Superior Resources

ASX Announcement

21 December 2021

Boost for Bottletree with extensive copper mineralisation intersected in third hole

HIGHLIGHTS:

- Third deep diamond drill hole (BTDD004) at Superior's Bottletree Copper Prospect drilled eastwards from western side of IP chargeability anomaly **intersected numerous visually observed copper-mineralised vein sets and disseminated copper over majority of 659m hole**
- **Strongest copper mineralisation occurs over a 200m interval, west of IP chargeability anomaly, about 200m vertically above strong copper mineralisation encountered at bottom of first hole (BTDD001).**
- **Strong copper sulphide mineralisation observed extensively outside the IP chargeability anomaly;** this outcome is highly encouraging, given 3D modelling of MIMDAS IP data did not initially indicate the presence of significant copper mineralisation in that area
- **Primary Target:** Interpreted **Cu-Au porphyry system** west of IP chargeability anomaly; veins of quartz-chalcopyrite-molybdenite and possible A or B Type veins in BTDD004
- **Secondary Target:** Copper mineralised zone associated with IP chargeability target, including at least 2 other similar copper zones; never been drill tested below 40m depth
- At least **500m width and 600m vertical extent of variable grade copper mineralisation** was identified by this year's drilling within and adjacent to the chargeability anomaly; **mineralisation remains open to the west (towards porphyry target) and at depth; 750m strike length of associated outcropping copper mineralisation**
- Potential porphyry system located west of chargeability anomaly, **indicated by 1.5km x 1km intense Cu and Au soil anomaly coincident with large oval magnetic and satellite topographic features**
- Chargeability anomaly likely to represent localised structurally-controlled mineralisation within an outer "shell" surrounding one or more large Cu-Au mineralised porphyry systems
- Follow-up drilling of Bottletree planned for the end of Q1 2022

Superior Resources Limited (**ASX:SPQ**) (**Superior**, the **Company**) announced today that extensive vein and disseminated copper sulphide mineralisation was intersected in the Company's third hole (BTDD004) drilled at its Bottletree Copper Prospect. The completion of BTDD004 marks the end of the Company's 13,000m drilling campaign at its 100%-owned Greenvale Project, located approximately 210kms west of Townsville, Queensland (Figure 1).

BTDD004 has confirmed that areas lying to the west of a large IP chargeability anomaly and towards a large interpreted Cu-Au porphyry system target are mineralised with extensive, strong copper sulphide mineralisation. It is also evident that the Company's 2018 MIMDAS IP survey appears not to have identified this copper mineralisation or other areas of extensive mineralisation associated with a large 1.5km x 1km Cu-in-soil geochemical anomaly that is coincident with the interpreted porphyry intrusion target.

BTDD004 was collared 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 the first two holes (BTDD001 and BTDD003), BTDD004 was designed to test part of the large soil Cu anomaly west of the IP chargeability anomaly and mapped zones of silica-magnetite alteration and phyllic alteration now thought to occur above and to the east of a buried mineralised porphyry.

Strong copper sulphide mineralised vein sets were intersected over an interval of approximately 200m immediately west of the chargeability anomaly. Variable degrees of vein and disseminated copper mineralisation was intersected over most of the hole from near surface.

Importantly, veins of quartz-chalcopyrite-molybdenite which resemble Type-B veins in a porphyry system have been intersected. Porphyry Type-B veins are a classic indication of a nearby porphyry system. Assay results are yet to be received from the three holes.

A porphyry system at Bottletree would likely be located at deeper levels and to the west of the chargeability anomaly. This location is also coincident with the large and intense 1.5km x 1km copper and gold soil anomaly, a large oval potential intrusion centre interpreted from airborne magnetic survey imagery and a part-coincident oval feature on satellite imagery.

The latest results follow Superior's announcement of results from the first two deep diamond drill holes, which intersected extensive disseminated and vein copper mineralisation coincident with the large MIMDAS IP chargeability anomaly (refer ASX release 30 November 2021).

Superior's Managing Director, Peter Hwang commented:

"Although the primary target at Bottletree is a large, interpreted copper-gold porphyry system located 500 metres west of the chargeability anomaly, the amount of copper sulphide mineralisation associated with the chargeability anomaly is, nevertheless, shaping up to be very significant.

"We have confirmed that strong copper mineralisation extends a long way further west than indicated by the IP modelling and remains open to the west, at depth and along strike. We are also confident that several other similar copper-mineralised zones exist within and surrounding the porphyry target area.

"It must be noted, however, that these copper-mineralised zones are a secondary target and appear to be mere outer zones of mineralisation, or 'leakage' related to potentially, a much larger porphyry copper-gold system.

