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EM SURVEYS COMMENCE AT HAYES CREEK PROJECT, NT

Highlights:

- NT field season has commenced with electromagnetic surveys at the Hayes Creek project
- Surveys targeting new massive sulphide hosted base metals and gold mineralisation at Mount Bonnie and Iron Blow deposits
- Prospective VTEM anomalies identified at Joplin and Clyde prospects will be surveyed to better define targets prior to drill testing

Phoenix Copper Limited **(ASX:PNX)** is pleased to announce that Fixed Loop Electromagnetic (FLEM) and Down Hole Electromagnetic (DHEM) surveys capable of identifying massive sulphide mineralisation have commenced at its Hayes Creek project in the Pine Creek region of the Northern Territory (Figure 1).

The aim of these surveys, which are expected to take up to 2 weeks to complete, is to identify new sources of sulphide mineralisation adjacent to, and beneath the known mineralisation at the Iron Blow (JORC Inferred Resource) and Mount Bonnie volcanogenic massive sulphide (VMS) deposits. In addition, two VTEM anomalies at Clyde and Joplin will be surveyed in order to refine the targeting for any sulphide mineralisation and 'see deeper' than the previous VTEM survey. All targets lie within close proximity to one another in the area comprising the Hayes Creek Project (Figure 2).

Drilling at Mount Bonnie is expected to commence immediately after the completion of the EM survey with the aim of extending the mineralisation identified historically.

Regional exploration campaigns are to recommence in May with the primary aim of discovering new base metal massive sulphide and gold deposits.

New Prospects

The Clyde prospect is an exciting new and untested target area located approximately 500m to the south of the Mount Bonnie deposit. At Clyde, a strong airbourne EM and magnetic response occurs along the interpreted trend of the mineralised horizon in a favourable structural setting. There is also an outcropping gossan (the weathered surface expression of mineralisation) directly to the south of Mount Bonnie suggesting that mineralisation may continue to the south. There has been no recorded drilling at Clyde (Figure 3).

The Joplin prospect is a high priority VTEM anomaly which lies approximately 2km to the south-east of Iron Blow. It exhibits a similar strike length as at Iron Blow with an associated quartz veined gossan. Here EM will be used to determine the depth and orientation of buried conductive rocks which are indicative of massive sulphide mineralisation, prior to drill testing the most conductive portion of the anomaly.

The Joplin prospect is subject to an earn-in with Crocodile Gold Australia (see ASX release 18 August 2014 for further details of the agreement). Iron Blow, Mount Bonnie and the Clyde prospect are all situated on granted Mining Leases 100% owned by Phoenix Copper.

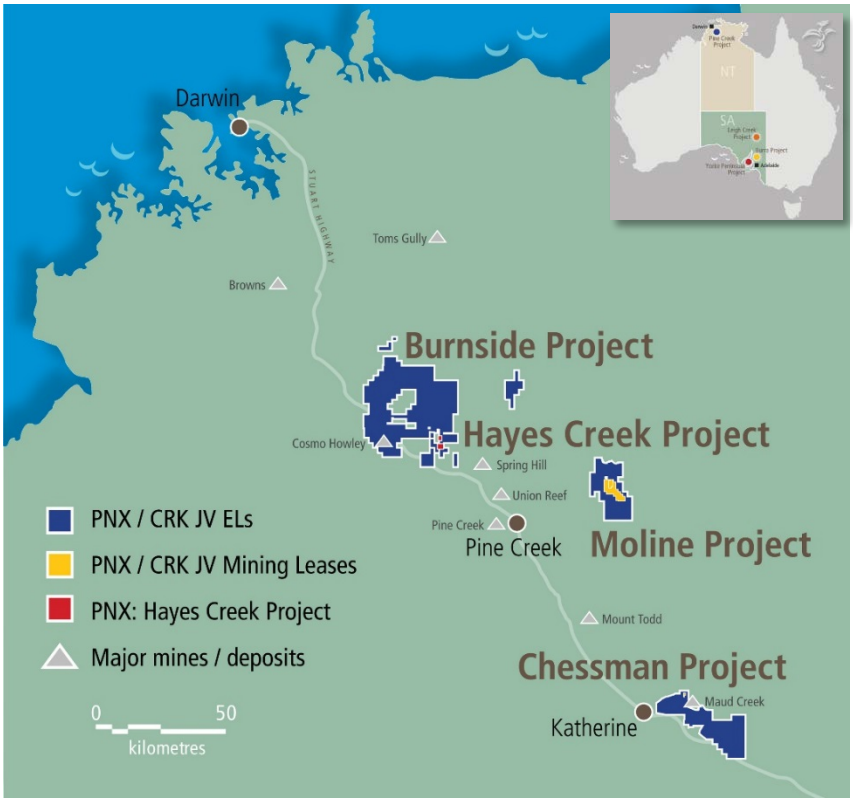

Figure 1: *Hayes Creek Project and the Burnside, Moline and Chessman Exploration Projects*

