Superior Resources | ASX Announcement

24 August 2022

Visual copper mineralisation intersected over almost entire 933.6m Bottletree Hole 5, collared 300m west of BTDD004

250m interval of stronger copper mineralisation in Hole 5 extends BTDD004 strongly mineralised distal copper zone to at least 700m depth from surface

HIGHLIGHTS:

- Hole 5 (BTDD005) at Superior's Bottletree Copper Prospect, collared 300m west of BTDD004, **intersected variable zones of visually observed copper-mineralised vein sets and disseminated copper of variable intensities from near surface to end of hole at 933.6m.**
- **Designed to drill directly beneath BTDD004, Hole 5 deviated 150m to the south at depth, intersecting stronger copper mineralisation over a 250m interval, between 500m to 750m, indicating at least 700m down-dip continuation from surface of the strongly mineralised distal copper zone identified in BTDD004** (224m @ 0.40% Cu, within overall 632m @ 0.21% Cu, incl 103m @ 0.53% Cu, 0.05g/t Au[1])
- **The full potential of the distal copper zone in terms of grade and size is not yet realised with indications that a significantly mineralised vein set was not captured as they are sub-parallel to drilling direction. The zone remains open in all directions**
- **New porphyry target identified:** structural vectoring information from BTDD005 point to a **large high priority 3D IP chargeability anomaly (Porphyry Target G) located 500m northwest of BTDD005** with anomalous aerial magnetic and soil geochemical support **as potentially representing the porphyry core source of mineralisation in BTDD005**
- At least **two other potential sources of copper mineralisation identified:** minor thin veins of phlogopite with chalcopyrite core suggest **a deeper main porphyry carrying better mineralisation (Porphyry Target A);** and structural vectoring information in BTDD004 indicating **a large IP chargeability anomaly to the southeast as a potential source (Porphyry Target B)**
- **Dacite porphyry in BTDD005 with chalcopyrite veining identified as a source of some of the copper**
- Hole 6 (BTDD006), southern-most hole to date just completed. Intersected the distal copper zone at depth. Lower degrees of mineralisation in upper parts of the hole, indicating that **mineralisation is focussed to the north as in holes BTDD005 and BTDD004**
- Assays for top 150m of BTDD005 received. Further assays for BTDD005 expected to be received over the next three weeks, timing of assays for bottom third of the hole to be confirmed and released
- Drilling of a developing number of holes is expected to continue to year end

---

[1] Refer ASX announcement dated 2 June 2022

T +61 7 3847 2887
E manager@superiorresources.com.au
A Unit 8, 61 Holdsworth Street, Coorparoo, QLD 4151
PO Box 189, Coorparoo, QLD 4151
ASX:SPQ. | ACN 112 844 407

Superior's Managing Director, Peter Hwang commented:

"Hole 5 has certainly reinforced the very extensive dispersion of copper mineralisation at Bottletree and continues to reinforce the project's large size potential. Based on the IP geophysical model, we expected large intervals of the hole to be barren, but it is reassuring to see such a broad expanse of copper mineralisation from surface to about 912m, although the mineralisation is weak towards the bottom of the hole.

"Being our western-most hole, Hole 5 is collared 600m to the west of the distal copper zone, which is only about a third of the distance across the prospect scale copper anomaly.

"Separately, we are also pleased to see the down-dip extension of the distal copper zone, which appears to have been intersected over an approximate 250m interval and resulting in a total down-dip extent of about 700m from surface. Being open in almost all directions, the zone is demonstrating considerable potential.

"The substantial amount of information obtained from the two holes has provided us with important pathfinders to vector towards what appears to be at least two potential core porphyries, believed to be the source of the very extensive spread of copper that defines the project area.

"Importantly, information from Hole 5, indicates that the copper mineralised veins at this western location are potentially emanating from a newly identified large IP chargeability anomaly exhibiting chargeability responses that are consistent with responses from the strongly mineralised distal copper zone.

"With only six porphyry targeted holes drilled so far and with the last two being incremental information gathering holes, we believe that the results so far are exceptional.

"Subject to site preparations, we expect to commence drilling of the new IP target in the next couple of weeks. The program at Bottletree is expected to continue to the end of the year.

Hole 5 (BTDD005)

BTDD005 is collared 300 metres to the west southwest of BTD004 and designed to drill towards the east northeast, directly below BTDD004. Due to ground conditions, the hole deviated significantly (by about 150m) towards the south (Figure 2). The total depth of BTDD005 is 933.6 metres.

Copper sulphide mineralisation was observed visually over almost the entire length of the hole (Figure 1).

Rationale for BTDD005

Drilling during 2021 (BTDD001, BTDD003 and BTDD004) clearly indicated that extensive and strong, potential porphyry style copper mineralisation, lies to the west of an intense induced polarisation (IP) chargeability anomaly. The large zone of mineralisation that was intersected by each of the 2021 holes is thought to represent the distal rim zone to one or more mineralised porphyry systems.

BTDD005 is one of several planned holes forming a fence line of holes westwards from BTDD004 for the purpose of identifying mineralised porphyry intrusions, porphyry zonation indicators and additional zones of mineralisation potentially nearer to a porphyry core (Figure 2). The hole was also designed to test the northern part of an oval Cu-Au-Ag with local Mo geochemically anomalous zone, potentially related to the core of a mineralised porphyry system (Figure 3).

Based on a revised 3D IP chargeability model, significant copper mineralisation was not expected in BTDD005 above about 500m down hole depth. However, varying degrees of vein and disseminated mineralisation was nevertheless encountered (Figure 1).