"The next program at Bottletree, aimed for the end of Q1, 2022, will be extensive and will target the interpreted porphyry system and the 'satellite' copper zones, including further drilling at the copper zone associated with the chargeability anomaly. To assist with designing the drilling program, a recently completed multi-element soil geochemical survey over the entire prospect area will provide modern geochemical vectoring tools. We will also be conducting a down-hole EM survey on BTDD003 and detailed analysis of airborne magnetic survey data and other geophysical data.

"Moving forward, the next few months will be a busy period. We will be receiving an enormous volume of assay data relating to the Bottletree drilling and soil geochemical survey, numerous rock chip assays relating to Bottletree and significantly, new areas of gold mineralisation along a 5km corridor between Bottletree and Steam Engine.

"We will also be releasing a maiden JORC (2012) Mineral Resource Estimate for the Cockie Creek Copper Prospect, an important Mineral Resource upgrade for the Steam Engine Gold Project and updates on the Steam Engine Feasibility Study.

"The coming few months will effectively see the reporting of outcomes from the intense 2021 Greenvale exploration programs, which apart from the 13,000m drilling campaign, includes ground magnetics, detailed mapping, soil geochemical sampling and extensive rock chip sampling.

"With our expectations from the 2021 programs, we feel confidently poised to realise substantial value transformations during 2022 and beyond for the benefit of shareholders."

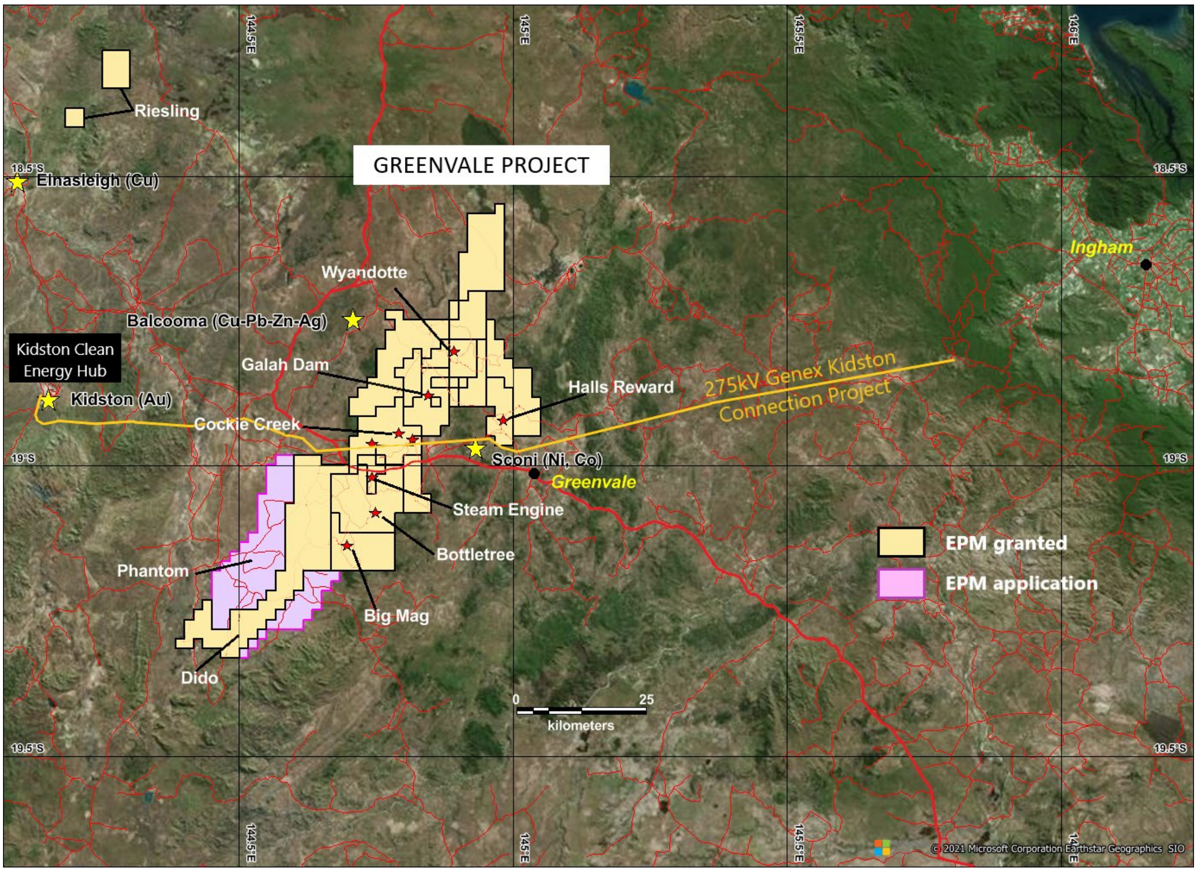

Figure 1. Location of exploration permits comprising the Greenvale Project. Select prospects are marked with a red star. The Greenvale township and existing historic mines (yellow stars) are also indicated.

