

**8<sup>th</sup> November 2017**

Company Announcement Officer  
ASX Limited  
Exchange Centre  
20 Bridge Street  
SYDNEY NSW 2000

## **EXTENSIVE MINERALISATION INTERSECTED IN FIRST HOLE INTO IP CHARGEABILITY TARGET**

### **Highlights**

- **Drilling intersects extensive zones of base metal mineralisation in the first drill hole into the large IP chargeability zone beneath the Bowdens Silver resource.**
- **Mineralisation zone extends for approximately 300 metres down hole.**
- **The zone includes intervals of higher intensity base metal mineralisation over an approximate 80 metre interval down hole.**
- **The visual results from this drill hole demonstrate the existence of a significant base metal system hosted in basement rocks beneath the Bowdens Silver Deposit.**
- **The initial hole forms part of a larger drilling program to test the extent of the IP chargeability zone which is over 1000 metres in strike and 250 metres wide.**
- **Drilling will now test the central and southern portions of the target as part of a larger initial program of up to 11,000 metres.**

### **Drill Hole BRD17023**

Silver Mines Limited (“Silver Mines” or “the Company”) is pleased to advise that it has completed the first drill hole (BRD17023) into the induced polarisation (‘IP’) chargeability target directly underneath the Bowdens Silver Deposit (See Figure1). The drill hole was the deepest undertaken at the project to date and was designed to test the northern portion of the IP chargeability target. The drill hole forms part of a larger drill program to test the extent of the IP chargeability zone which extends for 1000 metres in strike and is 250 metres wide. This first hole is located approximately 250 metres south along-strike from highly encouraging results returned from drilling on the north-western edge of the IP chargeability zone. This previous drilling included results of 31.25 metres @ 23g/t silver, 3.24% zinc 1.88% lead and

0.40g/t gold (218g/t silver equivalent) from 283.75 metres down-hole at Bundarra Deeps. See ASX announcement of 11<sup>th</sup> April 2017.

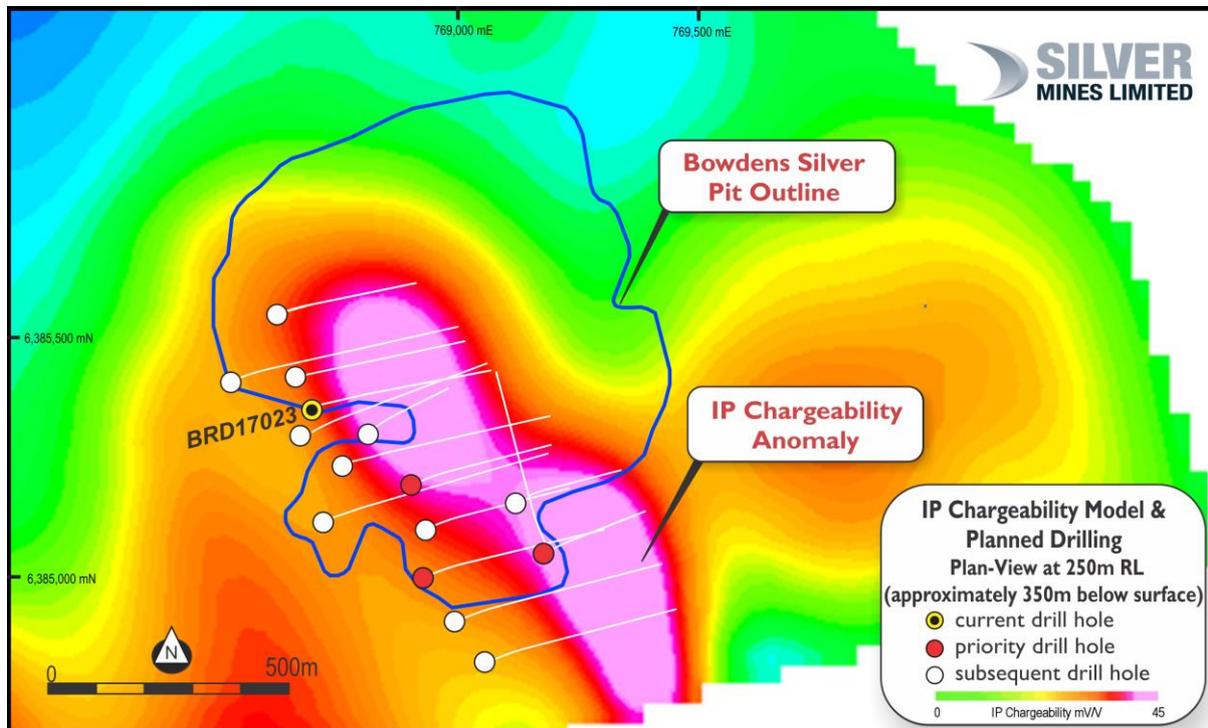


Figure 1. Plan view slice of IP chargeability anomaly at 250mRL (approximately 350 metres below surface) and the planned drilling program.