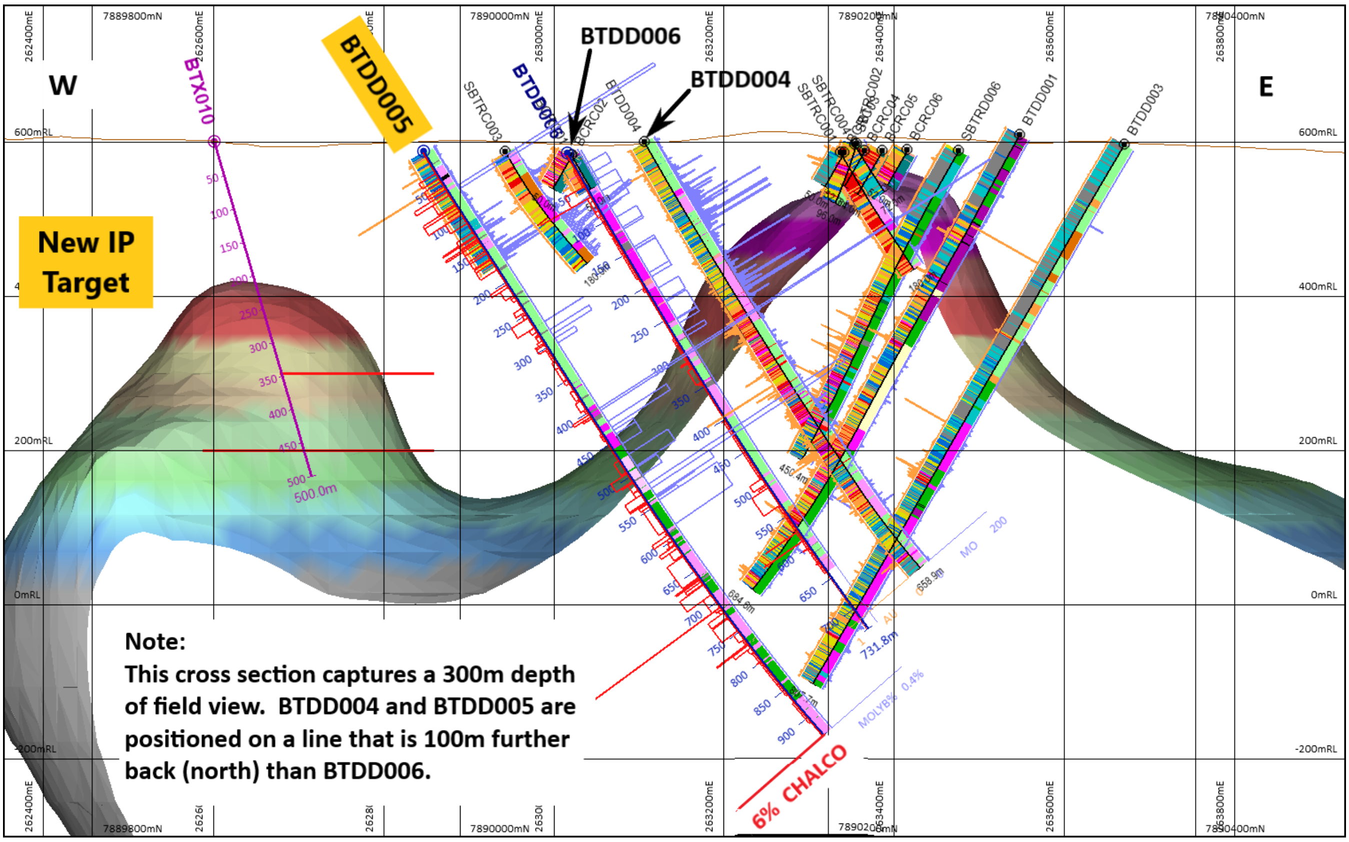

Figure 1. E-W cross section capturing a 300m depth of field view showing 20mV/V IP chargeability iso-surface of new 3D IP model, part of newly identified IP chargeability anomaly and holes drilled to date. Visual estimations of chalcopyrite and molybdenite are presented as histograms (where assays are not available) on each side of drill hole traces.

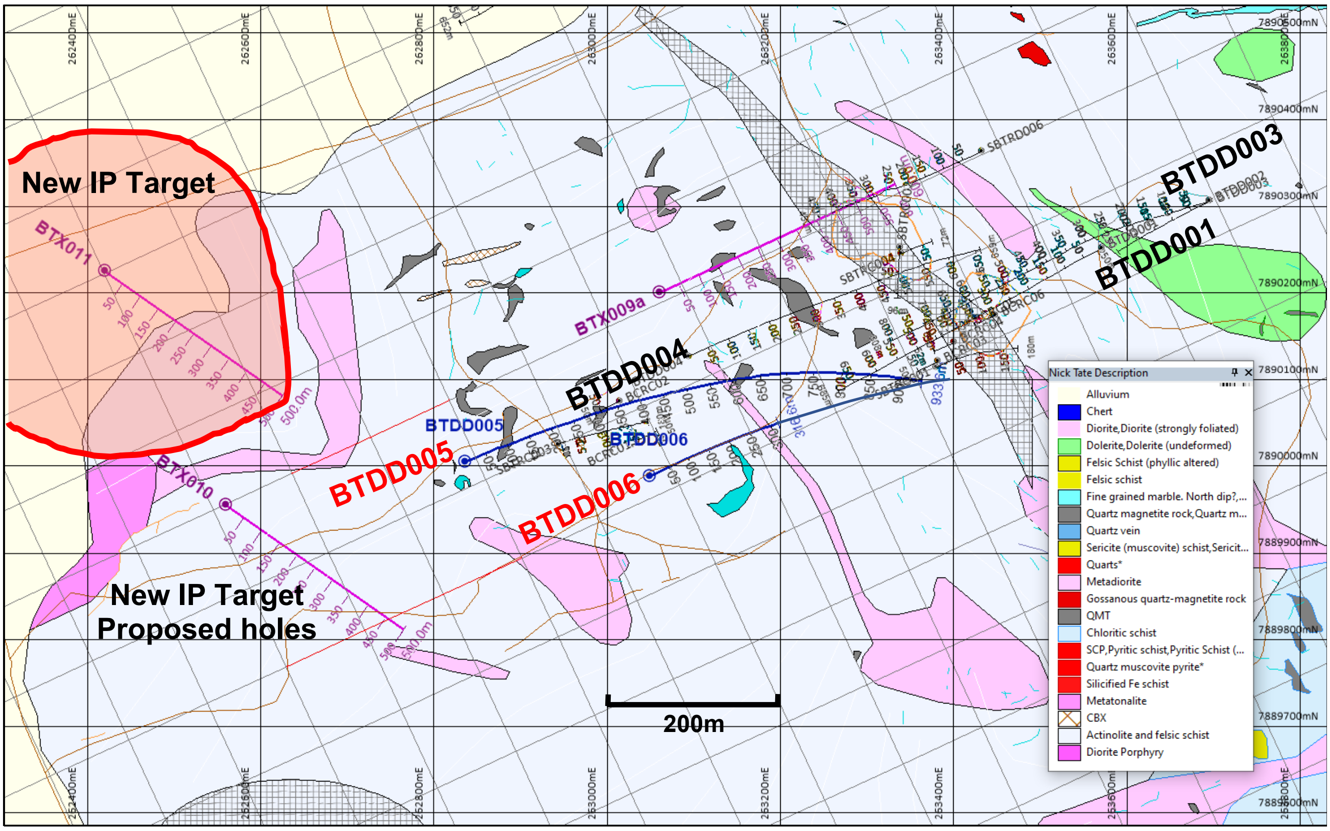

Figure 2. Surface geology plan showing collar locations, drill hole traces for BTDD005, BTDD006 and 2021 drill holes (in black) and approximate position of the newly identified IP chargeability target.

