

ASX Announcement (ASX:AXE)

25 September 2017

## Large scale copper prospect confirmed at Blue Hills

### Highlights

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- Multiple kilometre-scale copper anomalies identified at Blue Hills:
    - 4.0km x 2.0km copper in soil (+90ppm Cu) anomaly identified at Hood.
    - 1.5km x 1.0km copper in soil (+90ppm Cu) anomaly identified at Hawkeye.
    - 1.0km x 0.5km copper in soil (+90ppm Cu) anomaly identified at Katniss.
  - The Hood anomaly is coincident with recent rock chips that returned grades of up to 9.27% copper and 8.1g/t gold.
  - Results indicate that best targets were not drilled during May 2017 regional RC drilling which had intersected +20m of copper from surface
  - Infill sampling of higher grade anomalies and regional sampling of the remainder of the 25km<sup>2</sup> area of the mineralised magnetic anomaly expected to commence soon.
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Archer Exploration Ltd (ASX:AXE, Archer, Company) is pleased to announce that it has significantly enhanced the exploration potential of the Company's 100% owned Blue Hills Copper Project, located approximately 40km southeast of the town of Peterborough, South Australia.

Greg English, Executive Chairman of Archer, said "The discovery of new substantial soil anomalies, which are coincident with the observable geophysical anomaly, is very encouraging. This sampling clearly shows that the scale of the copper anomalism in this area is much more extensive than we originally understood".

"These results further confirm the excellent progress that the Company is making at Blue Hills which is shaping up to become a significant and valuable resource at a time when the outlook for copper producers is improving. This soil sampling program has been completed methodically and thoroughly with around 3,300 samples analysed and interpreted to date."

"The information is being assessed alongside the excellent rock chip and RC drill results previously reported by the Company and is helping us to cost effectively assess this marvellous opportunity." said Mr English. "The three large soil anomalies identified are open in all directions and we plan to extend our sampling by infill sampling at the higher-grade areas and sampling the remaining parts of the larger 25km<sup>2</sup> Blue Hills magnetic anomaly."

Recent soil sampling by Archer at Blue Hills has confirmed the results from recent drilling and rock chip sampling and also identified three separate large copper anomalies (Figure 1) along the interpreted edges of the large intrusive body. The anomalies are defined as:

- The Hood anomaly, located on the southern edge of the magnetic intrusion, is approximately 4km long and 2km wide (at +90ppm copper). the whilst Hawkeye and Everdeen are both slightly smaller.
- The Hawkeye anomaly, located on the south-eastern edge of the magnetic intrusion, is approximately 1.5km long and 1.0km wide (at +90ppm copper).
- The Katniss anomaly, trending in a north-west direction, is approximately 1km long and 0.5km wide (at +90ppm copper).