Third Hole (BTDD004)

BTDD004 represents the third successfully completed hole at Bottletree during 2021 (BTDD002, substituted by BTDD003, was terminated at 250.3m as a failed hole for excessive azimuth deviation).

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 mapped zones of silica-magnetite alteration and phyllic alteration now thought to occur above and to the east of a buried mineralised porphyry (Figure 2).

BTDD004 was also designed to test the extent of the strongly mineralised vein chalcopyrite-pyrrhotite mineralisation that was intersected outside and to the west of the chargeability anomaly in the bottom 20m of BTDD001.

Variable degrees of vein and disseminated chalcopyrite mineralisation were intersected generally from 50m to 658.9m (EOH) (Figure 3). In particular, strong copper sulphide mineralised vein sets were intersected over an interval of approximately 200m immediately west of the chargeability anomaly. These vein sets are likely related to the strongly mineralised veins observed at the bottom of BTDD001.

Importantly, veins of quartz-chalcopyrite-molybdenite which resemble Type-B veins in a porphyry system were variably intersected between 103m to 246m (Figure 10). Porphyry Type-B veins are a classic indication of a nearby porphyry system.

BTDD004 has confirmed that areas lying to the west of a large IP chargeability anomaly and towards a large interpreted Cu-Au porphyry system target are mineralised with extensive, strong copper sulphide mineralisation. It is also evident that the Company's 2018 MIMDAS IP survey appears not to have identified this copper mineralisation or other areas of extensive mineralisation associated with a large 1.5km x 1km Cu-in-soil geochemical anomaly that is coincident with the interpreted porphyry intrusion target (Figures 2, 4 and 5).

A porphyry system at Bottletree would likely be located at deeper levels and to the west of the chargeability anomaly. This location is also coincident with the large and intense 1.5km x 1km copper and gold soil anomaly, a large oval potential intrusion centre interpreted from airborne magnetic survey imagery and a part-coincident oval feature on satellite imagery.

No assays have been received in respect of any of the Bottletree drill holes. Representative photographs of vein mineralisation within BTDD004 core are set out in Figures 6 to 9.

