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RESOURCES

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BIG HILL IP RESULTS DEFINE 'CLASSIC' EAST LACHLAN PORPHYRY AU-CU PRIORITY DRILL TARGET

- **Full interpretation of Induced Polarisation (IP) results reveal:**
  - **A large-scale IP chargeability anomaly ~1km long by ~650m wide extending to ~500m depth (at 10Mv/v) at the Big Hill Porphyry Au-Cu Prospect**
  - **IP anomaly occupies the centre of the 5km long by 2.5km wide Big Hill Magnetic Complex and appears to indicate a Late Ordovician – early Silurian buried alkalic intrusive centre.**
- **The Big Hill complex is interpreted to represent the upper or outer parts of an Alkalic Porphyry Au-Cu system such as Cadia and Boda, with coincident Magnetic and IP anomalies displaying complimentary:**
  - **~2.2km long by ~400m wide, NNW-SSE striking, Gold + Copper & key porphyry pathfinder soil geochemical anomaly.**
  - **Outcropping Malachite, Azurite, Chalcocite and Native Copper-bearing high grade rock chips associated with distal skarn altered limestones and mafic volcanics at Gowan Green and Razorback, including:**
    - **24.6g/t Au & 26.1% Cu** **2.69g/t Au & 7.55% Cu**
    - **1.16g/t Au & 12.55% Cu** **0.94g/t Au & 5.71% Cu**
  - **Outcrops of Cadia / Boda equivalent stratigraphy and host rocks displaying porphyry style alteration facies including:**
    - **Propylitic 'green rock' epidote - chlorite - albite - sericite - prehnite - hematite - pyrite, incl. characteristic hematite dusting of feldspars 'reddening'.**
    - **Localised 'sodic' or 'alkalic lithocap' style albite - silica - sericite – pyrite**
  - **Feldspar - hematite veins and epidote – carbonate – malachite veins that are typically hosted in feldspar porphyry located above the magnetic high and IP anomaly.**
  - **Correct structural setting with the target cross-cut by Arc parallel and Cross-Arc structures**
- **The Big Hill Prospect is shaping up as the East Lachlan Fold Belt's latest standout, undrilled porphyry target.**
- **Landowner permission is granted, government approvals submitted, and drilling contractor secured with ground preparations on track for drilling scheduled to commence in mid-May**

Sultan Resources Limited (ASX: SLZ) (**Sultan** or **Company**) is pleased to announce results and interpretation from the Dipole Dipole Induced Polarisation (**IP**) survey completed at the Company's Big Hill Porphyry Au-Cu prospect. (see ASX announcement 14/01/2021).

The IP survey forms part of the ongoing exploration program designed to identify drill targets with high potential to host porphyry-style Au-Cu mineralisation across the highly prospective targets at Big Hill. Managing Director, Steve Groves commented:

> *"We are extremely pleased with the progress at Big Hill. Sultan's exploration efforts have rapidly advanced the Big Hill complex from a regional magnetic anomaly with the correct address to what we feel is the standout, undrilled porphyry Au-Cu target in the central Lachlan Fold Belt. The target is regionally significant, and the recent outstanding IP survey results pave the way for imminent drill testing."*

Dipole-Dipole Induced Polarization Results

Results and interpretation of the Dipole-Dipole IP survey completed at Big Hill in the March quarter 2021 have been received. Located approximately 50km south of Boda and 50km north of Cadia in central western NSW, the IP Survey consisted of five ~4km long, north-south orientated dipole – dipole lines and show distinct chargeability and coincident resistivity responses beneath the Big Hill, Razorback and Gowan Green targets.

The Big Hill chargeability response is particularly notable, with a distinct vertical chargeability anomaly approximately 1km long by 650m wide extending from the bottom of the model at a 500m depth (at 10Mv/v) to beneath the surface in the position of strongest Au, Cu and pathfinder element anomalism (Figures 1 & 2). The Big Hill IP response occurs within a distinct magnetic low embayment within the 5km long by 2.5km wide Big Hill Magnetic Complex and is surrounded by a halo of strong magnetic response. The magnetic low potentially indicates a zone of magnetite destruction that could be associated with a mineralised alkalic intrusion (Figure 3).

The IP results are interpreted to represent a magnetite destructive, sulphide rich alkalic lithocap style (albite - quartz - sericite - pyrite) hydrothermal alteration zone of the type that commonly surround resistive cores of potassic alteration and Au-Cu mineralisation in typical alkalic porphyry Cu-Au systems and have greatly enhanced the prospectively of the Big Hill and Razorback targets.