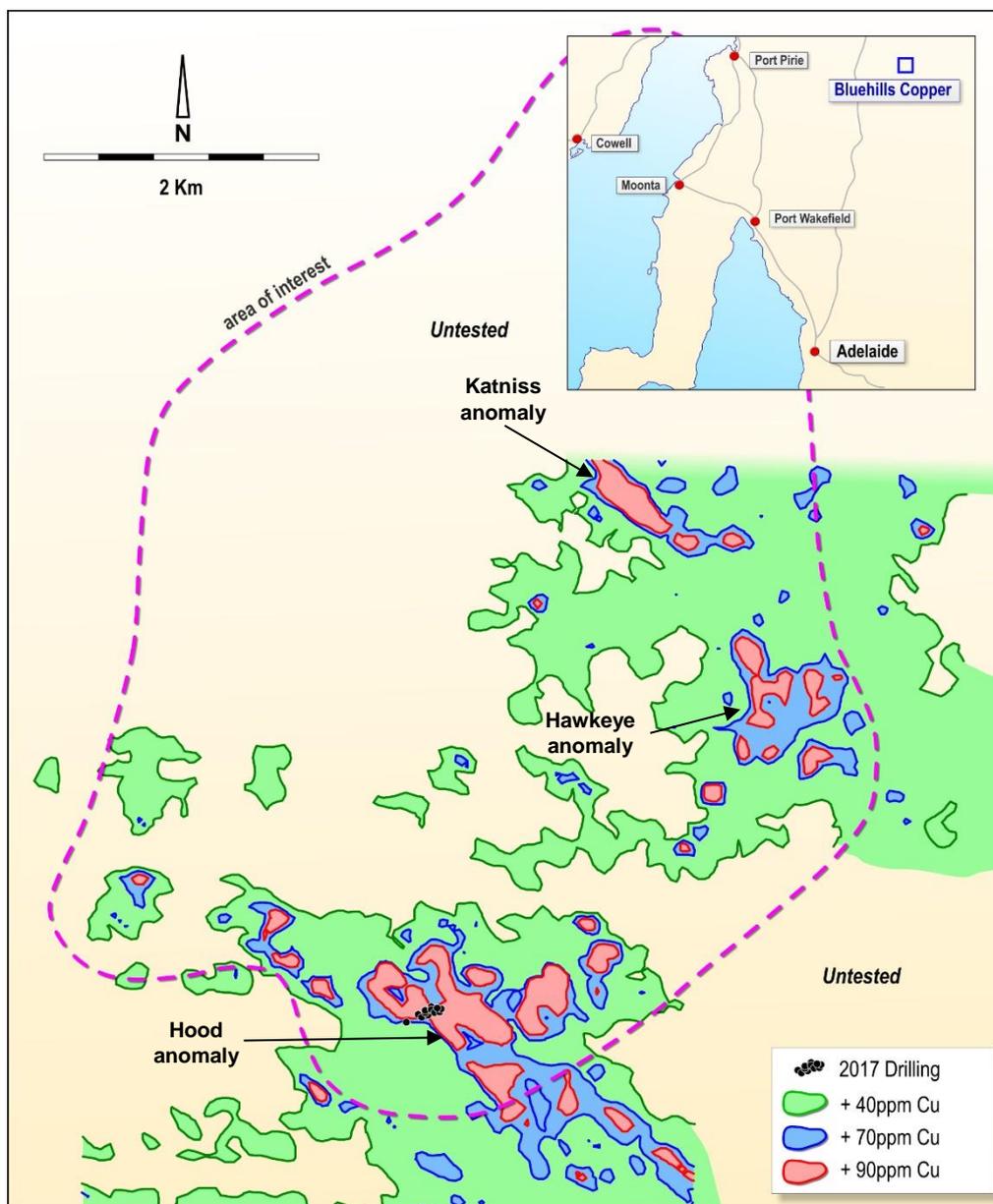


Figure 1: Blue Hills location map showing copper mineralisation coppers and areal extent of Blue Hills magnetic anomaly.

## Soil sampling program

Archer completed a 3,295 sample soil survey over an approximate area of 15km<sup>2</sup>, with samples collected on 100m x 100m grid. Each sample was analysed using a hand held XRF device, Copper, Arsenic, Lead and Zinc appeared to be consistently the best reported elements. The objective of this orientation survey was to determine the level of copper mineralisation associated with the interpreted large magnetic intrusive body and to identify future drill targets.