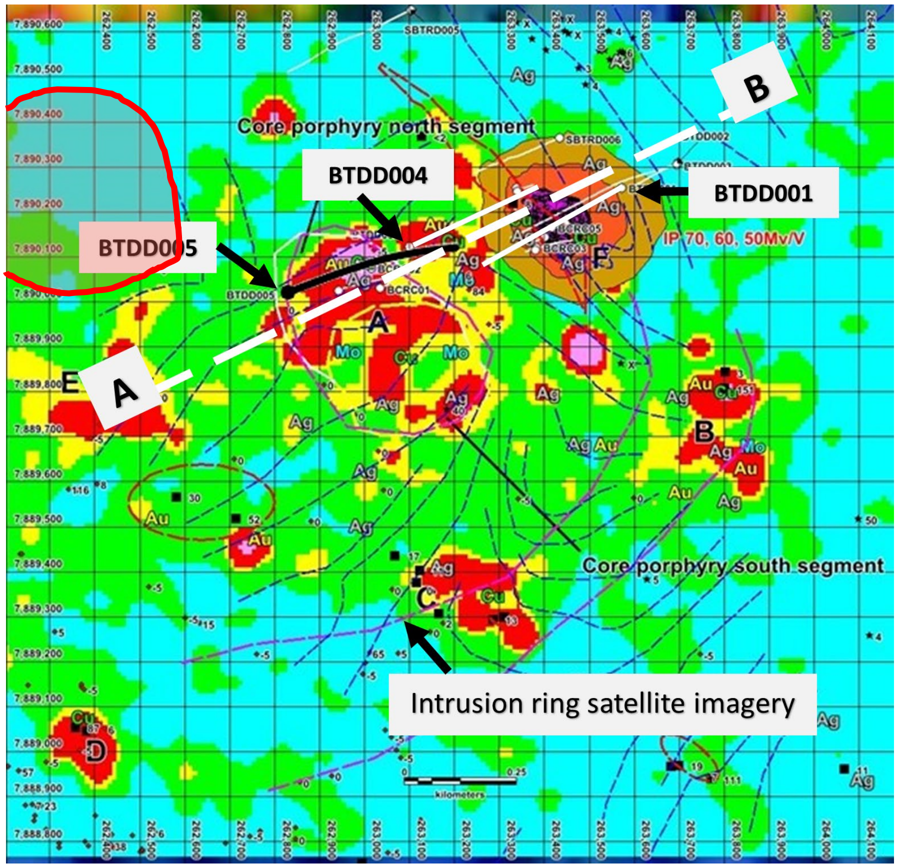

Figure 3. Gridded soil copper geochemistry showing select drill holes, satellite imagery interpreted intrusion ring; profile section A-B and approximate position of the newly identified IP chargeability target. Porphyry targets are shown, labelled A to F.

New porphyry targets identified: Vectoring information from BTDD005 and BTDD004

Structural and mineralogical vectoring information identified in drill core from BTDD005 and BTDD004 have provided critical directional and mineralisation system zonation information as vectors to discovering the source intrusions responsible for the copper mineralisation.

Initial indications are that several intrusive sources are potentially present at Bottletree:

- **Dacite porphyry intrusions intersected in the drill holes** have contributed to at least some of the copper mineralisation in the strongly mineralised distal copper zone. To date, these intrusions have relatively low volumes of chalcopyrite, but are likely to originate from a nearby, larger dacite intrusion likely to be carrying more significant mineralisation. Dacite porphyry intrusions appear to be more prevalent to the north (in BTDD005) compared to the southern and eastern areas, where later tonalite intrusions are present (BTDD001, BTDD003 and BTDD006) and may have stoped out mineralised dacite porphyry;
- **Large high priority IP chargeability anomaly (Porphyry Target G) located 500 metres to the northwest of BTDD005**. As a result of observations from mineralisation within BTDD004, 3D remodelling of MIMDAS IP chargeability data has resulted in a chargeability model that better conforms to the mineralisation observed in drill core. The new 3D model also highlighted a major chargeability anomaly located about 500 metres to the northwest of BTDD005 (Porphyry Target G) (Figures 1, 2 and 4).

  Porphyry Target G is significant in size and is supported by aerial magnetics as an intrusion feature, geochemical zonation and a rim of surface phyllic alteration partly surrounding the anomaly (Figures 2, 3 and 4). Importantly, the chargeability responses defining this anomaly are similar to the moderate chargeability response levels of the strongly mineralised distal copper zone. In contrast, the original IP chargeability anomaly exhibits significantly higher chargeability responses.

Additionally, mineralised structures within BTDD005 (being the closest drill hole) show a predominant dip direction to the northwest and west, which contrasts with a predominant southeast dip direction of mineralised structures observed within BTDD004 collared a further 300 metres to the east (Figure 6);

- **Deeper dacite or other porphyry intrusive body**, evidenced by thin phlogopite veins with cores of chalcopyrite in BTDD004 (Porphyry Target A); and
- **Large IP chargeability anomaly in the south eastern part of the Bottletree area (Porphyry Target B).** Structural vectoring of mineralised vein sets in BTDD001 and BTDD004 indicate a strong south to south-easterly source.

At this stage, it is unclear whether the main source of the copper is the dacite porphyry or a different porphyry.