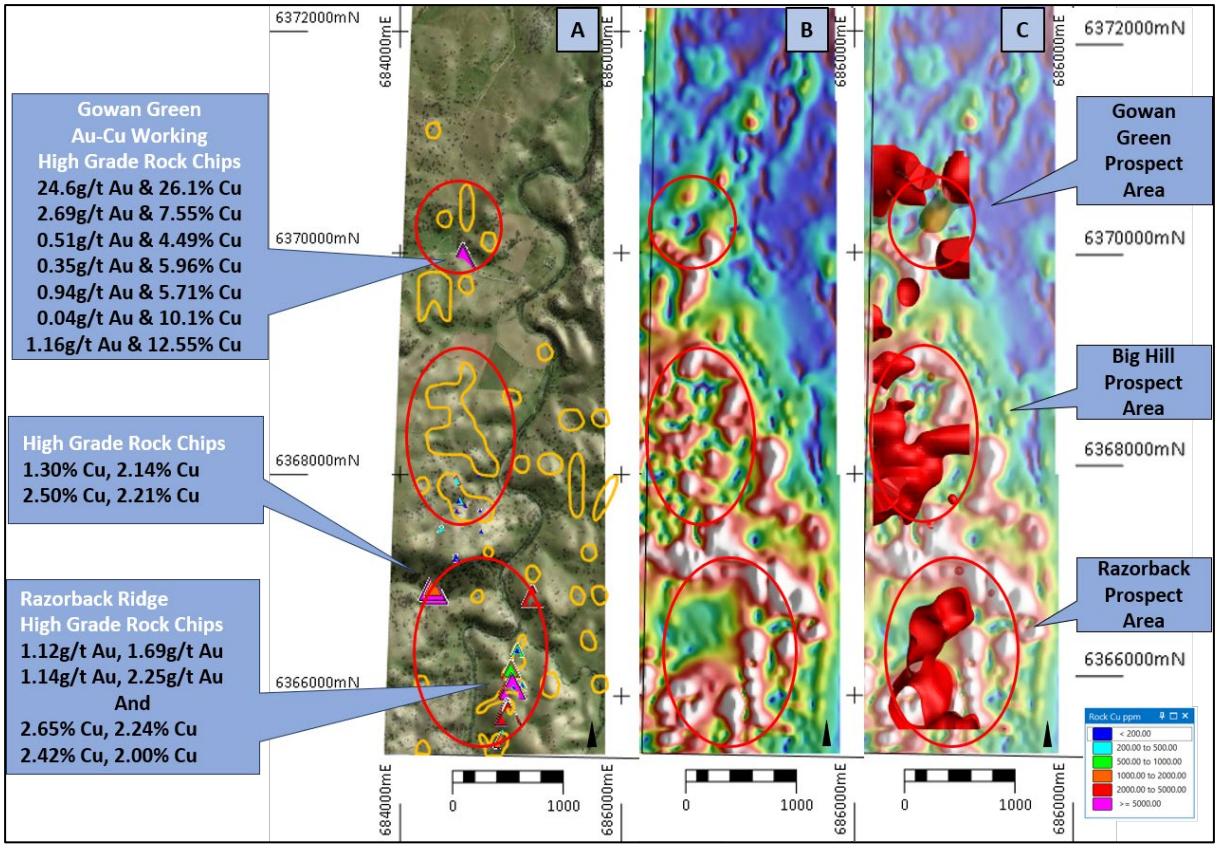

Figure 1: A: Aerial image with 4.5bbp Au contours and Rock Chip locations, B: Airmag Image Analytical Signal Eastshade NL , C: Airmag Image Analytical Signal Eastsheade NL 40% transparent with IP chargeability wireframe isosurface 10mV/V in red

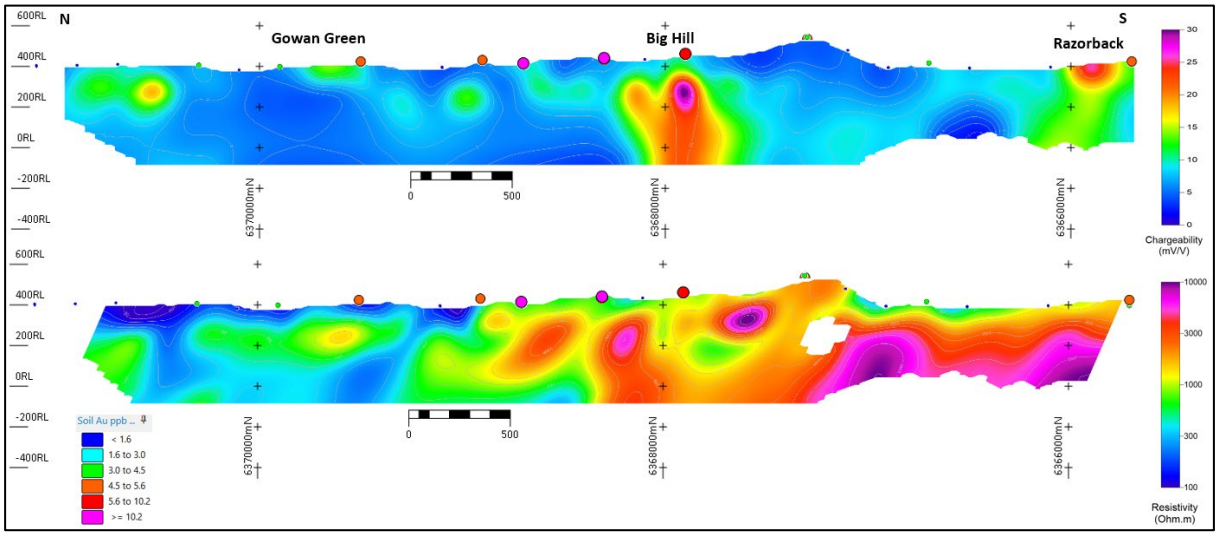

Figure 2: Large upright IP chargeability anomaly (>10mV/V, up to 50mV/V), that extends to the base of the section with a coincident >10000 Ohm.m resistivity anomaly which may represent both pyrite in the phyllic alteration zone and/or Au-Cu mineralisation associated with a more resistive intrusive lithology

Big Hill Porphyry Potential

The Big Hill Prospect is shaping up as the East Lachlan Fold Belt's latest standout, undrilled porphyry target. Every stage of exploration by Sultan has identified characteristics typical of an alkalic porphyry Cu-Au system and the recent IP results have provided the final dataset necessary to design drilling.

The Big Hill Prospect displays coincident and complimentary magnetic and IP responses, high grade copper and gold rock chips, distinct gold and copper plus pathfinder element geochemical soil anomalism and porphyry-style alteration within host-rock geology and a structural setting consistent with the upper or outer parts of an alkalic Porphyry Au-Cu system such as Cadia and Boda.

Geophysical Signature

The Big Hill target is marked by a large, high amplitude ovoid shaped magnetic high complex traversed by north-west striking structures. Three-dimensional magnetic inversion block modelling from all available public data has provided strong indications for the presence of a magnetic intrusive body immediately beneath the Big Hill, Razorback and Gowan Green surface geochemical anomalies (ASX Announcement 27/08/2020). The inversion block model shows a strong spatial association with the location of geochemical surface anomalies and displays a number of narrow apophyses that extend from the main body at depth to the surface in the locations of the strongest surface geochemical anomalism. A prominent magnetic low zone sits in the centre of the magnetic inversion model beneath the Big Hill prospect area.