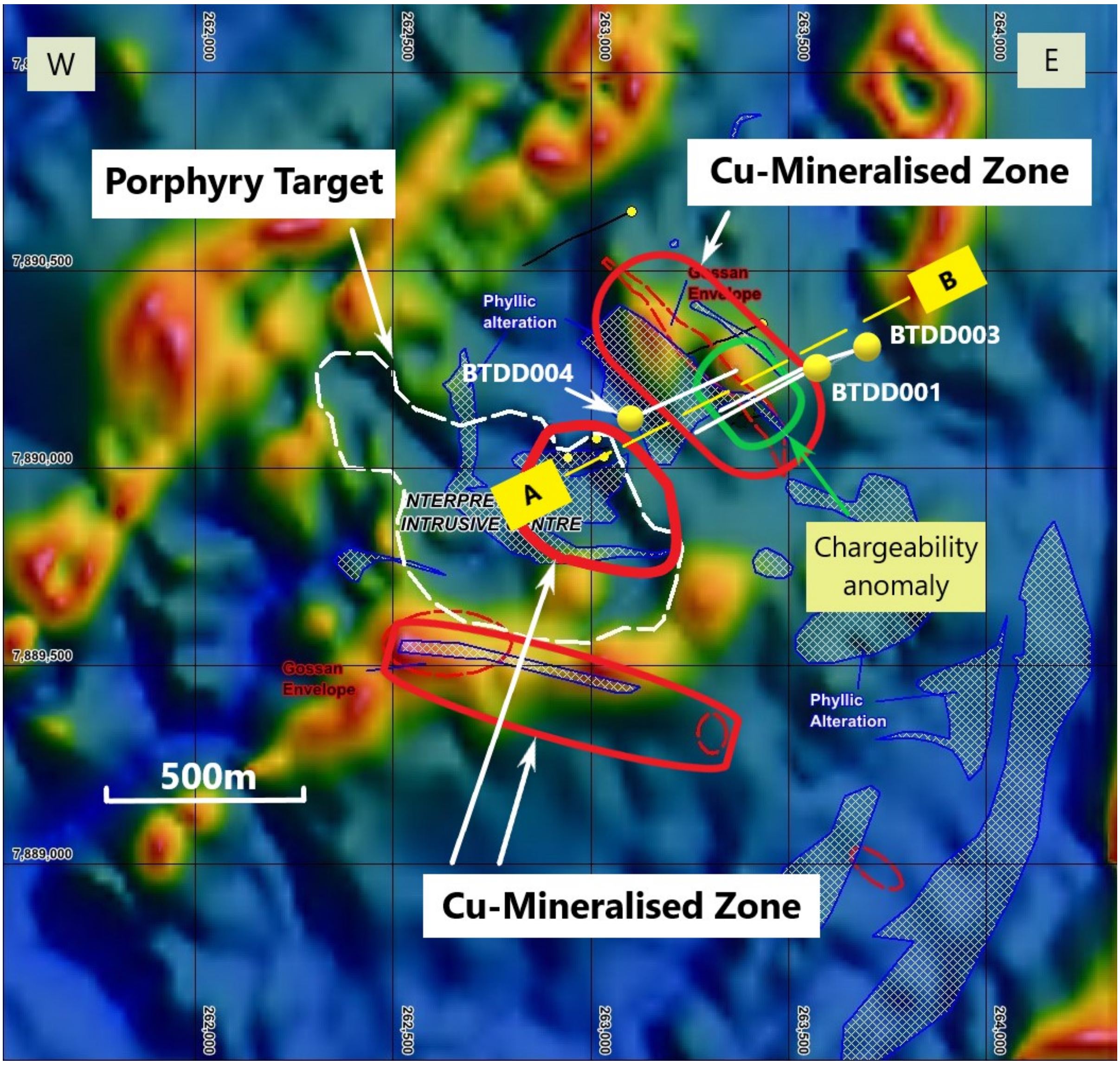

Figure 2. Colour TDr VI NSSF magnetic image over the Bottletree area showing an interpreted intrusive or porphyry (Porphyry Target), IP chargeability iso-surface and select high order soil copper envelopes (Cu-Mineralised Zones). Cross section through IP chargeability anomaly and 2021 drill holes shown and marked A-B.

