



## ASX ANNOUNCEMENT

2 May 2018

### **New IP Geophysical Targets at Copper Blow**

- **Trial induced polarisation (IP) geophysical survey has detected known sulphide zones at Copper Blow**
- **Survey outlines multiple new potential copper-gold targets**
- **Potential for new style of mineralisation with anomalous IP adjacent to Copper Blow**

**Silver City Minerals Limited (ASX: SCI) (“Silver City” or “the Company”)** is pleased to announce results from a recently completed induced polarisation (IP) geophysical survey at Copper Blow located 20 kilometres south of Broken Hill.

A trial of both dipole-dipole and gradient array configurations was completed over the North Zone where a diamond drill hole 18CB054 return an intersection of **41.2 metres at 1.3% copper and 0.4 g/t gold** (ASX Release 22 February 2018). Copper, gold and cobalt are hosted in sulphides within a magnetite-quartz-biotite-rich shear zone which extends for 4.5 kilometres along strike (Figure 1).

The data from this trial indicated that abundant sulphides located in the North Zone responded well to IP, with elevated and anomalous IP chargeabilities. As a consequence, in order to locate new copper-gold-cobalt sulphide targets, the Company decided to expand the gradient array survey to cover approximately 3.5 kilometres of the prospective magnetic shear zone not yet tested by IP.

#### *Results*

##### *Anomalies related to magnetic rocks*

The prospective magnetic shear has been drilled over a strike length of 1 kilometre in the South and North Zones at Copper Blow (Figure 1). The collars for the current drill program are shown and are focussed on the North Zone and its north-eastern extensions. Targeting of these holes was based on coincident magnetics, gravity and surface geochemical results.

The corresponding chargeability diagram in Figure 2 shows that both the North and South Zones are anomalously chargeable. The Company interprets this to be in response to the abundant sulphide mineralisation already outlined by drilling. Extending from the North Zone to the northeast for 1 kilometre, are a series of discrete chargeability anomalies similarly associated with elevated magnetic and gravity responses. These have been referred to in previous releases as anomalies CB3, 4 and 5. Drilling to test these is currently underway.

*Anomalies unrelated to magnetic rocks*

An unforeseen consequence of the IP survey was the occurrence of unexplained chargeability anomalies unrelated to magnetic rocks (Figure 2).

To the east and southeast of Copper Blow an anomaly extends over 600 metres along strike and is 200 metres wide. The orientation of this is subparallel to the magnetic shear zone which hosts Copper Blow.

Outcrop is sparse, with a thin veneer of soil cover over much of the area. Rocks types include amphibolite, aplitic granite, pegmatite and gossanous quartz veins. The gossanous quartz veins and iron oxide-bearing aplite occur in old prospecting pits. These rocks are interpreted to host primary sulphides at depth.

There are strong textural similarities of the gossanous quartz veins to those which occur in drill holes at Copper Blow.

Parts of this IP anomaly are underlain by a broad gravity anomaly.

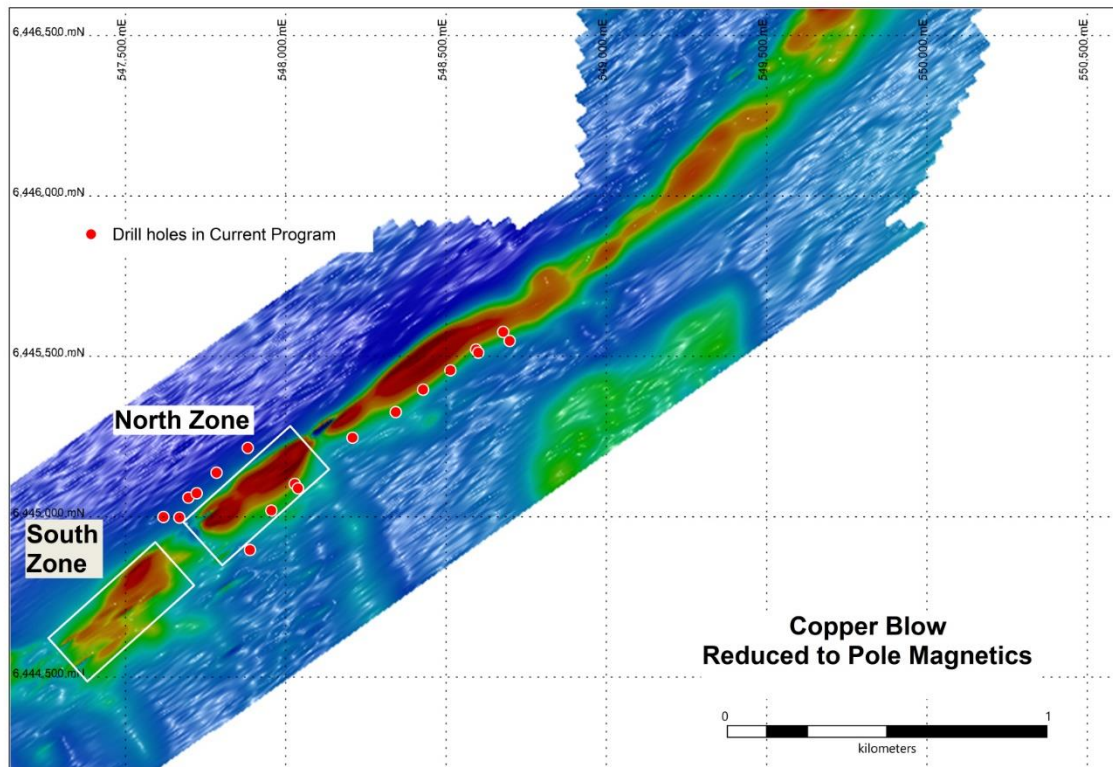
To the northeast of Copper Blow a north-north-easterly chargeability anomaly appears to transect the magnetic horizon obliquely. Two discrete IP anomalies within this zone, both north and south of the magnetic horizon, are hosted in non-magnetic rocks (Figure 2). No outcrop occurs in these zones.