Three-dimensional inversion models of the IP data show a series of strong chargeability responses coincident with all three of the identified prospects at Big Hill. The most compelling of these exists at Big Hill itself, where the modelled 10Mv/v isosurface defines a 1km long by 650m wide anomaly that sits almost perfectly within a distinct magnetic low zone (Figure 3). The narrow, vertical shape of the response (Figure 2, above) is reminiscent of the classic porphyry intrusive model used in the exploration for these styles of deposit in the LFB (Figure 4).

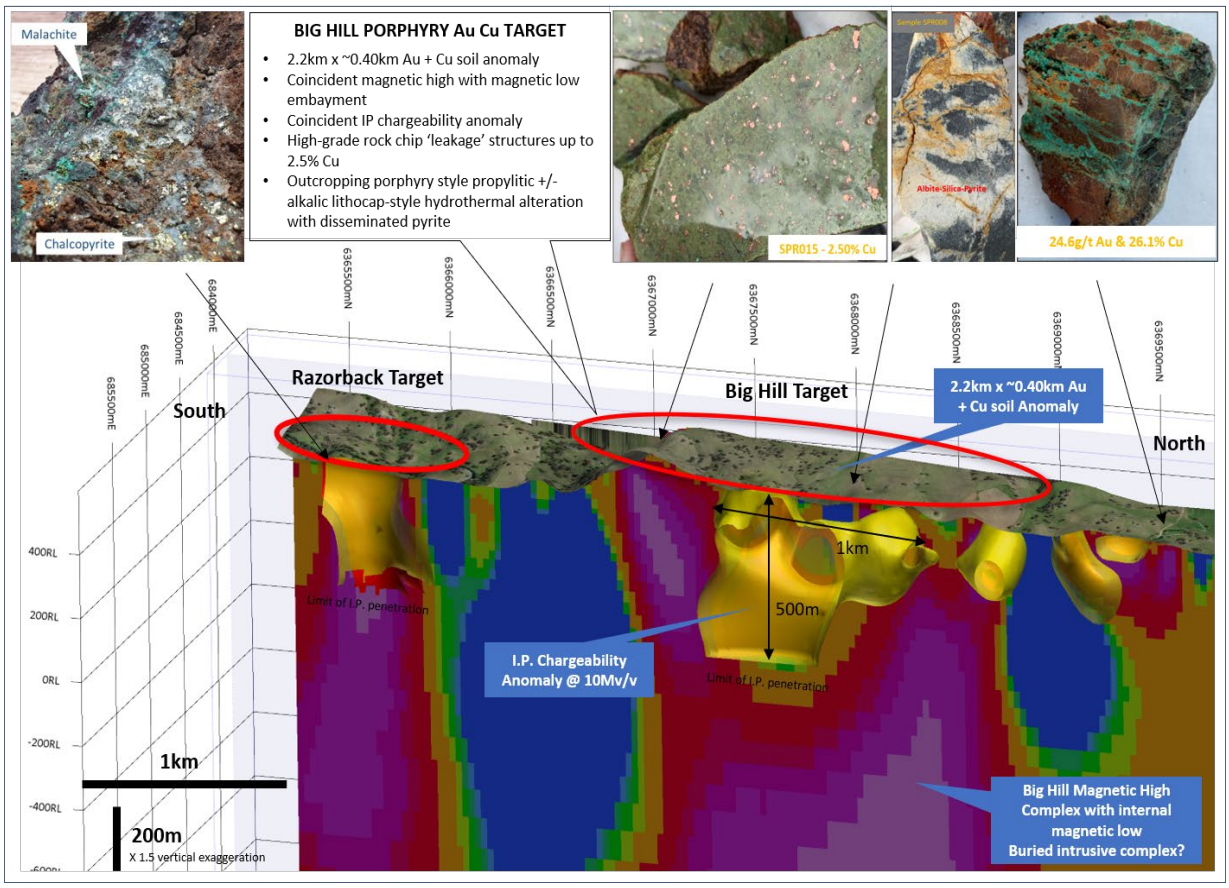

Figure 3: Combined oblique cross-section showing the coincident IP and magnetic responses at Big Hill and labelled with the locations of outcropping mineralisation and alteration from across the three prospects.

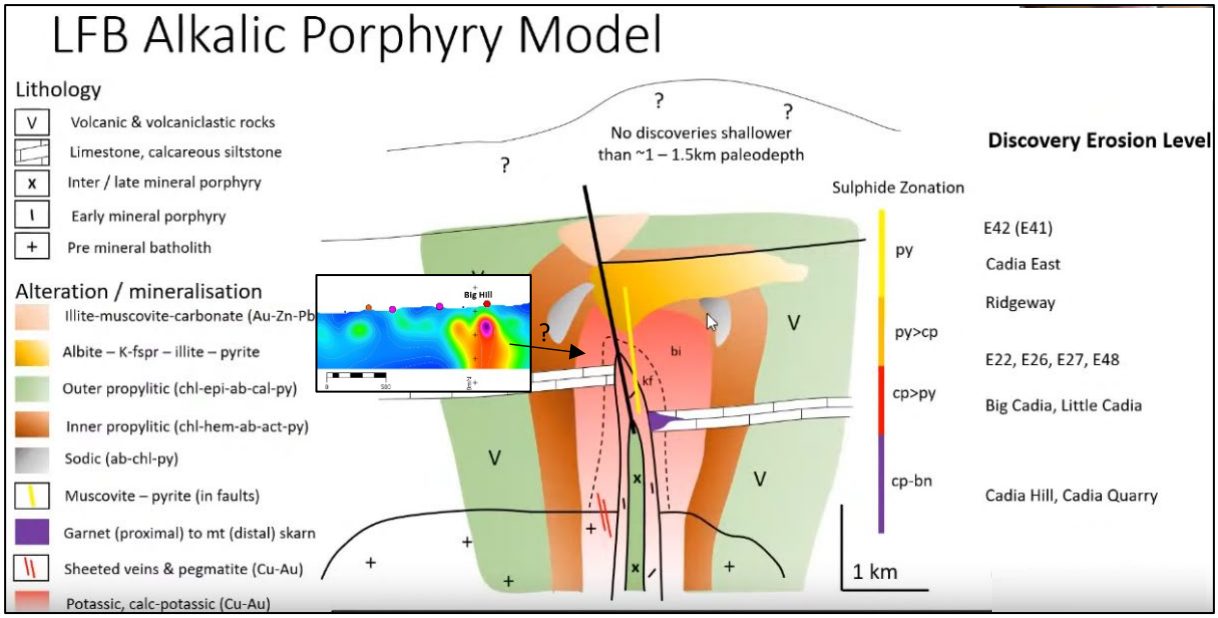

Figure 4: Comparison of the shape of the Big Hill IP chargeability response with a schematic alkalic porphyry model. (Reference: Alan Wilson, Ore Deposits Hub Presentation - Tops of alkalic Au-Cu porphyry systems: Exploration challenge & opportunity, 21/10/2020 (https://www.youtube.com/watch?v=NPefg5Ruk6w))