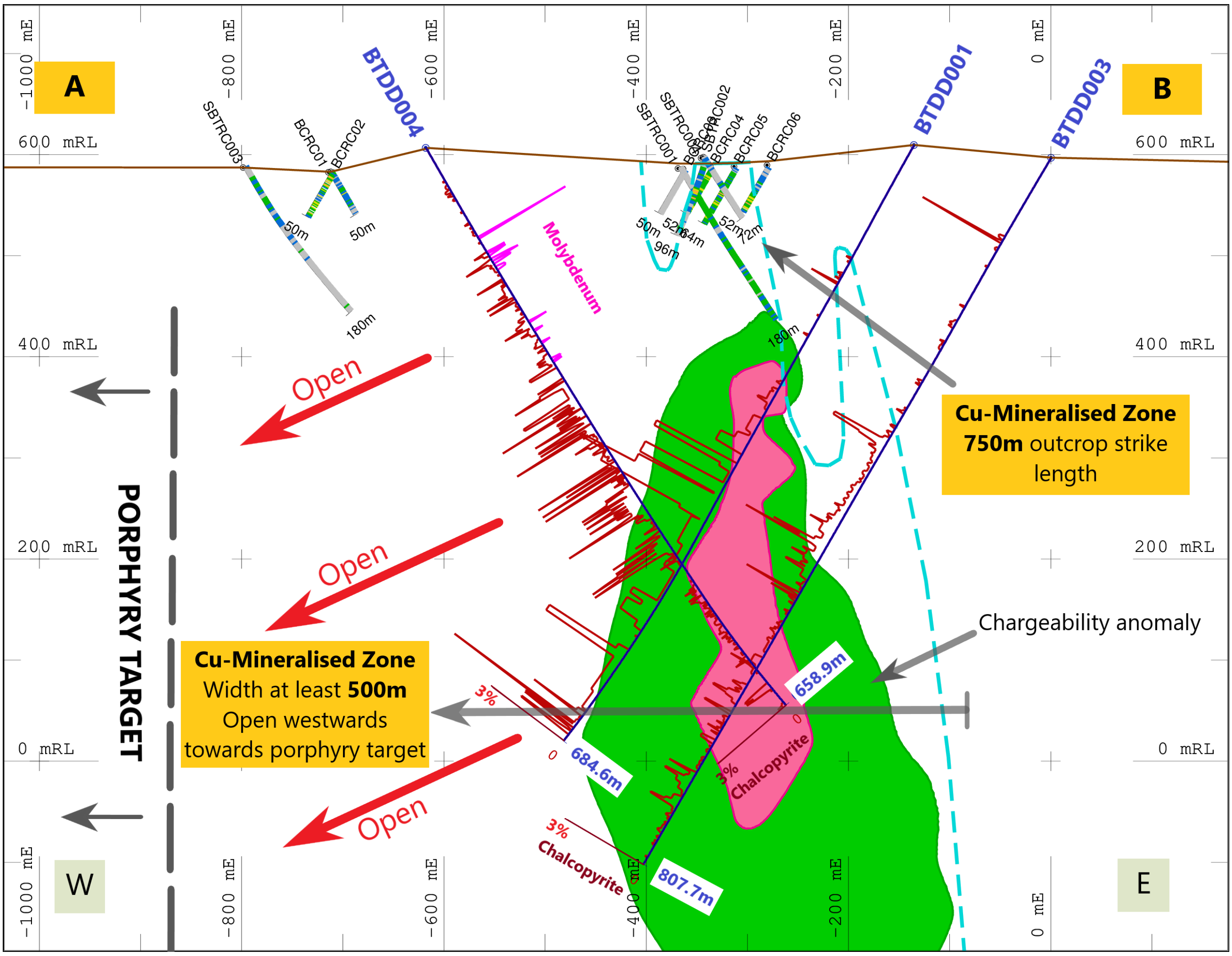

Figure 3. A-B cross section through MIMDAS IP chargeability anomaly and 2021 drill holes, showing visual estimates of chalcopyrite mineralisation in holes BTDD001, BTDD003 and BTDD004. Visual estimates of vein molybdenum mineralisation are shown for BTDD004. Copper-mineralised zone is at least 500m wide and open to the west. Eastern edge of interpreted intrusive or porphyry complex is also shown.

Additional work at Bottletree

A large 2.0km x 1.8km multi-element soil sampling survey based on a 50m x 50m sample grid has been completed for a total of 1,440 samples. The samples will be submitted to the assay laboratory shortly.

Detailed outcrop and alteration mapping has been completed over the prospect area. Information generated from the mapping exercise is being analysed together with observations from the drill core and geophysical modelling of airborne magnetometer and electromagnetic (EM) survey data.

A down hole EM survey will be conducted on BTDD003 after the end of the monsoon season.

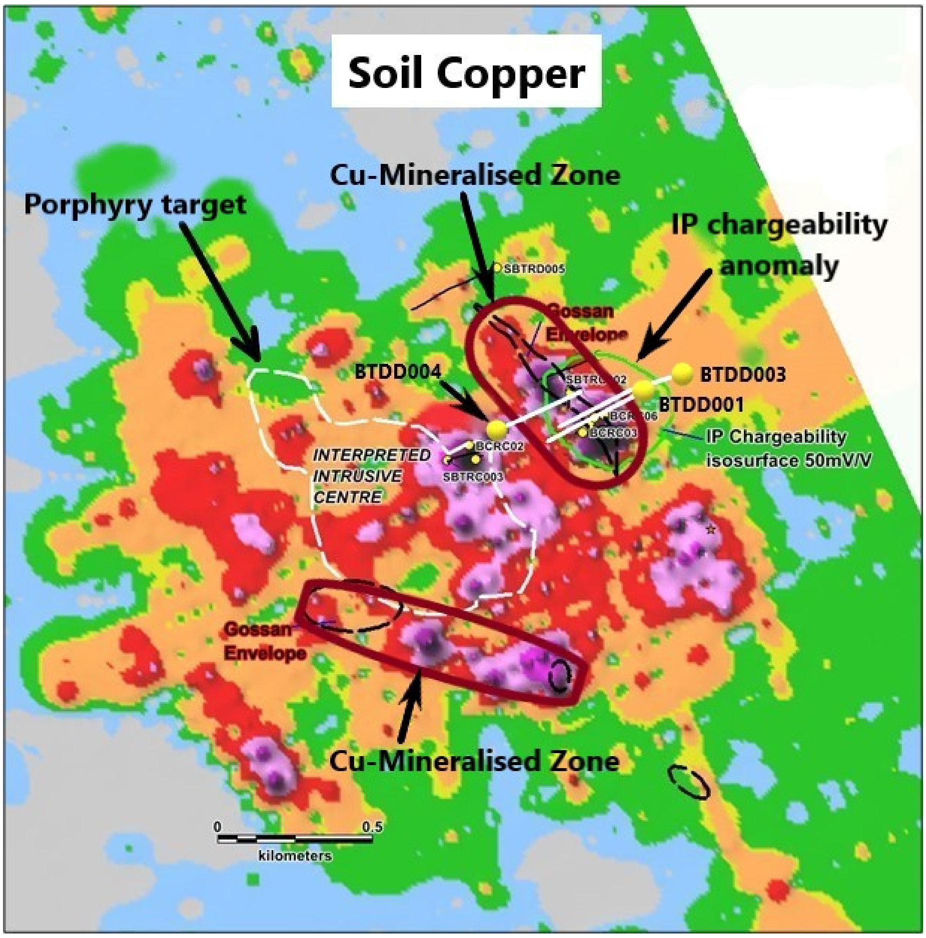

Figure 4. Cu soil geochemistry (historic data) over the Bottletree Prospect area, showing the central zone of anomalous copper, interpreted intrusive or porphyry complex, select copper-mineralised zones, IP chargeability anomaly and 2021 drill holes.