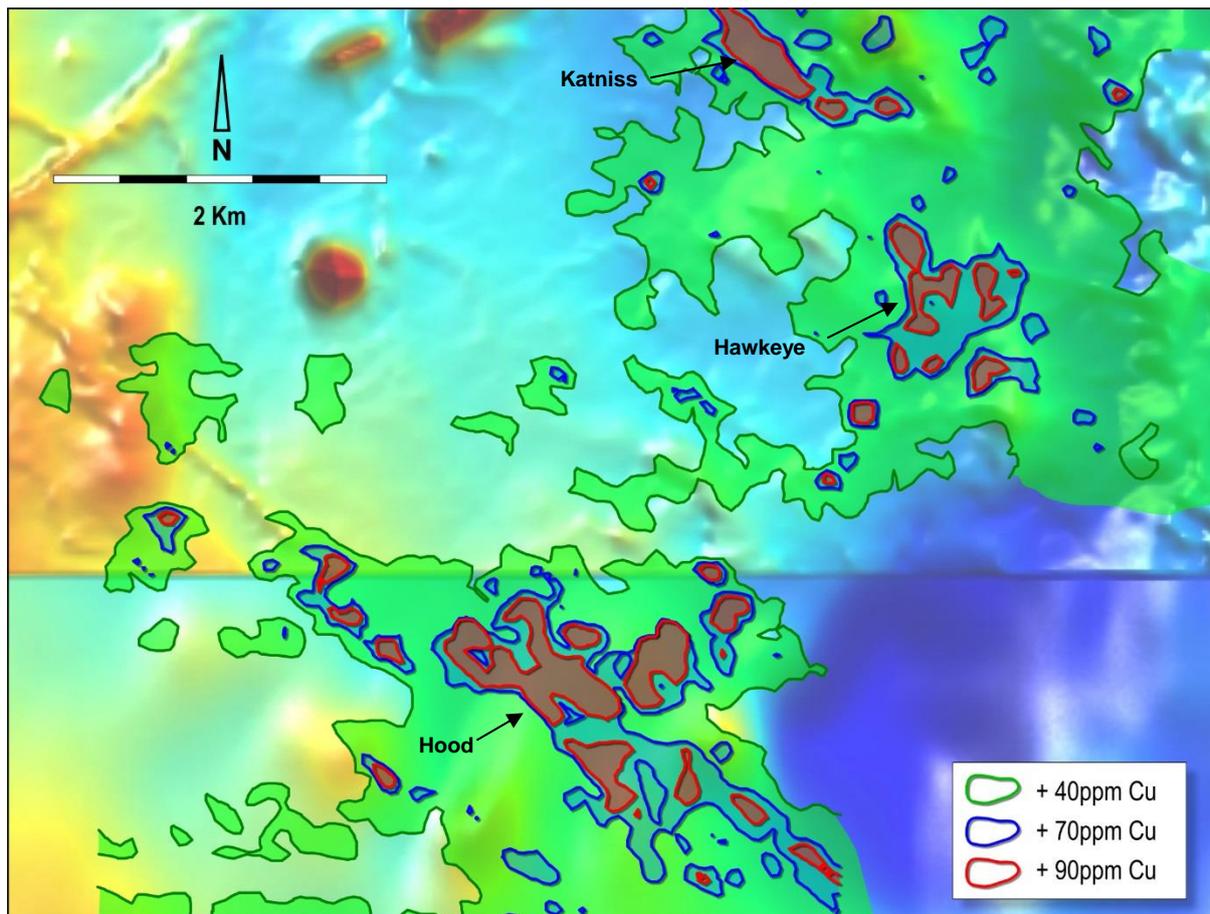


Figure 2: Blue Hills copper mineralisation contours overlain on magnetic image.

The largest cluster of anomalous copper values was obtained at Hood which is on the southern edge of the Blue Hills magnetic anomaly. Hood covers an area of 4km long and 2km wide (+70ppm copper) and at the +40ppm copper level, is approximately 4km x 4km in size. The anomaly is open to the south east.

Hood was the location of Archer's original exploration efforts at Blue Hills. A rock chip sampling program recently completed by Archer identified samples of up to 9.27% copper and 8.1g/t gold.

RC drilling by Archer at Hood defined a shallow copper zone at Hood, on the periphery of the magnetic anomaly. Numerous copper drill intersections were recorded by Archer from the shallow RC drilling, with drill intercepts of **23m @ 0.30%** and **12m @ 0.5%** copper from surface.

The Hood RC drill holes were not located within the highest-grade soil anomalies with significant +90ppm copper soil anomalies located in the vicinity of the RC drill hole collars. The latest soil sampling results suggest that the best targets have not been drilled at Hood.

Both Hawkeye and Katniss anomalies are new discoveries for Archer. Like Hood, the Hawkeye anomaly is also located on the edge of the Blue Hills magnetic anomaly. The Katniss anomaly is unique in that it is not located on the edge of the magnetic anomaly. Katniss strikes parallel to Hood and is open to the north.