Geochemical and Geological Signature

Mapping of outcrop at Big Hill shows occurrences of feldspar porphyry which confirms the presence of an intrusive complex. The feldspar porphyry intrudes Oakdale Formation volcano-sedimentary rocks which are the same host rocks to the recent Boda discovery (ASX:ALK). Also identified are zones of porphyry-style propylitic hydrothermal alteration, including extensive magnetite, disseminated pyrite ±chalcopyrite & copper (malachite) in epidote veins reminiscent of features often seen in the upper or outer parts of an alkalic porphyry Au-Cu system (Figure 6, ASX Announcement 20/05/2020). Other classic porphyry-style alteration identified includes localised alkalic lithocap-style sodic (silica-albite-pyrite) altered basaltic volcaniclastic rocks, lavas and sub-volcanic feldspar porphyries.

Soil sampling at Big Hill (100m x 200m sample spacing) has defined three geochemical anomalies of interest, including the high priority Big Hill Au-Cu, Gowan Green Au-Cu and Razorback Au-Cu (ASX Announcements 20/05/2020, 30/09/2020) prospect areas.

At **Big Hill,** a ~2.2km long x ~400m wide, NNW-SSE striking, low level Au - Cu + pathfinder (Cu/Zn-Te-Se-In-Ag-Li-Fe ±Hg-Pt-Pd-Co-Mo) soil geochemical anomaly is evident. The Big Hill prospect is defined by 'clustering' of low-level Cu-Au (>3.1ppb Au, up to 14.6ppb Au & >94ppm Cu, up to 178ppm Cu) with pathfinder soil geochemical anomalism which is consistent with the upper or outer zones of a 'concealed' alkalic porphyry Au-Cu system (Figure 5). Low level Pt-Pd anomalism, which is a salient feature of several Au-rich alkalic porphyry Au-Cu deposits worldwide, is semi-coincident with the gold-copper anomalism.

The Big Hill soil domain also shows a complex lithogeochemical signature, with elevated Sc-Fe-Ti-V-Mg-Li marking mapped mafic volcanic host rocks and coherent zones of elevated Zr-Nb-Al-Hf that possibly indicate of the presence of felsic volcanic and/or intrusive rocks.

Both Gowan Green and Razorback have returned high-grade gold and copper rock chips from skarn-style outcrop on the periphery of the main Big Hill target (ASX announcements 20/05/2020, 30/09/2020) **Razorback Ridge** is marked by a north-northeast striking zone of outcropping skarn-style mineralisation that is exposed for over 1 km yet remained unrecognised by previous explorers.

Mineralisation is hosted in quartz sulphide vein breccias showing quartz – Fe carbonate – chlorite – sulphide – hematite +/- magnetite altered limestone and chlorite altered mafic volcanics. The mineralised outcrop is strongly coincident with a prominent N-S striking linear magnetic feature and has returned strong copper and gold results (ASX Announcement 30/09/2020), including:

- **0.98g/t Au & 2.65% Cu**
- **0.55g/t Au & 2.24% Cu**
- **0.62g/t Au & 2.42% Cu**
- **0.64g/t Au & 2.00% Cu**
- **0.99g/t Au & 2.09% Cu**
- **1.12g/t Au & 0.1% Cu**
- **1.69g/t Au & 0.09% Cu**
- **1.14g/t Au & 0.1% Cu**
- **2.25g/t Au & 0.07% Cu**

The recent IP results have shown a strong IP chargeability anomaly extending from the Wattle Ridge porphyry target towards Razorback and the two are now considered to represent one target system.

Gowan Green lies immediately to the north of Big Hill and is centred upon a subtle historic gold and copper working showing gossanous malachite-azurite veined, propylitically altered (epidote-chlorite-carbonate-albite) mafic volcanic rocks in mullock heaps overlying a subtle magnetic high anomaly (ASX Announcement 20/05/2020). Rock samples of this material have returned spectacular high-grade copper and gold results (ASX Announcement 20/05/2020) including:

- **24.6g/t Au & 26.1% Cu**
- **2.69g/t Au & 7.55% Cu**
- **0.51g/t Au & 4.49% Cu**
- **0.35g/t Au & 5.96% Cu**
- **0.94g/t Au & 5.71% Cu**
- **0.04g/t Au & 10.1% Cu**
- **1.16g/t Au & 12.55%**

The high grade Au-Cu rock chip samples validate a large (>1.5km x >0.10km), low level Au-Cu + pathfinder soil geochemical anomaly associated with a discrete magnetic high (~300m diameter) anomaly and NE-SW structural corridor (Figure 5). Limestone stratigraphy, possibly forming a cap-rock, displays numerous small zones of possible skarn mapped intermittently over a ~600m x ~300m area.

Litho-geochemical studies of the multi-element assay data confirm Gowan Green rocks are calc alkaline basalts, with a volcanic arc tectonic signature consistent with being part of the Molong Volcanic Belt, Macquarie Arc. The target is therefore considered highly prospective for the discovery of porphyry related Cu-Au deposits.