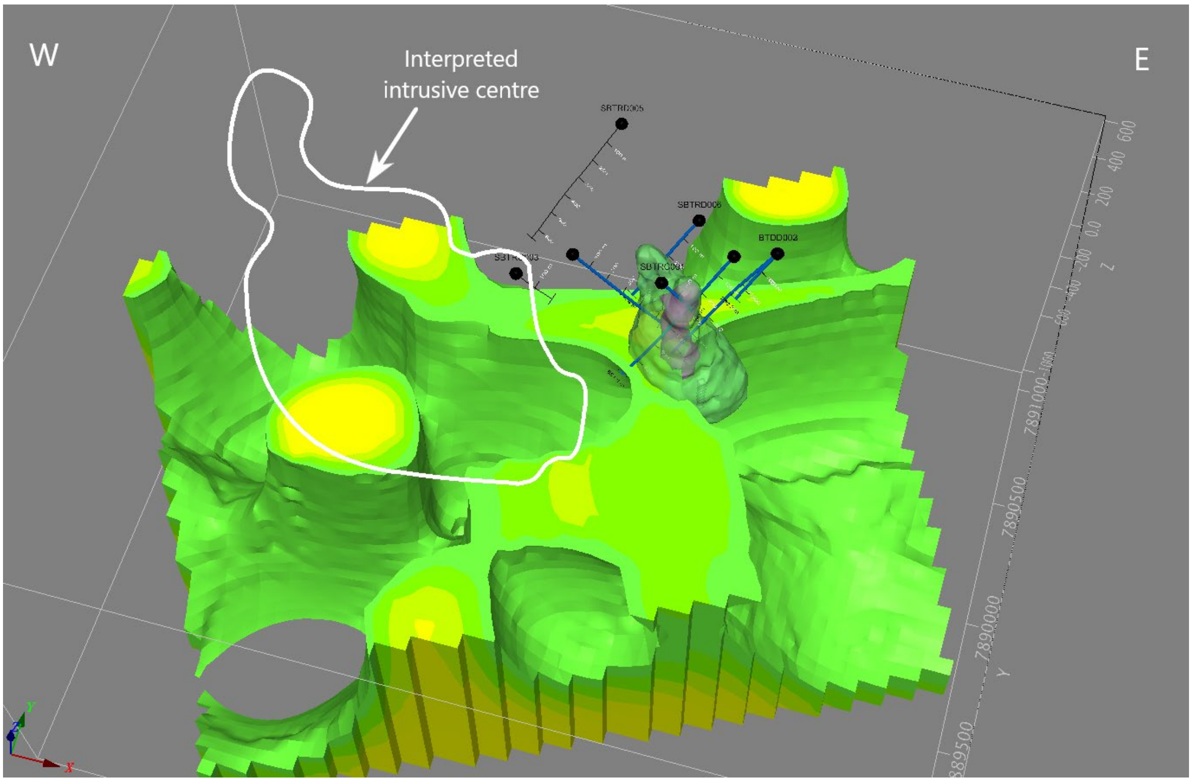

Figure 5. 3D-modelled MT resistivity data, high resistivity values clipped over the Bottletree Prospect area, showing the interpreted intrusive or porphyry complex centre, IP chargeability anomaly and 2021 drill holes.

Figure 6. BTDD004 (412.9m). Buck quartz vein with massive pyrrhotite-pyrite-chalcopyrite infill.

Figure 7. BTDD004 (463m). Deformed and brecciated metavolcanics with strong quartz-carbonate-pyrite-chalcopyrite veining and fracture infill.

Figure 8. BTDD004 (364.9m, left). Quartz-pyrite-chalcopyrite vein. BTDD004 (376.8m, right). Buck quartz-chalcopyrite-pyrite-pyrrhotite fracture infill vein.

Figure 9. BTDD004 (632-634m). Quartz-pyrite-chalcopyrite veins.

Figure 10. Deformed granular quartz vein with molybdenite along walls and internal chalcopyrite (BTDD004, 120.3m). Several such veins intersected in BTDD004 are interpreted as possible A or B Type veins within a porphyry system.

Next Steps

Work at Bottletree will focus on two main objectives:

- Primary Target – discovering the intrusive source to the Bottletree mineralisation; and
- Secondary Target – determining whether financially viable near-surface copper and gold Resources can be delineated within the Bottletree Prospect area.