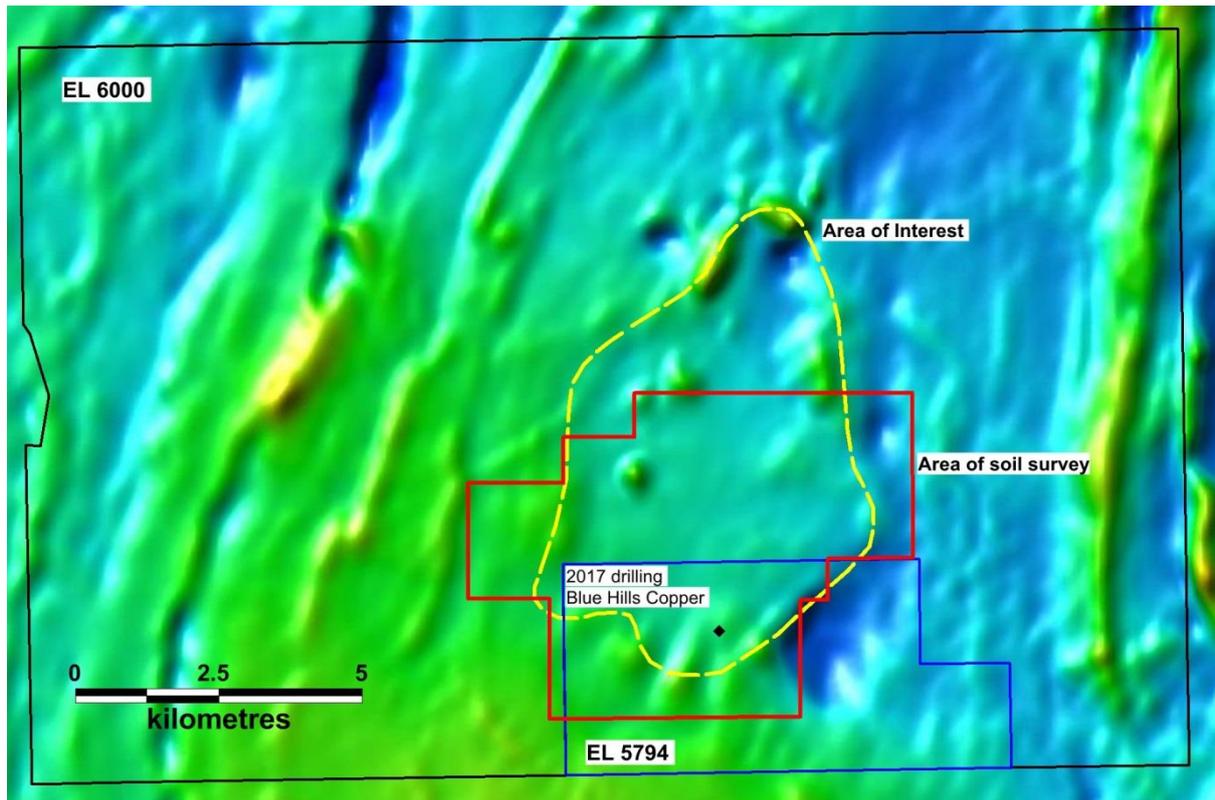


Figure 3: Magnetic image showing the extent of the soil sampling program and the extent of the underlying geophysical anomaly

## Next Steps

The recent soil sampling program was undertaken on a 100m x 100m grid and covered approximately 60% of the underlying 25km<sup>2</sup> geophysical anomaly. The latest outstanding results have given Archer the confidence to extend the soil sampling program by:

- Sampling the remaining 40% of the geophysical anomaly on a 100m x 100m grid.
- Infill sampling (20m x 20m grid) the high-grade copper zones at Hood, Hawkeye and Katniss.