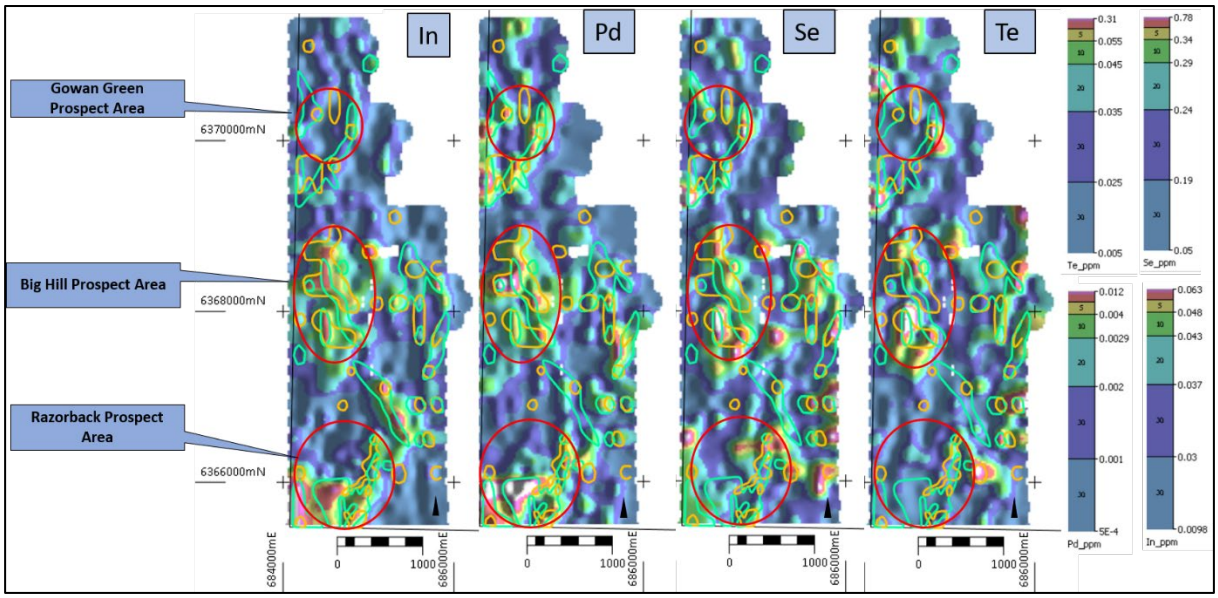

Figure 5: Pathfinder Geochemistry soils gridded imagery, with 4.5ppb Au contours in orange and 111ppm Cu in green

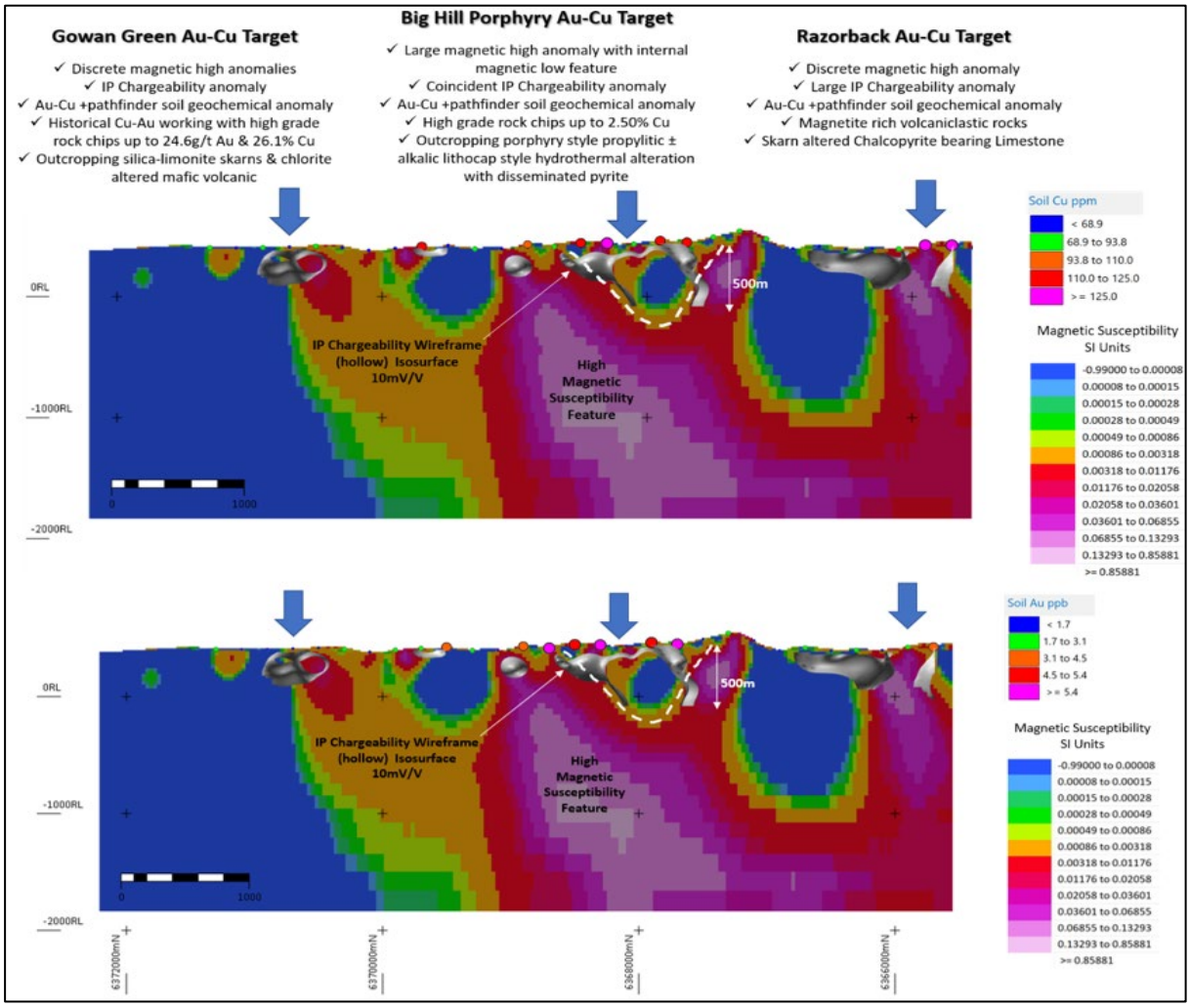

Figure 6: Cross-section, looking east showing the 3D magnetic inversion model and coincident IP chargeability 10Mv/v isosurfaces. Note the coincidence of chargeability highs at the three main prospects and, in particular, the location of the chargeability anomaly beneath Big Hill within the distinct magnetic low zone.

