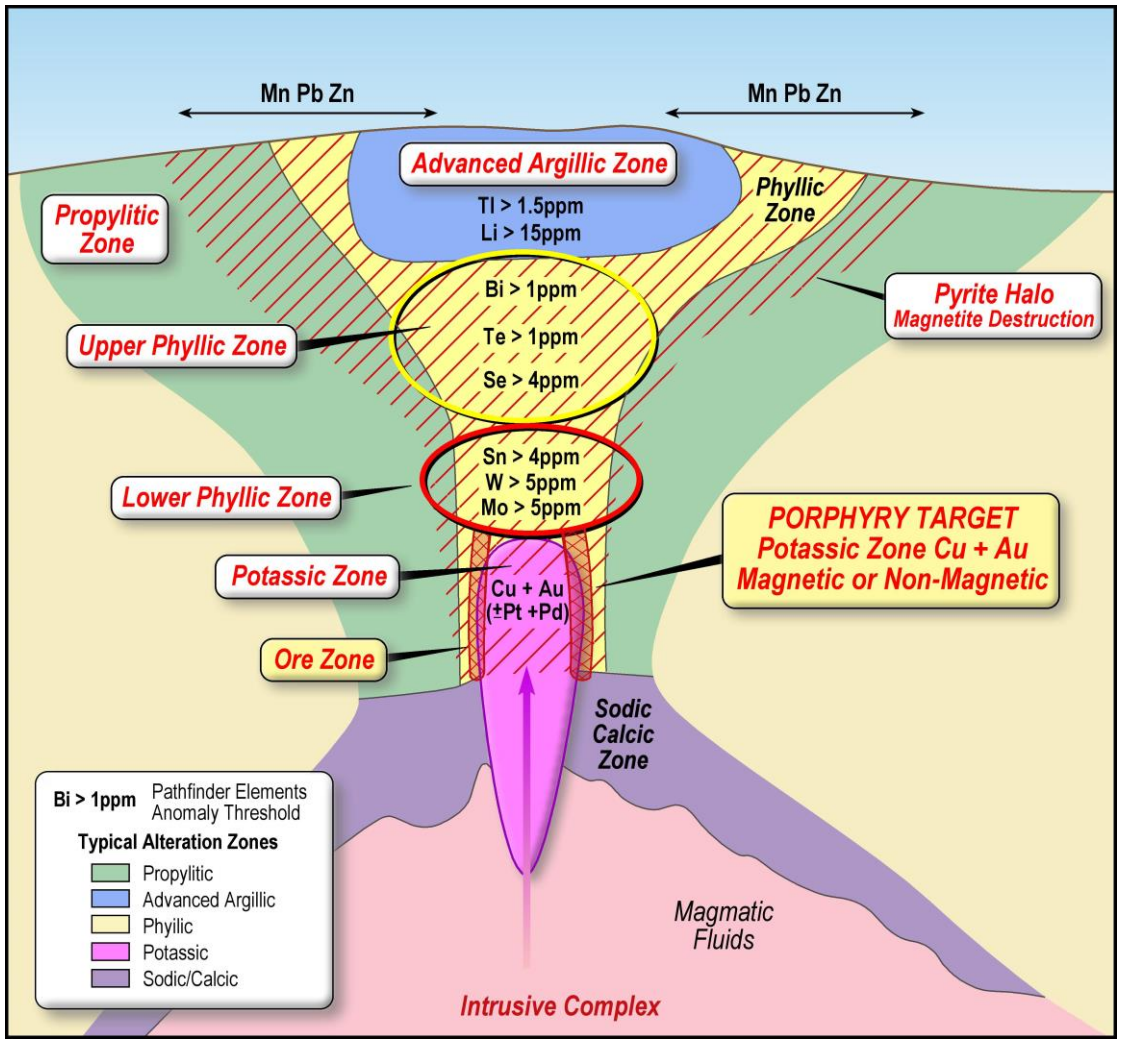

Figure 4. Model of the alteration zones and metal assemblages expected around major copper-gold deposits. In plan view these zones would be concentrically arranged around the host porphyry and this gives rise to the zinc doughnut phenomenon at Wafi-Golpu as shown below. Here soil geochemistry data for zinc shows a well developed annulus around the centre of the porphyry copper-gold deposit. Note the scale of the system which is similar to that defined at Apsley.