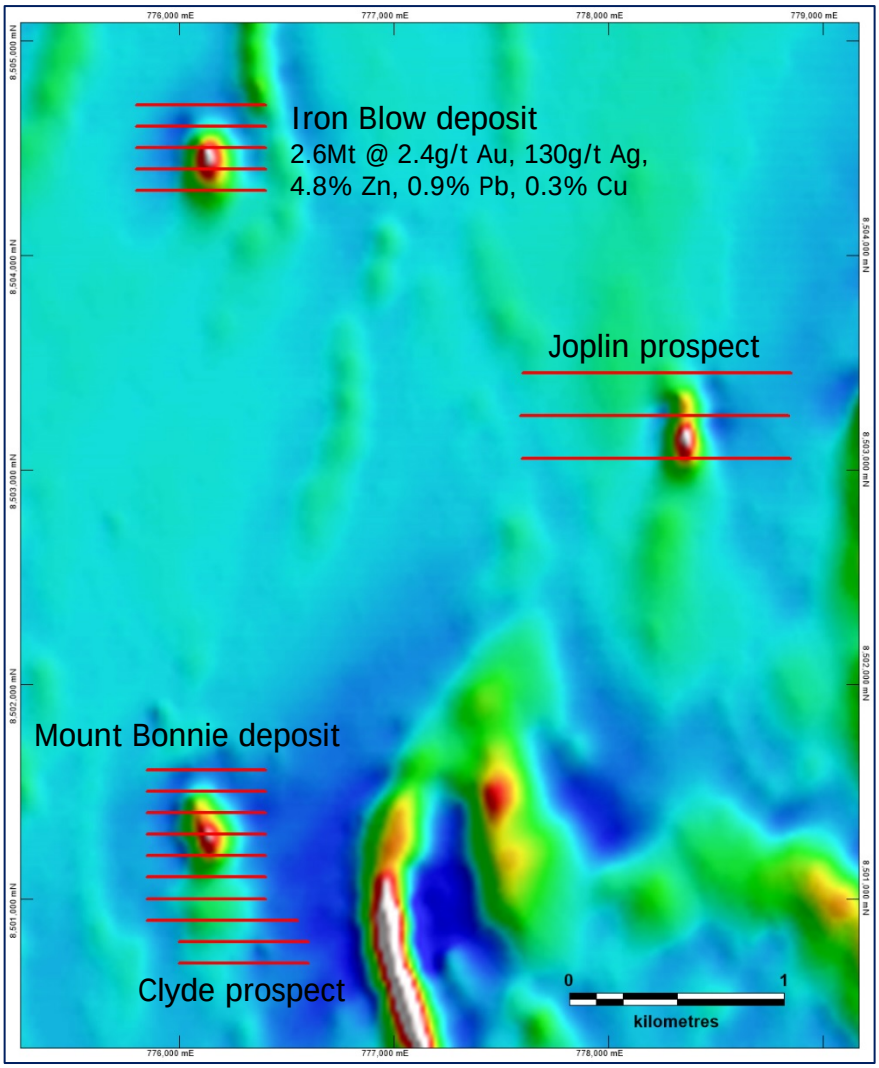

Figure 2: *Proposed EM lines on RTP mag (1VD)*

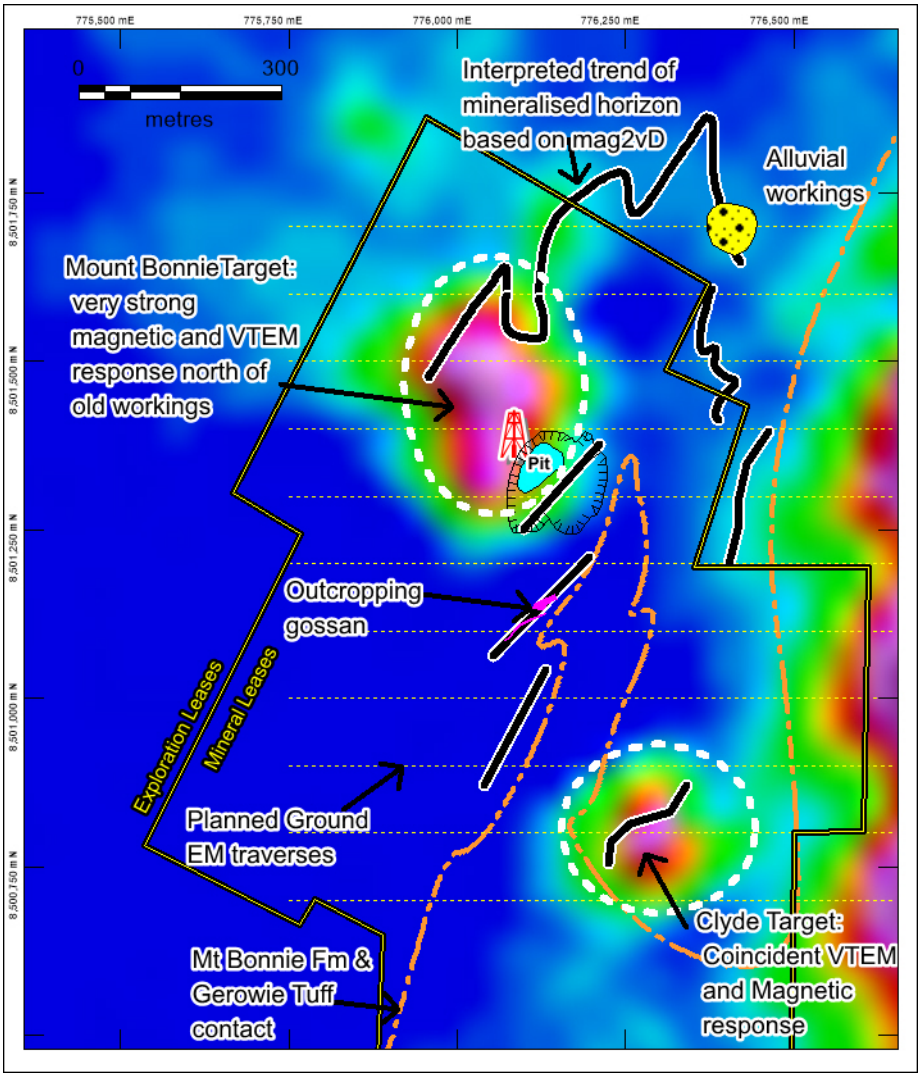

Figure 3: *Mount Bonnie deposit and Clyde prospect on VTEM image (BfieldZ35)*

About the Iron Blow and Mount Bonnie deposits

Iron Blow and Mount Bonnie are polymetallic VMS deposits which form part of Phoenix Copper's Hayes Creek Project within the Pine Creek region of the Northern Territory, 180km south of Darwin. They are situated on granted Mining Leases and 100% owned by Phoenix Copper, and are located close to infrastructure, including rail, road, power and water.

Iron Blow and Mount Bonnie were first discovered in the late 1800's with limited open pit and underground mining occurring around that time. During the mid-1980's oxidised ore was mined from small open pits for its gold and silver content, but the primary sulphide orebodies remain, and are now the focus of exploration by Phoenix Copper.

The Iron Blow deposit was upgraded to a JORC (2012) compliant inferred mineral resource estimate by Phoenix Copper in late 2014 (Table 1), and contains approximately 200,000oz of gold, 10.7M oz of silver and 125,000t of zinc at potentially mineable grades, (see ASX release 3 November 2014).

Depth	AuEq cut-off (g/t)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	ZnEq %
> -90 mRL	0.7	2.2Mt	6.7	2.4	140	0.3	1.0	4.9	11.8
< -90 mRL	3.0	0.4Mt	5.6	2.7	71	0.4	0.4	4.1	10.0
Total Inferred Mineral Resource		2.6Mt	6.5	2.4	130	0.3	0.9	4.8	11.5
Total Contained Metal			**543,000 oz**	203,000 oz	10,700,000 oz	7,000 t	23,000 t	125,000 t	**300,000 t**

Table 1: *Iron Blow Inferred Mineral Resource Estimate as at 8th October 2014. See ASX release 3 November 2014, 'High Grade Mineral Resource Estimate for Iron Blow Deposit', where further details are provided. Note there has been no material change in the Mineral Resource Estimate since it was first reported. The results from IBD023 have not been incorporated into the Mineral Resource Estimate.*