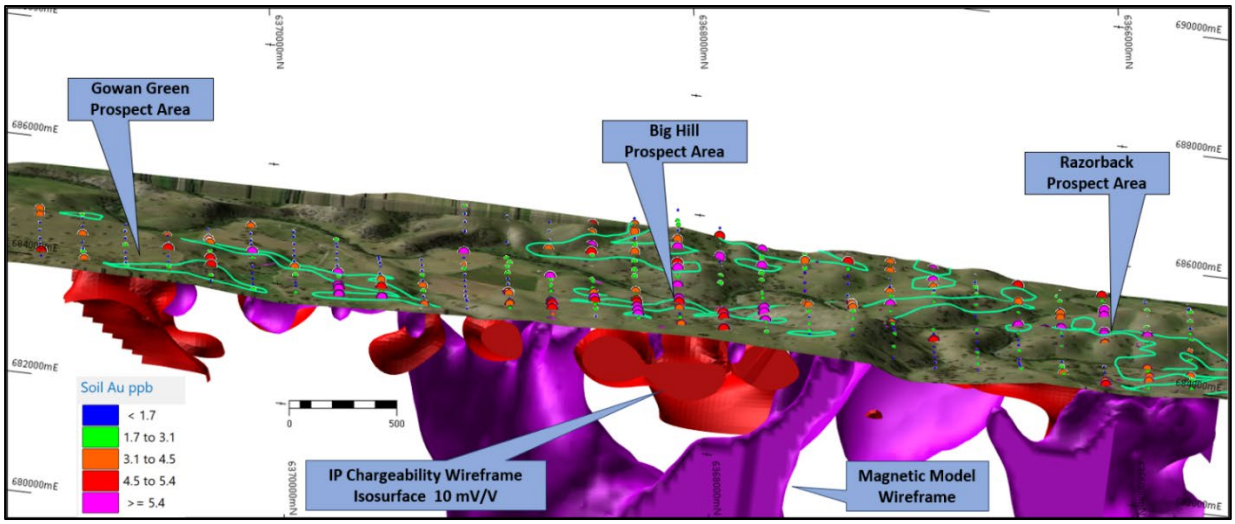

Figure 7: Oblique section looking east, 3D Magnetic model wireframe with IP Chargeability wireframe 10 mV/V isosurface, aerial image with 111ppm Cu contours and Auppb in soils results.

Drill Program

Drill planning is well underway with ESF4 exploration activity approval forms submitted to the NSW Resources Regulator for approval to undertake a 10 x 450m (4500m) diamond drill hole program from surface. The operation will be conducted as a staged program, with an initial 3 diamond holes (1200m) designed to confirm initial interpretations followed by an additional 7 holes for follow-up drilling. Rehabilitation objectives and completion criteria have been submitted to the Department and accepted. A drilling contractor has been appointed with planned commencement expected in mid-May upon receipt of Departmental approvals. Final drill designs are still in progress, however, it is envisaged that testing of the strong IP anomalies with supporting magnetic response and surface Au-Cu and pathfinder geochemistry will be the priority targets.