BRD17023, which was completed to a final depth of 600 metres, intersected an approximate 300 metre interval of base-metal mineralisation from 200 metres downhole depth which consisted predominantly of quartz-carbonate fracture hosted pyrite-sphalerite-galena sulphide assemblages (see Figure 2). This mineralisation occurs within the basement Coomber Formation, with a style consistent with that observed at Bundarra Deeps. This demonstrates that a significant base metal system occurs within basement rocks beneath the Bowdens Silver Deposit. A zone of higher concentration mineralisation was recognised from 320 to 400 metres down hole.

Additionally, the results of the drilling support the interpretation and modelling of the IP chargeability zone and provides substantial proof of concept that a large mineralised system exists below the Bowdens Silver Deposit. Final down-hole samples from BRD17023 are in the process of being despatched for laboratory analysis with results expected in the coming weeks.

Drill testing of the Bowdens IP chargeability anomaly will continue in the central and southern portions of the target zone. The program over the coming months includes up to sixteen drill holes with four priority drill holes designed to initially test the IP chargeability target with an initial total of up to 11,000 metres.

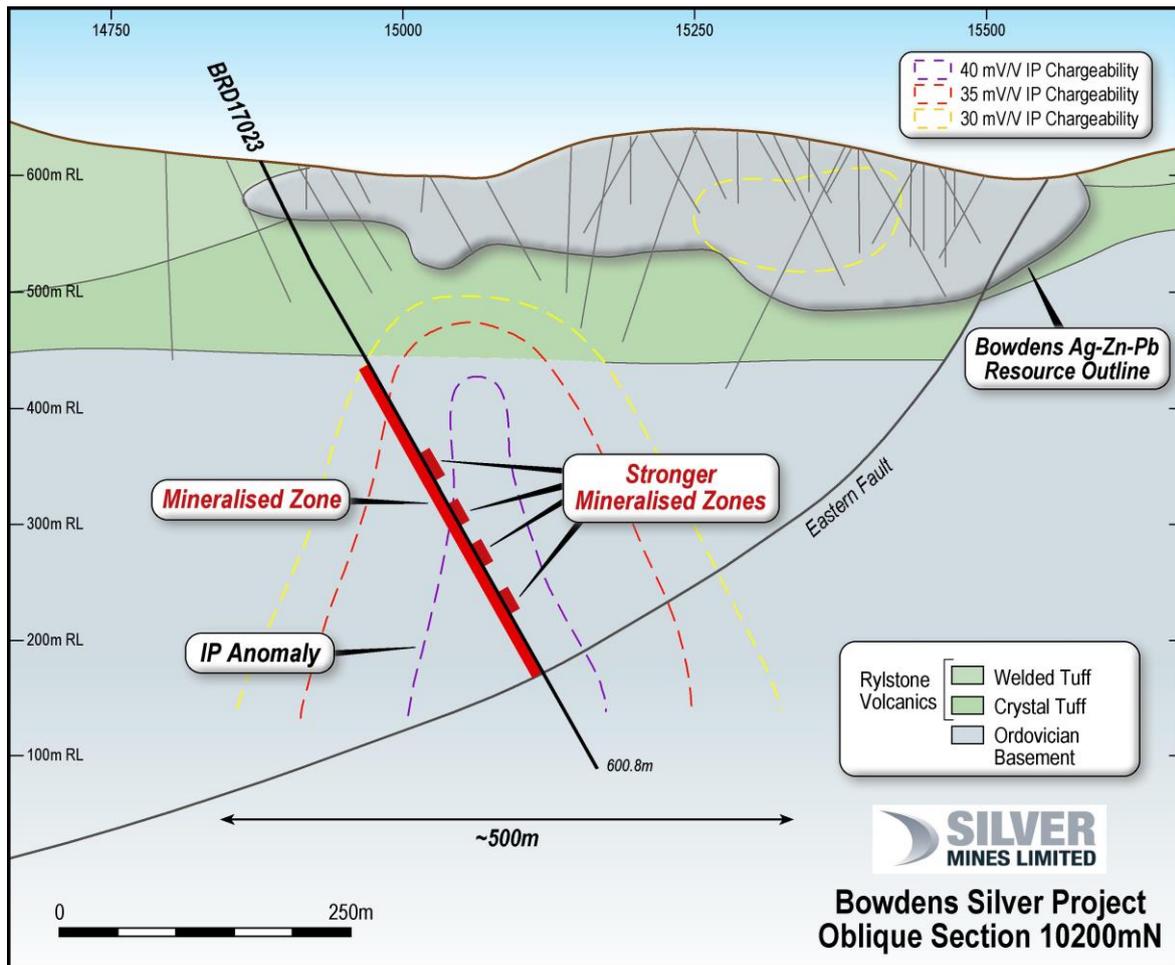


Figure 2. Cross Section of BRD17023.



**About Silver Mines Limited**

The Silver Mines strategy has been to consolidate quality silver deposits in New South Wales and to form Australia's pre-eminent silver company.

The Company's goal is to provide exceptional returns to shareholders through the acquisition, exploration and development of quality silver projects and by maximising leverage to an accretive silver price.

**Competent Persons Statement**

The information in this report that relates to mineral exploration results is based on information compiled or reviewed by Mr Scott Munro who is a full-time employee of the company. Mr Munro is a member of the Australian Institute of Geoscientists (AIG) and 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' (JORC code). Mr Munro consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

**Appendix 1 Drill Hole Details**

Hole ID	East	North	RL	Dip	Azimuth (mag)	EOH (m)	Comment
BRD17023	768708	6385345	614	-65	62	600	assays pending