*What does this mean?*

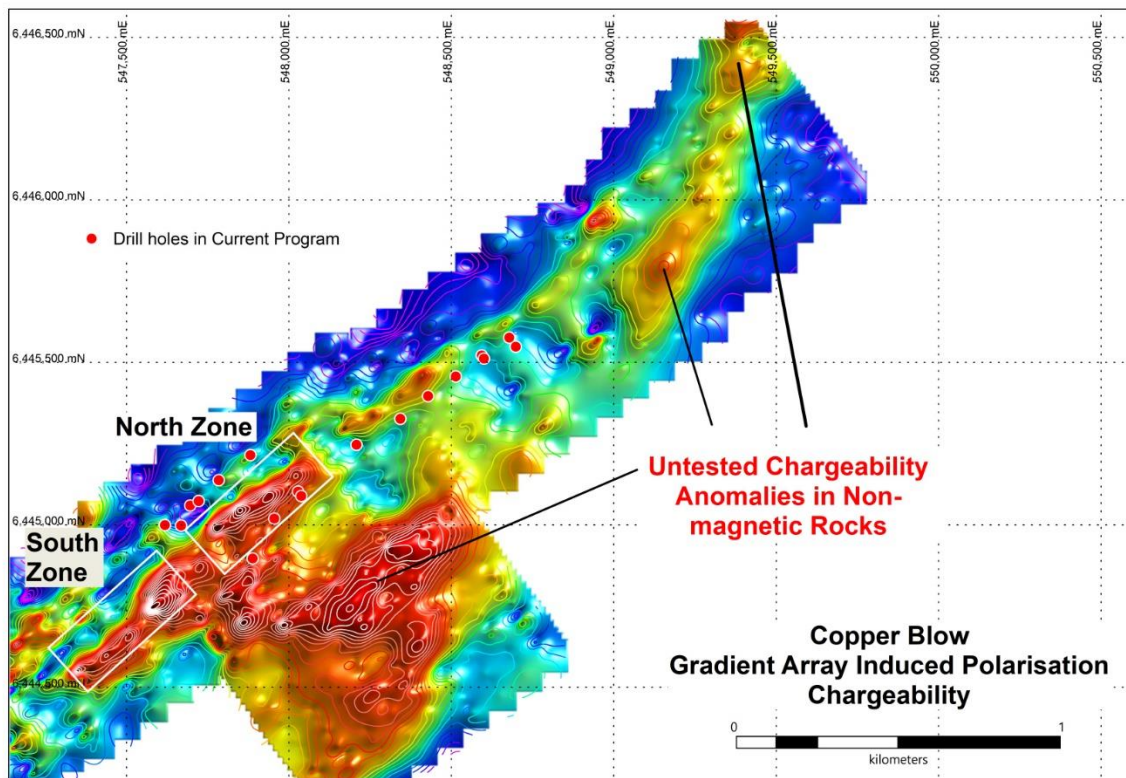
The IP survey suggests that sulphide-bearing rocks are not restricted to the magnetic horizon which, to date, has been the focus of interest for copper, gold and cobalt exploration. Potential for a similar, geologically-related, style of copper-gold mineralisation exists. In iron oxide copper-gold deposits two forms of iron oxide; magnetite and hematite are often present. Hematite is not magnetic and commonly contains copper-gold mineralisation.

The IP survey may have detected this hematite-style of copper-gold mineralisation or another sulphide-bearing shear that has no magnetite.

The Company considers the results of the IP survey to be highly encouraging. It plans to expand the survey and undertake a soil sampling program to assess the geochemical signature of the IP anomalies over the coming months to assist in drill targeting.