Specific upcoming activities include:

- receive and analyse assays from BTDD001, BTDD003 and BTDD004;
- receive, compile and analyse assays from multi-element soil sampling program;
- conduct down-hole EM survey on BTDD003;
- plan drill programs targeting potential porphyry intrusions and delineate areas of near-surface copper and gold mineralisation;
- execute next drilling program; 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.

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[1] 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[2].

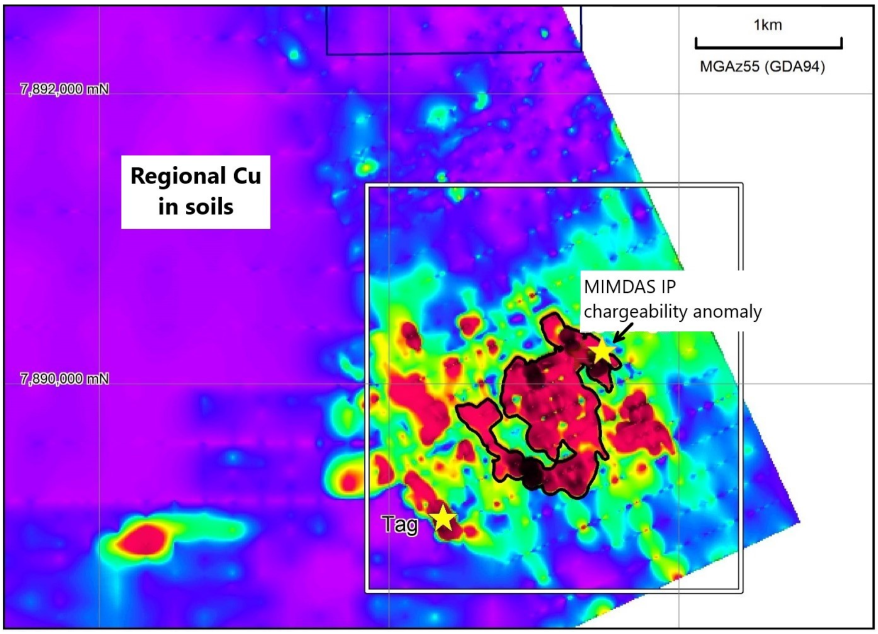

Figure 11. Regional Cu-in-soil processed image showing the large scale Bottletree copper anomaly and location of the MIMDAS IP chargeability anomaly that has been targeted with drilling in 2021.

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.

[1] Refer ASX announcement dated 17 September 2021
[2] Refer ASX announcement dated 25 October 2018