## JORC Code, 2012 Edition – ANNEXURE 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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 down hole 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 1m samples from which 3kg was pulverised to produce a 30g 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>Sampling taken from NQ diamond core and from reverse circulation (RC) drill chips.</li> <li>NQ size core - all samples taken as nominal 1 metre intervals from half-cut core and from the same side of the core.</li> <li>RC samples collected on a 1m interval from a cone splitter.</li> <li>Each sample represents approximately 2 kilograms of material</li> <li>Each sample was sent for multi-element assay using ICP techniques with the entire sample pulverized and homogenized with a 50g extract taken for assay.</li> <li>Assays are considered representative of the sample collected.</li> </ul>
Drilling techniques	<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>Diamond drilling undertaken using HQ &amp; NQ diamond core rig with standard tube.</li> <li>All core, where unbroken ground allows, is oriented by drilling team and an orientation line along the base of the hole.</li> <li>RC drilling using a 139mm hammer.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core recovery is estimated at greater than 95%.</li> <li>• Some zones (less than 10%) were broken core with occasional clay zones where some sample loss may have occurred. However, this is not considered to have materially affected the results.</li> <li>• RC samples are weighed for each metre and assessed for recovery, contamination and effect of water if present.</li> <li>• No significant relationship between sample recovery and grade exists.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All diamond holes are logged using lithology, alteration, veining, mineralization and structure including geotechnical structure.</li> <li>• RC chip samples are logged using lithology, alteration, veining and mineralization.</li> <li>• All core and chip trays are photographed using both wet and dry photography.</li> <li>• In all cases the entire hole is logged by a geologist.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core were taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Minor selective sub-sampling based on geology to a maximum size of 1.3m and a minimum of 0.3m.</li> <li>• All core is cut using a Corewise core saw with core rotated 10 degrees to the orientation line to preserve the orientation for future reference.</li> <li>• The half (NQ) of the core without the orientation line is removed, bagged and sent to the laboratory for assay.</li> <li>• Sample sizes are considered appropriate for the rock type, style of mineralisation, the thickness and consistency of the intersections and assay ranges expected at Bowdens.</li> <li>• RC samples are collected from a cone splitter at a 6% split. The cyclone/splitter system is checked periodically throughout each hole and cleaned when necessary. To assess the representation of material sampled a duplicate 6% split sample is collected from a secondary sample chute on the opposite side of the cone splitter at the rate of 1/20.</li> </ul>
<i>Quality of assay data</i>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples dispatched to ALS Global laboratories in Orange NSW for sample preparation and gold analysis Au-AA25. 33 multi-element</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and laboratory tests</i>	<p><i>considered partial or total.</i></p> <ul style="list-style-type: none"> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc.</i></li> <li><i>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.</i></li> </ul>	<p>analysis completed at ALS Brisbane using method ME-ICP61.</p> <ul style="list-style-type: none"> <li>Site Standards are inserted every 20 samples to check quality control and laboratory standards and blanks every 25 samples to further check results.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections calculated by site-geologists.</li> <li>All geological logging is entered digitally before inputting into a Maxwell Geoservices database schema.</li> <li>Primary assay data is sent electronically from the lab to the SVL database administrator and then entered into the geological database for validation.</li> <li>All assays matched with the logging sheets and loaded directly from the output provided by the laboratory with no manual entry of assays undertaken.</li> <li>No adjustments were made or required to be made to the assay data.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>The collar position is initially surveyed using hand-held GPS with accuracy of +- 5 metres. Periodically, Real Time Kinetic by VRS Now surveys are conducted with accuracy of +-1cm.