For further information, please contact:

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## **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Wade Bollenhagen, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of Archer Exploration Limited. Mr Bollenhagen 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr. Bollenhagen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## 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
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li>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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples taken on a regularised grid of 100m by 100m (nominally).</li> <li>Sampling was guided by Archer’s protocols as the program was exploratory in nature. No standards were submitted by the company during analyses.</li> <li>A Delta DP4050C &amp; a Niton XL3t-500 portable XRF were used to analyse a sieved fraction of soil regolith.</li> <li>The soil sample was taken from the B horizon and sieved to – 1.6mm and placed into a sample bag ready for assaying with the PXRF. A field duplicate was taken every 50<sup>th</sup> sample and marked with an “a”. A range of standards were used during the analyses, with a standard being read as every 40<sup>th</sup> assay a duplicate reading was also made every 40<sup>th</sup> sample as well.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is not being reported in this release</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Drill Sample Recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is not being reported in this release.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were described for geological purposes</li> <li>Drilling is not being reported in this release.</li> </ul>
<b>Sub-Sampling Techniques and Sample Preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is not being reported in this release.</li> <li>For all samples taken, all surficial organic material was removed from the site where the sample was to be taken, this involves the removal of 2 to 10cm of surface material in places.</li> <li>A sample of material (200gm) was then taken from the location (10 to 20cm deep) and sieved so that only material of -1.6mm was retained.</li> <li>This was placed inside a pre-numbered bag for assay with the XRF.</li> <li>A duplicate sample is taken every 50<sup>th</sup> location and labelled as "a".</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Quality of Assay Data and Laboratory Tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Certified standards were not used in the assessment of the analyses.</li> <li>Analyses was by Delta DP4050C &amp; a Niton XL3t-500 portable XRF</li> <li>Standards, blanks and duplicates were used during the analyses by the XRF's.</li> <li>Certified Reference Material (CRM's) were used during the analyses, a frequency of 1 on 40 for CRM's occurred.</li> </ul>
<b>Verification of Sampling and Assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification of sampling.</li> <li>Data is exploratory in nature and exists as excel spread sheets.</li> <li>No data adjustment.</li> </ul>
<b>Location of Data Points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>MGA94 Zone 54 grid coordinate system is used.</li> <li>A hand-held GPS was used to identify the sample location</li> <li>Quality and adequacy is appropriate for this level of exploration</li> </ul>
<b>Data Spacing and Distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is not being reported in this release.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Orientation of Data in Relation to Geological Structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling is not being reported in this release.</li> </ul>
<b>Sample Security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that best practices were undertaken at the time</li> <li>All residual sample material (pulps) are stored securely.</li> </ul>
<b>Audits or Reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>None undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<b>Mineral Tenement and Land Tenure Status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Tenement status confirmed on SARIG.</li> <li>All work being reported is from EL 5794 &amp; EL 6000 (owned by SA Exploration Pty Ltd, a subsidiary of AXE).</li> <li>The tenement is in good standing with no known impediments.</li> </ul>
<b>Exploration Done by Other Parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Work was undertaken for diamond exploration in the past, the detailed magnetic data is a result of the exploration of kimberlites for diamonds.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The mineralisation style indicates that it was emplaced by fluids within the Tindelpina Shale Member of the Tapley Hill Formation.</li> <li>• The association with underlying geology (if any) will be explored with the expansion of the survey area to the North as well as to the South East. Additional sampling will cover areas outside of the influence of Dolomitic units.</li> <li>• The strike appears to be NNE and is open, the model is still evolving</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>• 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:               <ul style="list-style-type: none"> <li>– Easting and northing of the drill hole collar</li> <li>– Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>– Dip and azimuth of the hole</li> <li>– Downhole length and interception depth</li> <li>– Hole length</li> </ul> </li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is not being reported in this release.</li> </ul>
<b>Data Aggregation Methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is not being reported in this release.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is not being reported in this release.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is not being reported in this release.</li> <li>• Extent of soils sampling is demonstrated by the contours presented in the images of this release.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The reporting is considered to be balanced.</li> <li>• No drilling is being reported,</li> <li>• Soil sampling results are presented as contour images, in line with the exploratory nature of the work.</li> </ul>
<b>Other Substantive Exploration Data</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Nothing to report at this stage</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Further sampling is required along strike of the anomalies, as well as further to the North over the magnetic low.</li> <li>• Electro-magnetics will be required to vector areas of greater conductivity and higher mineralisation potential.</li> <li>• Figures in the body of this report highlight the gaps in the data.</li> </ul>