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Bennett, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Bennett has sufficient experience relevant to the style of mineralisation and the type of deposits 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 Bennett consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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 downhole 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 (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.*	• VTEM: Geotech helicopter-borne versatile time domain electromagnetic (VTEM) survey flown on behalf of Crocodile Gold Australia Operations in August 2011. Burnside survey block 7 for a total of 839 line km (out of a larger survey of 4,079 line km) was flown at 80km/hr at a nominal terrain clearance height of 90m and a sensor height of 48m. The transmitter was 26m in diameter, peak dipole moment 425,000 NIA, 25Hz pulse repetition rate, 200 Amp Peak cycle.
Drilling techniques	• *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).*	• No drilling was carried out as part of the survey.
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.*	• No drilling or sample recovery was carried out as part of the survey.
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.*	• No drilling or logging as carried out as part of the survey.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No drill sub-sampling was carried out as part of the survey.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No samples were collected as no drilling was carried out as part of the survey. • Geophysical surveys were carried out by experienced industry contractors, Geotech Airborne Pty Ltd, and are of acceptable quality.
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 sample verification was carried out as no drilling was carried out as part of the survey.
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.*	• A NovAtel WAAS enabled OEM4-G2-3151W GLS navigation system located in the helicopter tail was used. • All co-ordinates were referenced to Datum GDA 94, map grid Aus zone 52 & 53.
Data spacing	• *Data spacing for reporting of Exploration Results.*	• Sampling interval 0.1s along flight lines where line spacing was at a