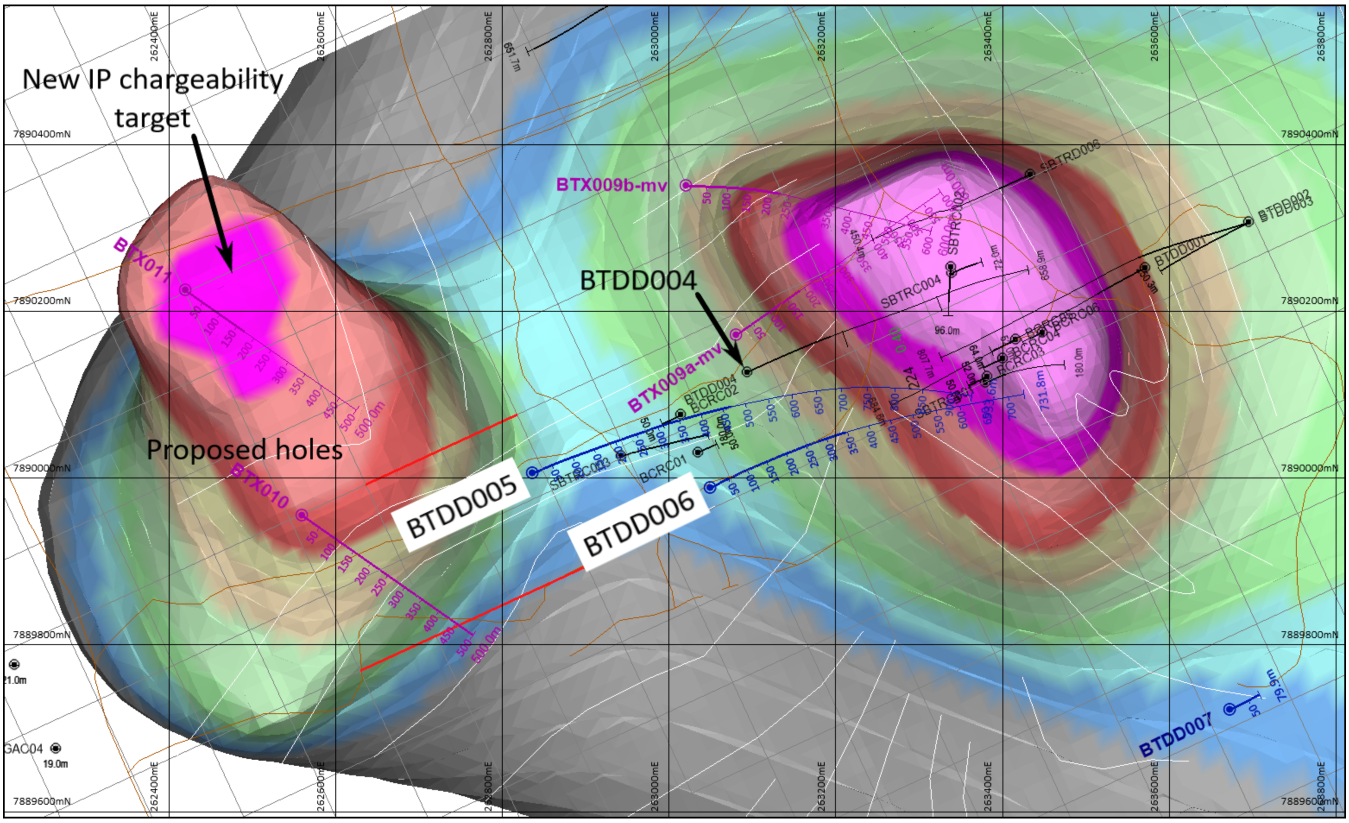

Figure 4. Revised 3D IP chargeability model showing the newly identified IP chargeability anomaly in the west and the original IP chargeability anomaly to the east. Viewed looking downwards and towards the north.

Distal Copper Zone intersected in BTDD005

BTDD005 is collared 300 metres to the west southwest of BTD004 and designed to drill towards the east northeast, directly below BTDD004. As a result of ground conditions, BTDD005 deviated approximately 150m to the south of the strongly mineralised copper zone in BTDD004, which averaged **224m @ 0.40% Cu, within an overall 632m @ 0.21% Cu, including 103m @ 0.53% Cu and 0.05g/t Au**[2].

Despite the deviation, the down-dip continuation of the strongly mineralised copper zone appears to have been intersected from about 500m to 750m down hole. The mineralisation is developed as sulphide veining mostly

---

[2] Refer ASX announcement dated 2 June 2022

associated with quartz as well as disseminated pyrite-chalcopyrite. Most of the copper (chalcopyrite) appears in dacite and andesite as veins and disseminations of pyrite-chalcopyrite and locally with molybdenite. Some mineralisation is developed in pyritic sheeted veins.

Based on the drilling to date, **the overall strongly mineralised distal copper zone commences at surface and plunges steeply westwards to at least 700 metres down dip (Figure 1). To date, the zone has been intersected over a lateral distance of about 250 metres, appears to be about 200m in true thickness and remains open in all directions (Figure 5).**

The distal copper zone forms part of a very broad area of variable, lower grade copper mineralisation that has been identified in drill holes over a horizontal distance of at least 650 metres westwards (Figure 5).

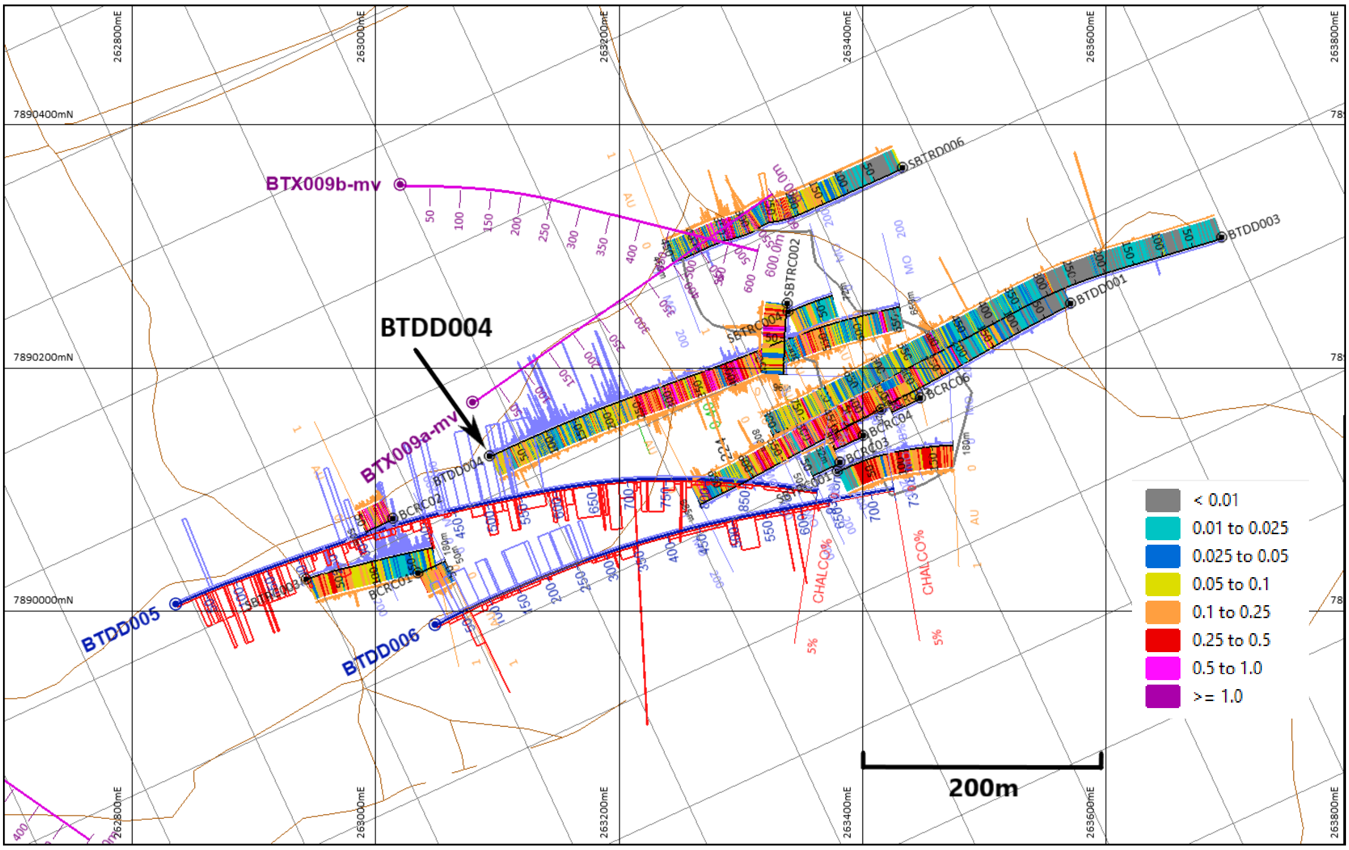

Figure 5. Plan of current drill holes. Individual metre copper and gold grades are shown for assayed holes. Where final assays are yet to be received, visual estimates of chalcopyrite and molybdenite are shown in histogram format.