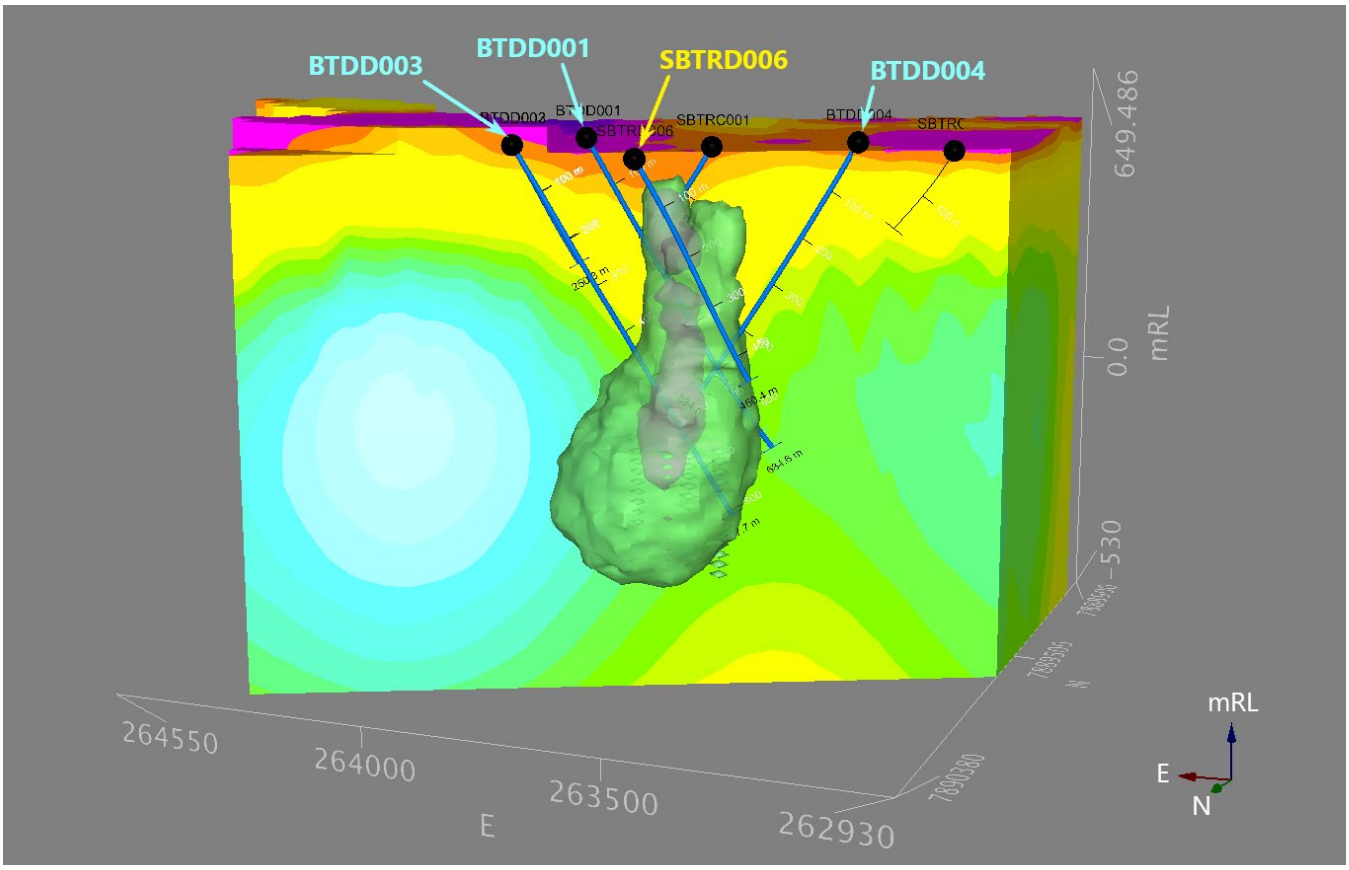

Figure 12. 3D-modelled MIMDAS IP high chargeability iso-surfaces representing the Bottletree IP chargeability anomaly, viewed looking southwest. Recently completed BTDD001, BTDD003, BTDD004 and 2018 drill hole SBTRD006 shown.

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 not been on the Bottletree Project site, but has reviewed all primary data, inspected drill core located in Townsville and its context, 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.*

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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

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.*	• BTDD001: Drilling from surface comprised reverse circulation (**RC**) drilling of pre-collars followed by NQ diameter diamond core drilling to end of hole. • BTDD003 and BTDD004: Drilling from surface comprised HQ diameter diamond core drilling to end of hole. • Reverse Circulation (**RC**) drill samples are collected as drilled via a riffle splitter attached to the drill rig cyclone and collected as 1m riffle split samples. Approximately 1-3kg of sample was collected over each 1m interval used for assaying. • 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 Intertek laboratories in Townsville. • Assaying for gold was via fire assay of a 50-gram charge. • Sample preparation at Intertek 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 RC and diamond drilling techniques. • Drilling was conducted by AED (Associated Exploration Drillers) using a McCullochs DR950 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. • The RC drill rod string delivered the sample to the rig-mounted cyclone which is sealed at the completion of each 1m interval. The riffle splitter is cleaned with compressed air at the end of each 1m interval and at the completion of each drill hole. • 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. • The RC Chip trays were photographed. • 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*	• The sample collection methodology is considered appropriate for RC and diamond drilling and was conducted in accordance with standard industry practice. • The RC drill hole samples are split with a riffle splitter at 1m intervals as drilled. Split 1 metre samples are regarded as reliable and representative.

Criteria	JORC Code explanation	Commentary
	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.*	• Approximately 1-3kg of sample was collected over each 1m interval. • Samples were collected as dry samples. • 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 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,*	• All samples were submitted to Intertek 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,

Criteria	JORC Code explanation	Commentary
	blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	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.
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	• *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*	• 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.

Criteria	JORC Code explanation	Commentary
geological structure	*orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No orientation sample bias has been identified at this stage.
Sample security	• *The measures taken to ensure sample security.*	• Sub-samples selected for assaying were collected in heavy-duty polyweave bags which were immediately sealed. • These bags were delivered directly to the Intertek assay laboratory in Townsville by Terra Search or Superior Resources' employees. • Sample security measures within the Intertek laboratories are considered adequate.
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.

Criteria	JORC Code explanation	Commentary
		• 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 and BTDD004, the mineralisation at the Bottletree Prospect is considered to be 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.

Criteria	JORC Code explanation	Commentary
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 reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Included.
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 BTDD001, BTDD003 and BTDD004; • receive, compile and analyse assays from multi-element soil sampling program; • conduct down-hole EM survey on BTDD003; • plan drilling programs targeting potential porphyry intrusions and to delineate areas of near-surface copper and gold mineralisation;

Criteria	JORC Code explanation	Commentary
		• execute next drilling program; 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.