</li> <li>Down hole surveys collected every 30 metres using an electronic downhole reflex survey camera.</li> <li>The terrain includes steep hills and ridges and with a topographical model of 0.034 metre accuracy.</li> <li>All collars recorded in MGA94 zone 55 and also re-projected to a locally defined mine-grid system.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>This drilling is designed as preliminary exploration targeting a geophysically derived induced polarization chargeability model on approximate 200m spaced sections.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<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>Drill orientation was designed to intersect the projection of breccia zones and zones of veins within an overall mineralized envelope.</li> <li>An interpretation of the mineralization has indicated that no sampling bias has been introduced.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples bagged on site under the supervision of two senior geologists with sample bags tied with cable ties before being driven by site personnel to the laboratory in Orange, NSW (~200km from the site)</li> </ul>
<i>Audits or reviews</i>	<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>The drilling campaign and drill work includes on-going internal auditing with advice taken on process from external advisors.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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 Bowdens Resource is located wholly within Exploration Licence No EL5920, held wholly by Silver Mines Limited and is located approximately 26km east of Mudgee, New South Wales.</li> <li>The tenement is in good standing.</li> <li>The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US\$5 million over 100% of the EL5920.</li> <li>The project has a 1.85% Gross Royalty over 100% of EL5920.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Bowdens project was previously managed by Kingsgate Consolidated and Silver Standard Ltd, however the new drilling reported under this table is based on work conducted solely by Silver Mines/Bowdens Silver.</li> </ul>
<i>Geology</i>	<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 Bowdens Deposit is a low sulphidation epithermal base-metal and silver system hosted in Permian Volcanic rocks.</li> <li>Mineralisation includes veins, shear veins and breccia zones within</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>tuff and ignimbrite rocks.</p> <ul style="list-style-type: none"> <li>Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic dome. There are several vein orientations within the broader mineralized zones including some areas of stock-work veins.</li> </ul>
<p><i>Drill hole Information</i></p>	<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; and</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>All information is included in Appendix 1 of this report.</li> </ul>
<p><i>Data aggregation methods</i></p>	<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>Intersection calculations based on 1% combined lead + zinc cut-off for low-grade results or a minimum 30 g/t silver with maximum 10 metre internal dilution and a minimum 60g/t silver with maximum 5 metre internal dilution for high-grade results.</li> <li>The silver equivalent values calculated using metal prices of US\$20 per ounce silver, US\$1.00 per pound zinc and US\$1.00 per pound lead and recoveries of 81% for silver, 82% for zinc and 81% for lead.</li> <li>Ag equivalent formula = <math>Ag\ g/t + ((Pb\% + Zn\%)*33.2)</math></li> </ul>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<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 down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is both stratabound and vein hosted. The stratigraphy dips moderately to the north while the majority of mineralised veins dip west. Some individual veins intersected were sub-parallel (~10 degrees to core axes). The drilling width is estimated to be 120% of true-width for stratabound mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Maps and cross-sections provided in the body of this report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All results received and compiled to date are reported in this release. Drilling is ongoing with further results expected to provide a more detailed assessment of the mineralised zones.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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 and potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This report relates to drill data reported from this program.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This report relates to a drill program that is designed to test a geophysical induced polarization chargeability target. Drilling is ongoing with further results pending.</li> </ul>