Hole 6 (BTDD006)

BTDD006, drilled to total depth of 731.8 metres, was collared 200 metres east and on the next drill line, 100 metres south of the BTDD004 - BTDD005 line (Figures 1, 2, 4, 5 and 6). The hole deviated moderately to the south with depth, although to a significantly lesser degree than BTDD005.

BTDD006 was designed to test for the south western extent of the strongly mineralised distal copper zone and for any other mineralisation in the upper levels of Porphyry Target A.

Although low levels of sulphide, including chalcopyrite, were intersected in several zones down most of the hole, the generally weaker mineralisation is likely to indicate the southerly limit of the mineralisation system intersected in holes BTDD004 and BTDD005.

Importantly, zones of strongly mineralised quartz-chalcopyrite veins were intersected at approximately 500 metres down hole depth. This mineralisation appears to indicate a southerly extension of the distal copper zone where most of the copper is in late shear-related chlorite-buck quartz veins with associated pyrrhotite-chalcopyrite (Figures 1, 2 and 5).

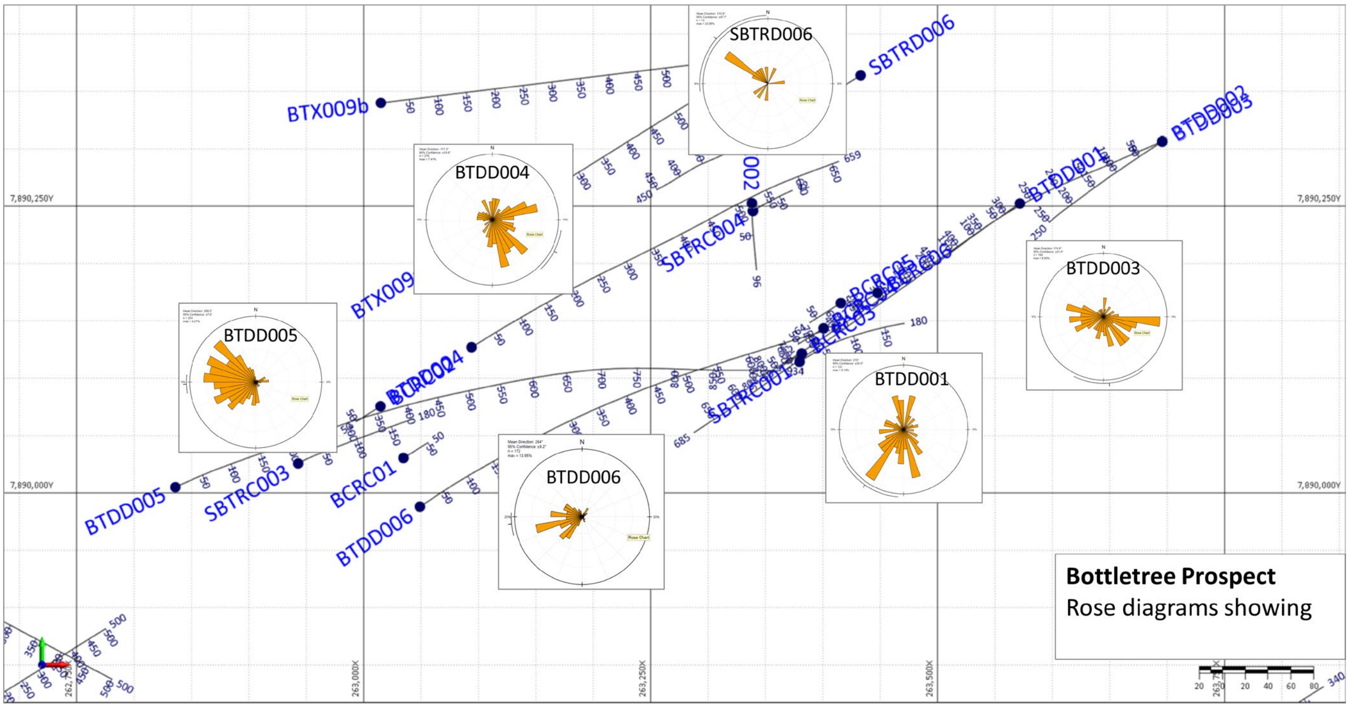

Figure 6. Current drill hole plan showing rose diagrams of mineralised vein structures within diamond core holes. The rose diagrams indicate dip direction frequency distributions.

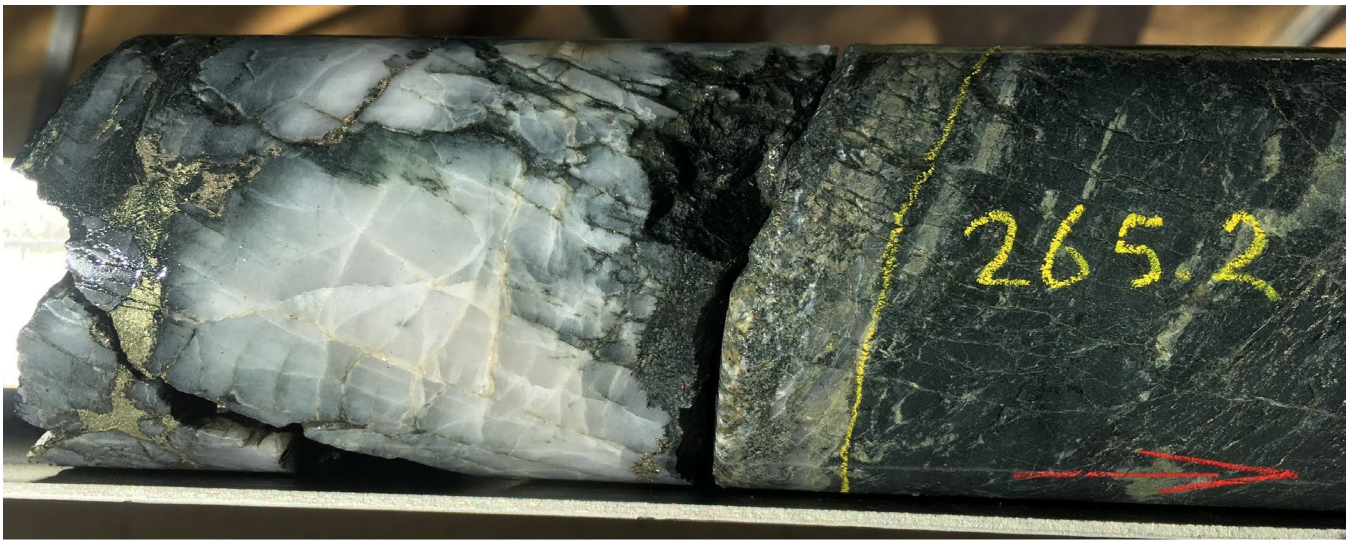

Figure 7. BTDD005 – quartz-pyrite-chalcopyrite vein at 265.2m

Figure 8. BTDD005 – 699.9m (left), 708.5m (right) – buck quartz vein with chalcopyrite-pyrite-pyrrhotite infill.