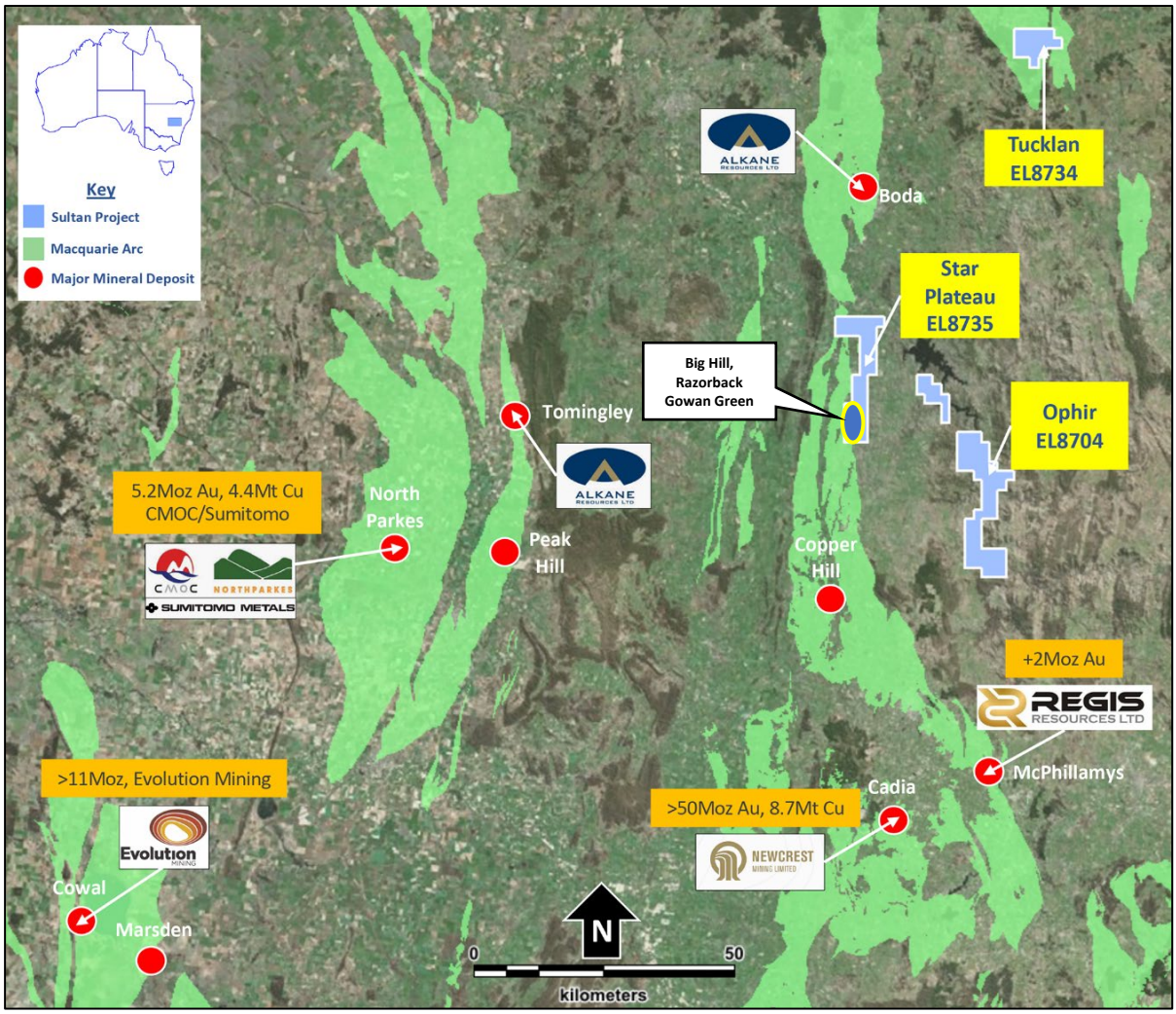

Figure 8: Location Map – Sultan Tenements over the prospective Macquarie Arc sequence

This announcement is authorised by Steve Groves, Managing Director

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Competent Persons Statement
The information in this report that relates to Exploration Targets and Exploration Results is based on historical exploration information compiled by Mr Steven Groves, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Groves is Managing Director and a full-time employee of Sultan Resources Limited. Mr Groves has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Groves consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Sultan Resources

Sultan Resources is an Australian focused exploration company with a portfolio of quality assets in emerging discovery terranes currently targeted by successful explorers such as Newcrest Mining, Alkane Resources, Gold Road Resources, and Sandfire Resources. Sultan's tenement portfolio includes prospective targets for porphyry Au-Cu, structurally-hosted gold, Nickel, Cobalt and base metals and include tenements located in the highly prospective Lachlan Fold Belt of Central NSW as well as projects located within the southern terrane region of the Yilgarn Craton in south and south eastern Western Australia. Sultan's board and management strategy is for a methodical approach to exploration across the prospects in order to discover gold and base metals that may be delineated via modern exploration techniques and exploited for the benefit of the company and its shareholders.

Appendix 1: JORC Code, 2012 Edition Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature & quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity & the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Rock sampling program • Rock chip samples were taken in the field by Colossus geologists during field inspection of the Big Hill porphyry target • Rock samples were collected from surface outcrop and float • Outcrop samples are resistant portions of the local geology and are considered to be in situ. Float samples are interpreted to have been sourced from local area.. • Samples weighing up to several kilograms were collected soil sampling program • All soil sample points were located using a hand-held GPS with +/-5m accuracy utilising MGA zone 55 (GDA94) coordinate system. Surface organic matter was removed from the sample site using a hand pick and shovel and a 25cm x 25cm x 25cm deep hole was dug using a mattock, with a sample of primarily B soil horizon collected. The soil sample was screened using a 3mm mesh aluminium sieve and a 200-250 gram sub sample of -3mm fraction was retained in a labelled soil geochemical bag for analysis. Soil sample IDs and locations are stored digitally in a register which also notes sample content and conditions. External certified reference material / standards, blanks and duplicates are submitted every 50th, 51st and 52nd sample respectively for QAQC purposes.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) & details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented & if so, by what method, etc.).*	• N/A
Drill sample recovery	• *Method of recording & assessing core & chip sample recoveries & results assessed.* • *Measures taken to maximise sample recovery & ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery & grade & whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• N/A
Logging	• *Whether core & chip samples have been geologically & geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies & metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length & percentage of the relevant intersections logged.*	Rock sampling program • A short geological description was taken at each sample point • The description is qualitative and includes lithology, alteration and mineralisation
Sub-sampling techniques & sample preparation	• *If core, whether cut or sawn & whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc.& whether sampled wet or dry.* • *For all sample types, the nature, quality & appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Rock and soil sampling program • The sample preparation for both rock and soils follows industry best practise involving oven drying, crushing and pulverisation

Criteria	JORC Code explanation	Commentary
Quality of assay data & laboratory tests	• *The nature, quality & appropriateness of the assaying & laboratory procedures used & whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make & model, reading times, calibrations factors applied & their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) & whether acceptable levels of accuracy (i.e. lack of bias) & precision have been established.*	• Rock samples are analysed for 48 elements including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Be, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y Zn and Zr using method ME-MS61 (four acid ICP-MS). Gold will be analysed separately using ALS method Au-AA22, with a lower detection limit of 0.001 ppm. • Soil Samples were analysed for 53 elements including Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn & Zr using method AuME-ST44. • External certified reference material / standards, blanks and duplicates are submitted every 50th, 51st and 52nd sample respectively for QAQC purposes.
Verification of sampling & assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical & electronic) protocols.* • *Discuss any adjustment to assay data.*	• All data are verified by at least two experienced Colossus Metals geologists. • Data are sored in a digital database and interrogated using the ioGas™ geochemical software suite. • Na% multiplied by a factor of 1.346 to convert to Na2O in Figure 4
Location of data points	• *Accuracy & quality of surveys used to locate drill holes (collar & down-hole surveys), trenches, mine workings & other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality & adequacy of topographic control.*	• A handheld GPS was used to locate each sample point. Accuracy of +/- 5m is considered reasonable • MGA94, Zone 55 • Elevation were in AHD (MGA94, Zone 55)
Data spacing & distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing & distribution is sufficient to establish the degree of geological & grade continuity appropriate for the Mineral Resource & Ore Reserve estimation procedure(s)&classifications applied.* • *Whether sample compositing has been applied.*	• Soil samples from the current program are collected across a grid spaced at • Big Hill - 100m x 200m • These spacings are considered reasonable to provide sufficient geochemical coverage over the target types sought.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures & the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation & the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed & reported if material.*	• N/A
Sample security	• *The measures taken to ensure sample security.*	All geochemical samples were selected by geologists in the field delivered directly to the lab by Colossus,
Audits or reviews	• *The results of any audits or reviews of sampling techniques & data.*	• Not applicable