Criteria	JORC Code explanation	Commentary
and distribution	• *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.*	nominal 150m. • No sample compositing was applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Flight lines oriented perpendicular to dominant strike direction of lithology and structures, where applicable.
Sample security	• *The measures taken to ensure sample security.*	• No drilling was carried out as part of the survey. • Geophysical data was acquired by Phoenix Copper from Crocodile Gold Australia as part of a data package related to a Sale and Purchase Agreement agreed to on 15 August 2014. • Data has been assessed by appropriately qualified consultants and Phoenix Copper personnel for data quality which is of an acceptable standard.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Geophysical data has been reviewed by an external consultant Geophysicist at Terra Resources, the results of which a have been reviewed by Phoenix Copper personnel for quality and integrity. • No external audits have been carried out.

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 VTEM surveys were conducted over portions of tenement EL25748 (where the Joplin prospect is located) which form part of a Sale and Purchase and earn-in to a joint venture Agreement between Phoenix Copper Ltd and Crocodile Gold Australia Pty Ltd executed on 15 August 2014. • The Iron Blow deposit is located within MLN214, the Mount Bonnie deposit is located within MLN1033 and MLN1039, and the Clyde prospect is located within ML30589 and all form part of the Hayes Creek project area which is within the boundaries of EL25748.

Criteria	JORC Code explanation	Commentary
		• The deposits and prospects are situated within Pastoral Lease No. 903, Douglas, held by Tovehead Pty Ltd. • The Mineral Leases and Exploration Leases are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration at Iron Blow and Mount Bonnie has consisted of oxide mining, geological mapping, surface geochemical sampling and diamond drilling. • Extensive exploration on the broader tenement package by previous explorers has focused on gold exploration. Numerous base metal prospects have been identified in surface geochemical sampling by these explorers that have not been adequately followed up due to the lower gold values. • The previous focus on gold has likewise meant that little or no ground geophysical prospecting has been carried out. Several airborne EM (VTEM) surveys have previously been flown over parts of the tenement package. Numerous conductors prospective for base metals have been identified by Phoenix Copper Ltd for further ground truthing and follow-up work.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Iron Blow and Mount Bonnie are stratabound base metal, silver and gold massive sulphide deposits. They are located within the Mount Bonnie Formation of the South Alligator Group, within the Pine Creek Orogen of the Northern Territory. Both deposits appear to be located at similar stratigraphic positions on opposite limbs of the roughly north-south trending Margaret Syncline. The prospects at Clyde and Joplin are in the same stratigraphic horizon. • Mineralisation at Iron Blow and Mount Bonnie is hosted within carbonaceous siltstones and mudstones within the lower portion of the Mount Bonnie Formation. It appears to have formed early in the basin development and has associated footwall alteration consisting of variable proportions of chlorite, amphibole, calcite, silica, and talc with associated vein and disseminated sulphides. The mineralisation appears to be consistent with a volcanic hosted massive sulphide deposit (VHMS) characteristics, or could possibly be related to carbonate replacement style. Further work is required to determine the exact association. • The massive sulphide mineralisation at Iron Blow is dominantly massive pyrrhotite with zones of coarse-grained, high-grade sphalerite, arsenopyrite, chalcopyrite, with lesser galena. Significant

Criteria	JORC Code explanation	Commentary
		silver and gold grades are also present in previous drillholes within the massive sulphide and within adjacent quartz-veined and brecciated sediments containing significant disseminated and stringer sulphides, which is possibly the vent zone typical of VHMS deposits. • Mineralisation at both Iron Blow and Mount Bonnie is structurally complex and appears to be deformed by the regional deformation events.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• No drilling was carried out as part of the survey.
Data aggregation methods	• *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.* • *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.*	• No drilling was carried out as part of the survey.
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').*	• No drilling was carried out as part of the survey.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being*	• Refer to body of this announcement, see Figures 1-3.

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All matters of importance have been included.
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.*	• All relevant information has been included, no significant exploration data has been omitted.
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.*	• RC drilling (if appropriate) is proposed to test the geophysical anomalies for economic base metals and gold mineralisation • Further drilling and/or exploration work at the will be dependent on the results of the initial drill testing.