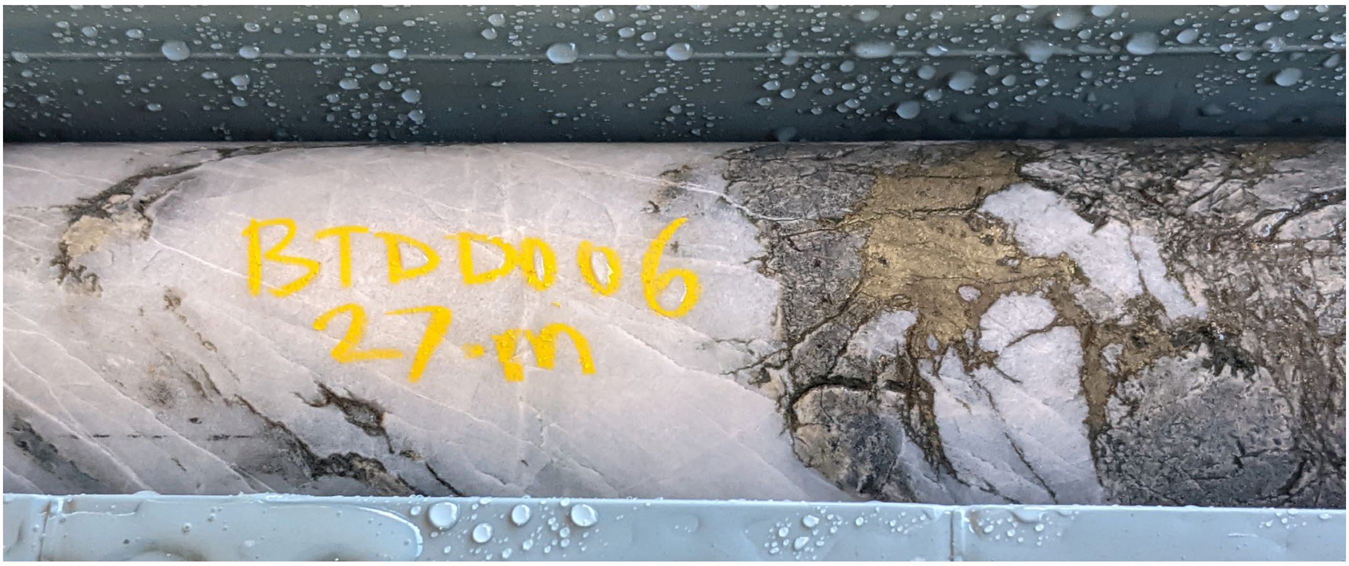

Figure 9. BTDD006 – 27m – chalcopyrite infill in buck quartz vein.

Figure 10. BTDD006 – 531.7m (left) - quartz-pyrite-chalcopyrite-pyrrhotite; 491.8m (right) – breccia infill quartz-pyrite-chalcopyrite-pyrrhotite

Background (Bottletree)

Superior has long recognised the significance of Bottletree, which is expressed at surface as a large, zoned copper mineralised system that extends over several square kilometres (Figure 11). As a result of the Queensland native title regime during important commodity boom periods, Bottletree (and other areas in Qld) was effectively quarantined from the exploration sector. Apart from a small number of shallow historic drill holes over the anomalous area, Superior conducted the only deep investigation of the area with three drill holes during 2017 and 2018.

During September 2021 the Company announced[3] the commencement of deep drilling of a large high-order 3D-modelled MIMDAS IP chargeability anomaly located adjacent to a regionally distinct 1.5km by 1km copper and gold soil anomaly (Figure 12). Drilling during 2018 intersected the northern edge of the chargeability anomaly, which returned 292m @ 0.22% Cu, including 18.7m @ 1.12% Cu[4].

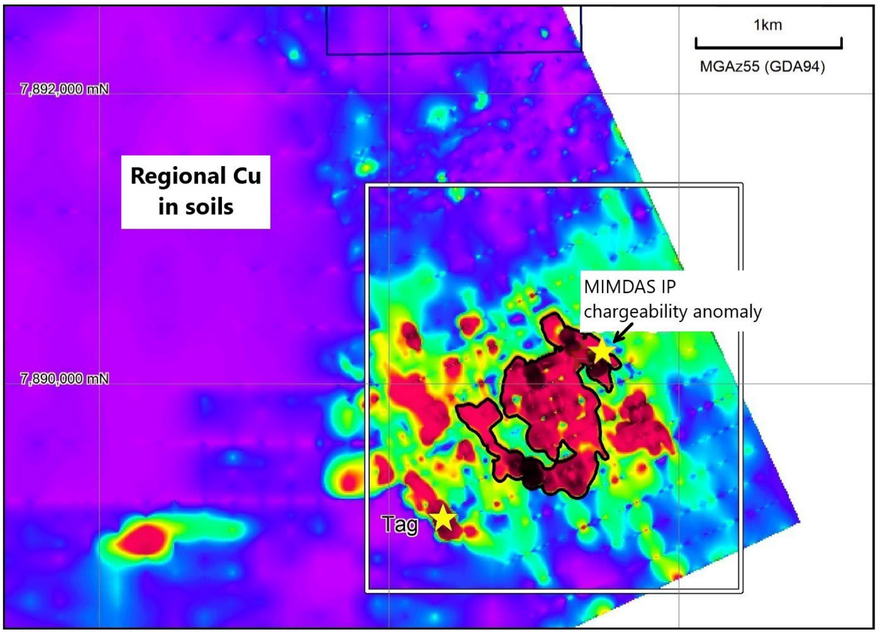

Figure 11. Regional Cu-in-soil processed image showing the large scale Bottletree copper anomaly and location of the MIMDAS IP chargeability anomaly that has been targeted with drilling in 2021.

2021 Drilling Program

The 2021 drilling program commenced with the drilling of two holes (BTDD001 and BTDD003) targeting the modelled centre of the chargeability anomaly at different depth levels (Figure 12). BTDD001 was drilled using NQ rods to 684.6m with a RC pre-collar to about 250m. BTDD003 was cored using HQ diameter rods from surface to an end of hole depth of 807.7m, which was the capability limit of the drill rig. BTDD002, located in the same position as BTDD003, was a RC pre-collar hole that was terminated as a result of exceeding hole deviation limits.

BTDD004 was collared approximately 200m west of the IP chargeability anomaly and drilled in an east-north-easterly direction to a total depth of 658.9m. Planned as a 'scissor hole' to BTDD001 and BTDD003, BTDD004 was designed to test part of the large soil copper anomaly located west of the IP chargeability anomaly and closer towards the interpreted porphyry target zone for porphyry-related mineralisation and vectoring indicators.