**Figure 1** Magnetic image with hot colours showing the magnetite-rich zone which has been the focus of exploration to date.



**Figure 2** Corresponding IP chargeability image showing that some chargeability anomalies are associated with magnetite while other are non-magnetic. Chargeabilities range from 3.5 mv/v (blue colours in image) to 15mv/v (red colours in image).

## SILVER CITY MINERALS LIMITED



**Christopher Torrey**  
Managing Director

### **ABOUT Silver City Minerals Limited**

*Silver City Minerals Limited (SCI) is a base and precious metal explorer with a strong focus on the Broken Hill District of western New South Wales, Australia. It takes its name from the famous Silver City of Broken Hill, home of the world's largest accumulation of silver, lead and zinc; the Broken Hill Deposit. SCI was established in May 2008 and has been exploring the District where it controls Exploration Licences through 100% ownership and various joint venture agreements. It has a portfolio of highly prospective projects with drill-ready targets focused on high grade silver, gold and base-metals, and a pipeline of prospects moving toward the drill assessment stage. The Company continues to seek out quality projects for exploration and development.*

### **Caution Regarding Forward Looking Information.**

*This document contains forward looking statements concerning Silver City Minerals Limited. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on Silver City's beliefs, opinions and estimates of Silver City Minerals as of the dates the forward looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future development.*

### **Competent Persons**

*The information in this report that relates to Exploration Results is based on information compiled by Chris Torrey (BSc, MSc, RPGeo Mineral Exploration), who is a member of the Australian Institute of Geoscientists. Mr Torrey is the Managing Director, a shareholder and full time employee of Silver City Minerals Limited. Mr Torrey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as "Competent Persons" as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Torrey, consents to the inclusion in this Report of the matters based on this information in the form and context in which it appears.*

## **CONTACT DETAILS**

### **Management and Directors**

Bob Besley	Chairman
Chris Torrey	Managing Director
Greg Jones	Non-Executive Director
Josh Puckridge	Non-Executive Director
Ivo Polovineo	Company Secretary

### **Registered Office**

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# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> </ul>	<ul style="list-style-type: none"> <li>Report refers specifically an IP survey</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Report refers specifically an IP survey</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>Results are Material to this and future Public Reports</li> </ul>
	<ul style="list-style-type: none"> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Report refers specifically an IP survey</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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>No drilling</li> </ul>
<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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>No measures</li> </ul>
	<ul style="list-style-type: none"> <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>No drilling</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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
<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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <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 drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Handheld GPS</li> </ul>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>MGA94 Zone 54</li> </ul>
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drone survey conducted by Company</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>No compositing</li> </ul>
<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> </ul>	<ul style="list-style-type: none"> <li>Report refers to three metallurgical samples only</li> </ul>
	<ul style="list-style-type: none"> <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>Report refers to three metallurgical samples only</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>none</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>No audits have been undertaken</li> </ul>

## Section 2 Reporting of Exploration Results

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

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>The survey outlined in this public report falls within ELs 8255, 8629 and 8076 which are subject a joint venture between Silver City Minerals and CBH Resources. Landowner access agreements are in place. Native Title has been extinguished.</li> <li>The tenure is secure under NSW legislation. There are no known impediments to operate.</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>Details previously outlined in ASX Release 4 May 2017,)</li> </ul>
<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>Iron oxide copper-gold deposit hosting cobalt</li> </ul>
<b>Drill hole 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>down hole 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>No drilling</li> <li>Report refers to an IP survey</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 (eg 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>No drilling</li> <li>No drilling</li> <li>No drilling</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> </ul>	<ul style="list-style-type: none"> <li>No drilling</li> </ul>
	<ul style="list-style-type: none"> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>No drilling</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>See body of text</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>No drilling</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>This report refers primarily to the results of a recent induced polarization survey. The parameters and general results of this survey are as follows:  The gradient array Induced polarisation survey was conducted with 25 metre readings on lines 100 metres apart and was oriented on lines at a bearing of 325.4 degrees relative to MGA north. Results consist of 3310 individual readings, at 1006 stations, of apparent IP chargeability and apparent resistivity covering an area of 2.33 square kilometres.  Resistivity readings are log-normally distributed with 98% of the readings lying between 125 and 2500 ohm-m. The lognormal mean resistivity readings is approximately 500 ohm-m. IP chargeability values are bimodal with modal values at 7 and 13 mV/V. 98% of the chargeability values lie between 2 and 13.5 mV/V.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul style="list-style-type: none"> <li>Continued drilling, metallurgical testwork, surface geochemical surveys, expanded IP surveys</li> </ul>
	<ul style="list-style-type: none"> <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>Refer to previous reports ASX 21 December 2017</li> </ul>