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement & land tenure status	• *Type, reference name/number, location & ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park & environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The licences include EL8734, EL8704 and EL8735, which together cover a total area of approximately 326 km2 within the Lachlan Fold Belt of central NSW. • All licences are in good standing
Exploration done by other parties	• *Acknowledgment & appraisal of exploration by other parties.*	• Previous exploration over EL8735 has been limited. Work reported was generally generative in nature and at a reconnaissance level. The most detailed exploration was undertaken by Clancy Exploration during the period 2006 – 2016 and is considered to have been performed to a high standard.
Geology	• *Deposit type, geological setting & style of mineralisation.*	The Project lies halfway between the Cadia and Boda Cu-Au porphyries within the central Molong Belt of the Ord Macquarie Arc, East Lachlan, NSW. It is located on the Intersection of a major N-S striking arc parallel and NW-SE striking cross arc structural corridors,

Criteria	JORC Code explanation	Commentary
		The Lachlan Orogen is approximately 700 km wide and 1000 km long and has disputed complex evolutionary history. The Macquarie Arc is part of the eastern sub-province of the Lachlan Orogen and is the host to numerous porphyry Au–Cu deposits. It consists mainly of subduction-related Ordovician intermediate and mafic volcanic, volcaniclastic and associated intrusive rocks and was accreted to Gondwana in the Early Silurian, and underwent rifting and burial in the Middle to Late Silurian. It consists of four structural belts, namely, the western (Junee-Narromine), the central (Molong), the eastern (Rockley-Gulgong) Belt, and southern (Kiandra) volcanic belts. These belts have most likely been formed by rifting and dismemberment of a single arc, which developed along the boundary between the Australian and proto-Pacific plates during the Ordovician and was subsequently dismembered during the Silurian. An entirely intra-oceanic setting is postulated for the Macquarie Arc (Crawford et al., 2007), with four phases of arc-type magmatism, the earliest in the Early Ordovician, and culminating in the Late Ordovician to Early Silurian. The four phases of volcanism in the Macquarie Arc relate to distinct groups of porphyritic intrusions that vary from monzodiorite-diorite through monzonite-granodiorite compositions and correspond with porphyry copper-gold and epithermal gold-silver mineralisation Lithology The Big Hill target eshibits features consistent with an Alkalic intrusive complex, with mineralogy & textures typical of the Cadia Intrusive Complex, including outcropping monzogabbro, diorite, monzodiorite & mafic monzonite porphyry dykes & small plugs or 'apophyses'. Intrusives have intruded interpreted Cadia and Boda equivalent stratigraphy being the Late Ordovician Oakdale Volcanics, including an upper volcanic dominant and lower volcano-sedimentary package equivalent to the Forest Reef Volcanics & Weemalla Fm at Cadia and Kaiser Volcanics & Bodangora Fm at Boda. An upper sequence consisting of basalt, andesite, trachyte & latite lavas, volcaniclastics and sub volcanic intrusions including feldspar-pyroxene

Criteria	JORC Code explanation	Commentary
		porphyry dykes has been recognised. The lower sequence dominated by finely laminated, interbedded, volcaniclastic siltstones and sandstones, with localised skarn horizons.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *Easting & northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip & azimuth of the hole* ○ *down hole length & interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material & this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	N/A
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)&cut-off grades are usually Material & should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results & longer lengths of low grade results, the procedure used for such aggregation should be stated & some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• N/A
Relationship between mineralisation widths &	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	• N/A

Criteria	JORC Code explanation	Commentary
intercept lengths	• *If it is not known & only the down hole lengths are reported, there should be a clear statement to this effect (e.g.'down hole length, true width not known').*	
Diagrams	• *Appropriate maps & sections (with scales)&tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations & appropriate sectional views.*	• See maps and figures accompanying this ASX release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low & high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Reference has been made to anomalous levels of geochemical pathfinder elements in the document. This interpretation has been determined by experienced Colossus Metals' geologists using the ioGas™ geochemical software. It is impractical to present every result for all 53 elements across the sample population in this document. A map showing the distribution of anomalous Cu has been included for reference.
Other substantive exploration data	• *Other exploration data, if meaningful & material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size&method of treatment; metallurgical test results; bulk density, groundwater, geotechnical & rock characteristics; potential deleterious or contaminating substances.*	• The Induced Polarisation (IP) survey method is often used to determine the location of disseminated sulphides. Rocks containing sulphide minerals can be more readily charged than barren ground. An external current is applied, and charge separation can occur on sulphide grain boundaries. When the transmitted current is switched off the decay of the current can be measured. • The IP survey was completed by Fender Geophysics. The oversight of the survey and auditing (QAQC) and processing of data acquired was conducted by Alan Ortel, an experienced geophysict. • The IP survey array used was Dipole-Dipole with a 100m receiver dipole size and a 100m transmitter dipole size. The transmitter dipole was moved at 100m intervals, achieving a 100m station spacing. Five lines, (5), two 4.6km, two 4.4km and one 3km North-South orientated lines spaced at 200m intervals, and extend from 4.3 to 5km were completed over the Big Hill and Gowan Green prospect. Another eight (8), 1.8km lines orientated east west, in 200m intervals were completed from Big Hill moving south to cover the Razorback prospect. Data from both surveys have been inverted with final pseudosections and wireframe isosurfaces were provided as finished products from Geopotential Consulting Pty Ltd.

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		• The transmitter used is a GDD-Tx4, 5kVA transmitter system and the receiver used in a GDD-Rx32. The survey was collected with a frequency of 0.25Hz. • The transmitter and receiver electrode positions are located to hand-held GPS accuracy, generally +-3m (UTM projection GDA94 Zone 55). • Other Geophysical data including the 2013, Clancy Exploration 1805 line-km helicopter-based magnetic and radioelement survey using Aerosystems have been referred to in interpreting the Big Hill Au-Cu data
Further work	• *The nature & scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations & future drilling areas, provided this information is not commercially sensitive.*	• The focus on future work will be to ultimately generate targets for drilling. Work to enable this will include further soil sampling programs coupled with dipole-dipole IP geophysics to locate bodies of disseminated sulphides beneath the surface. If sufficient encouragement is gained from this work, then deeper RC or diamond drilling is anticipated.