[3] Refer ASX announcement dated 17 September 2021
[4] Refer ASX announcement dated 25 October 2018

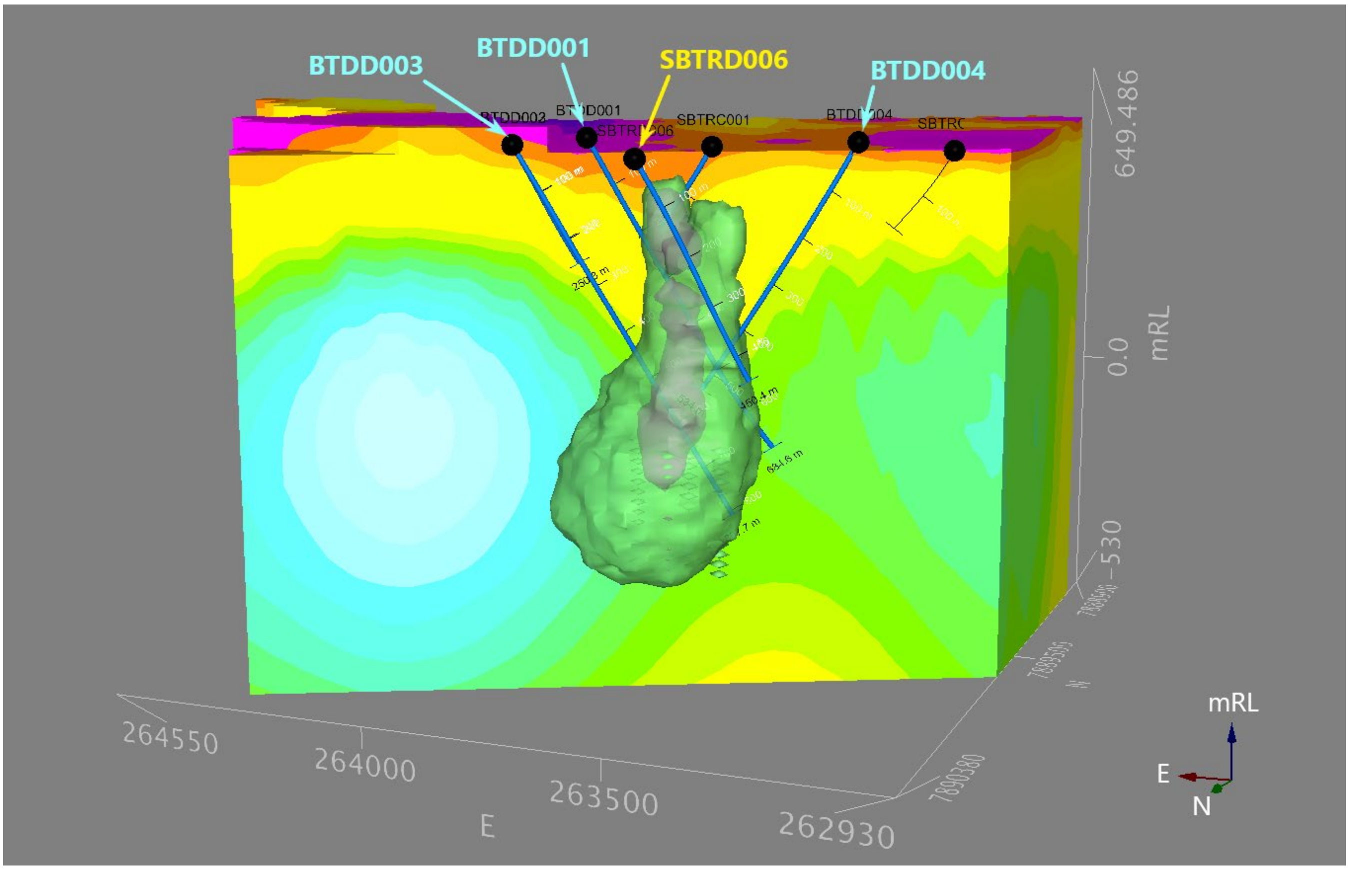

Figure 12. 3D-modelled MIMDAS IP high chargeability iso-surfaces representing the Bottletree IP chargeability anomaly, viewed looking southwest. Recently completed BTDD001, BTDD003, BTDD004 and 2018 drill hole SBTRD006 shown.

About Superior Resources

Superior Resources Limited (ASX:SPQ) is an Australian public company exploring for large lead-zinc-silver, copper, gold and nickel-copper-cobalt-PGE deposits in northern Queensland which have the potential to return maximum value growth for shareholders. The Company is focused on multiple Tier-1 equivalent exploration targets and has a dominant position within the Carpentaria Zinc Province in NW Qld and Ordovician rock belts in NE Qld considered to be equivalents of the NSW Macquarie Arc. For more information, please visit our website at www.superiorresources.com.au.

Reporting of Exploration Results: *The information in this report as it relates to exploration results, geology, geophysical imagery and drilling was compiled by Dr Peter Gregory, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and an independent consultant to the Company. Dr Gregory does not hold shares or any other interest in the Company. He has recently visited the Bottletree Project site, has reviewed all primary data, inspected drill core located in Townsville and on site and its context and 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'. Dr Gregory consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

Reliance on previously reported information: *In respect of references contained in this report to previously reported Exploration Results or Mineral Resources, Superior confirms that it is not aware of any new information or data that materially affects the information, results or conclusions contained in the original reported document. In respect of previously reported Mineral Resource estimates, all originally reported material assumptions and technical parameters underpinning the estimates continue to apply and have not been materially changed or qualified. The form and context in which the relevant Competent Person's findings are presented have not been materially modified from the original document.*

Forward looking statements: *This document may contain forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "indicate", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Indications of, and interpretations on, future expected exploration results or technical outcomes, production, earnings, financial position and performance are also forward-looking statements. The forward-looking statements in this presentation are based on current interpretations, expectations, estimates, assumptions, forecasts and projections about Superior, Superior's projects and assets and the industry in which it operates as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made. The forward-looking statements are subject to technical, business, economic, competitive, political and social uncertainties and contingencies and may involve known and unknown risks and uncertainties. The forward-looking statements may prove to be incorrect. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results expressed or implied by any forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements.*

For more information:
Peter Hwang
Managing Director
Tel: +61 7 3847 2887

www.superiorresources.com.au
manager@superiorresources.com.au

APPENDIX 1

REPORTED DRILL HOLE COLLAR DETAILS

Hole ID	Easting (m)	Northing (m)	RL (m)	Depth (m)	Dip°	Azimuth°
BTDD001	263571.7	7890252.3	609.5	684.6	-60	245
BTDD002	263695.7	7890306.2	597.0	250.3	-60	245
BTDD003	263695.9	7890306.9	596.8	807.7	-59	250
BTDD004	263094	7890127	607.0	658.9	-60	65
BTDD005	262836	7890005	611	933.6	-60	58
BTDD006	263049	7889988	604	731.8	-60	56

APPENDIX 2

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 and 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 and 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.*	• BTDD005 and BTDD006: Drilling from surface comprised HQ diameter diamond core drilling to end of hole. • Diamond core samples were obtained by splitting core in half using a core saw. • The drill bit sizes used in the drilling are considered appropriate to indicate the degree and extent of mineralisation. • 2m representative samples were assayed for base metals, gold, silver and other elements at SGS laboratories in Townsville. • Assaying for gold was via fire assay of a 50-gram charge. • Sample preparation at SGS laboratories in Townsville for all samples is considered to be of industry standard.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Drilling from surface was performed using standard diamond drilling techniques. • Drilling was conducted by AED (Associated Exploration Drillers) using a UDR1000 drill rig. • All holes were surveyed using a Reflex Gyro north-seeking gyroscopic instrument to obtain accurate down-hole directional data.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Sample recovery was performed and monitored by Terra Search contractor and Superior Resources' representatives. • The volume of sample collected for assay is considered to be representative of each 2m interval. • Diamond drill core recovery was logged. Recovery overall was close to 100%.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging was conducted during the drilling of each hole by a Terra Search geologist having sufficient qualification and experience for the mineralisation style expected and observed at each hole. • All holes were logged in their entirety at 1m intervals. • All logging data is digitally compiled and validated before entry into the Superior database. • The level of logging detail is considered appropriate for resource drilling. • Magnetic susceptibility data for each 1m sample interval was collected in the field. • All core was logged for structure with structures being recorded in relation to a bottom line marked on the core and established using Reflex equipment. Logging included both and Alpha and Beta angles. Data from structural logging of planar features was converted to grid dips and dip directions as well as plan parameters to allow structures to be plotted on sections and allow structures to be projected to the ground surface by software.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and 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*	• The sample collection methodology is considered appropriate for diamond drilling and was conducted in accordance with standard industry practice. • Diamond drill core was split in half using a diamond saw with half of the sample being sent for assay and the remainder retained for reference. Core halving was done along the bottom line marked on the core for structural logging. • The sample sizes are considered appropriate to the style of mineralisation being assessed. • Quality Assurance (**QA**)/Quality Control (**QC**) protocols were instigated such that they

Criteria	JORC Code explanation	Commentary
	for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	conform to mineral industry standards and are compliant with the JORC code. • (QA) processes with respect to chemical analysis of mineral exploration samples includes the addition of blanks, standards and duplicates to each batch so that checks can be done after they are analysed. As part of the (QC) process, checks of the resultant assay data against known or previously determined assays to determine the quality of the analysed batch of samples. An assessment is made on the data and a report on the quality of the data is compiled. • Quality control included determinations of duplicate samples every 50 samples or so to check for representative samples. There was a conscious effort on behalf of the samplers to ensure consistent weights for each sample. Comparison of assays of duplicates shows good reproducibility of results. • The above techniques are considered to be of a high quality and appropriate for the nature of mineralisation anticipated. The 2-3kg sample size is appropriate for the rock being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and 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 and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• All samples were submitted to SGS laboratories in Townsville for gold and multi-element analysis. • Samples were crushed, pulverised to ensure a minimum of 85% pulp material passing through 75 microns, then analysed for gold by fire assay method FA50/OE04 using a 50 gram sample. • Multi-element analyses were conducted using a four acid digestion followed by an OES finish using method 4A/OE33 for the following 33 elements: Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W, Zn. • Certified gold, multi-element standards and blanks were included in the samples submitted to the laboratory for QA/QC. • Additionally, Intertek used a series of its own standards, blanks, and duplicates for the QC of the elements assayed.

Criteria	JORC Code explanation	Commentary
Verification of sampling and 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 and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No holes were twinned. • Logs were recorded by Terra Search field geologists on hard copy sampling sheets which were entered into spreadsheets for merging into a central database. • Laboratory assay files were merged directly into the database. • The data is routinely validated when loading into the database. • No adjustments to assay data were undertaken.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collars have been recorded in the field using handheld GPS with three metre or better accuracy. The collar locations have been further defined using DGPS to give sub-one metre accuracy. • The area is located within MGA Zone 55. • Topographic control is currently from DGPS point data that has been merged with RL-adjusted contours.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Further drilling is necessary to establish a Mineral Resource.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The majority of holes have been designed to drill normal to interpreted mineralisation trends. However, there has been insufficient drilling and geological interpretation to determine if there is a bias to sampling as a result of drilling oblique to or down dip on mineralised structures. • No orientation sample bias has been identified at this stage.
Sample security	• *The measures taken to ensure sample security.*	• Samples are delivered directly to the SGS assay laboratory in Townsville by Terra Search or Superior Resources' employees. • Sample security measures within the Intertek laboratories are considered adequate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of the sampling techniques and data have been undertaken to date.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and 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 and 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 areas reported for the Bottletree Prospect lie within Exploration Permit for Minerals 25659, which is held 100% by Superior Resources. • Superior Resources holds much of the surrounding area under granted exploration permits. • Superior has agreements or other appropriate arrangements in place with landholders and native title parties with respect to work in the area. • No regulatory impediments affect the relevant tenements or the ability of Superior Resources to operate on the tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• All historical drilling reported in this report has been completed and reported in accordance with their current regulatory regime. • Previous work on the prospect has been completed by Pancontinental Mining. • Soil geochemical survey data compiled by Pancontinental Mining was used in this report for the purpose of part characterising the Bottletree mineralisation. • Compilation in digital form and interpretation of the results of that work in digital form has been completed by a Competent Person.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Bottletree Prospect is hosted in Lower Palaeozoic deformed mafic meta-volcanic lavas and volcaniclastics. • Mineralisation style is disseminated and vein sulphide of probable intrusion-related hydrothermal origin. • On the basis of observations made in holes BTDD001, BTDD003, BTDD004, BTDD005 and BTDD006, the mineralisation at the Bottletree Prospect is considered to be

Criteria	JORC Code explanation	Commentary
		intrusive-related. More geological, geochemical and drill data is required to fully understand the mineralisation setting.
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 and northing of the drill hole collar* ○ *elevation or RL (Reduced Level) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• A drill hole collar table is included in the main body of the report.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and 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.*	• Exploration results are yet to be received from the reported drill holes.
Relationship between mineralisation widths and intercept lengths	• *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.* • *If it is not known and 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').*	• Downhole length, true width not known until further drilling provides more information on the nature of the mineralised body. • Detailed drill sections are not available until assay results have been received from the laboratory.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being*	• Included.

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• N/A.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Publicly available and historic soil geochemical data and airborne magnetic survey data was compiled, examined and interpreted to aid in the interpretation of geological observations made from the available drill core. • Images from an advanced 3D model of a MIMDAS IP survey are included in the report to allow an appreciation of the relationship of the mineralised intervals with the 3D modelling results.
Further work	• *The nature and 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 and future drilling areas, provided this information is not commercially sensitive.*	Specific upcoming activities include: • receive and analyse assays from BTDD005 and BTDD006; • execute drilling programs targeting potential porphyry intrusions and to delineate areas of near-surface copper and gold mineralisation; • conduct a MIMDAS IP extension survey over the Bottletree Prospect area; and • conduct geochronological dating on intrusions and molybdenite for age correlation with intrusions in the Macquarie Arc in NSW, which hosts the world class Cadia and North Parkes porphyry Cu-Au deposits.