

### THREE EM CONDUCTORS MODELLED BELOW NEW COPPER ZONES AT COLLERINA

- Off-hole conductors modelled from down-hole EM (DHEM) surveys have been identified below new oxide copper zones<sup>1</sup> at the Collerina Copper Deposit.
- The modelled EM plates are located sub-parallel and south of the Central Zone copper mineralisation.
- This geophysical modelling supports the potential for sulphide accumulation down plunge of the new oxide copper zones.
- Planning is underway for a follow-up deep drilling program, targeting potential sulphide accumulation associated with the modelled EM Conductor positions and additional primary sulphide copper targets located in other local geological controls. Drilling is expected to be undertaken this quarter.

Helix Resources Limited (ASX:HLX) (Helix or the Company) is pleased to advise that data from recent DHEM surveys undertaken at the Collerina Copper Deposit has now been processed and modelled. The DHEM surveys were conducted in six holes from the recent shallow RC drilling program which successfully identified four new near surface mineralised oxide zones. The surveys were completed to test for conductive bodies lying below these new copper zones.

Three off-hole EM conductors have been modelled under the new zones of oxide copper and are located, where expected, in plunge planes sub-parallel and south of the Central Zone copper mineralisation (refer Figure 1).

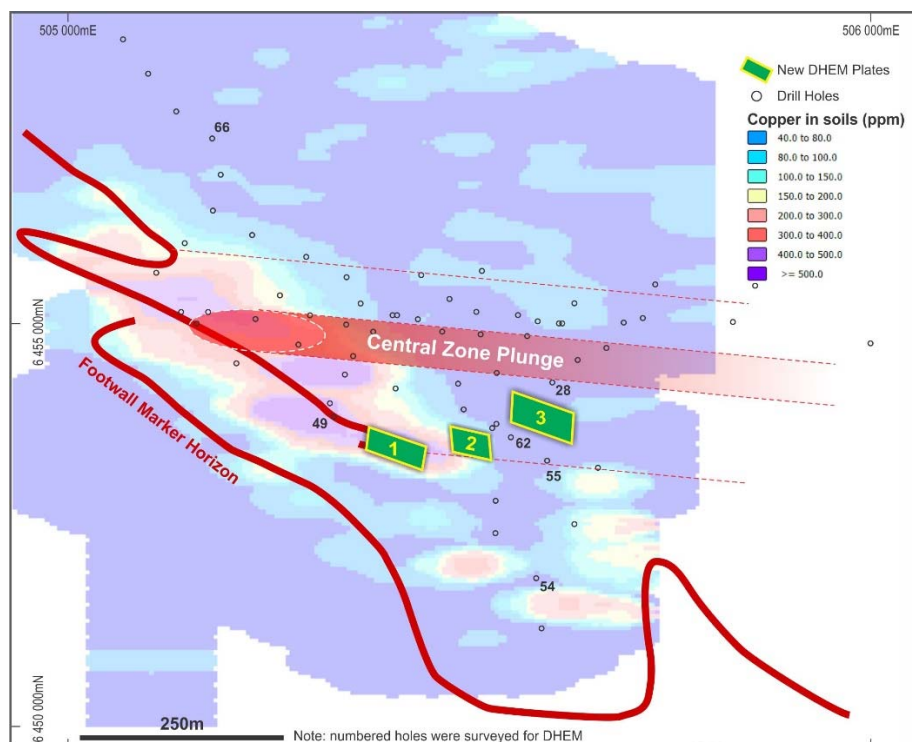


Figure 1: Schematic plan view of the Collerina Copper Deposit showing the approximate projection to surface of modelled EM plates in new target zones south of the Central Zone mineralisation.

The new zones have similar geological characteristics as the Central Zone mineralisation where primary copper sulphides are located down plunge of its near surface depleted copper oxide zone. The primary mineralised copper position in the Central Zone was targeted in 2015 following the identification of a conductive body via a surface moving loop EM (MLEM) survey.

The new mineralised zones are open down plunge and an initial drill test is planned in a follow-up drilling program. The planned drill program is also intended to provide platforms for further DHEM surveys.

**Significance**

The presence of EM conductors associated with the new copper oxide zones, in separate sub-parallel positions to the Central Zone, now shows a strong correlation to the broader area of the surface geochemical footprint at the Collerina Copper Deposit.

Critically, the modelled EM plates in the new zones are all open down dip and plunge, and provide scope for the possible expansion of the scale of the overall copper system at Collerina, as illustrated in the schematic long section (refer Figure 2) and are of relatively similar conductance as EM conductor(s) located down plunge from the mineralised Central Zone.

**DHEM Surveys and Modelling**

The DHEM surveys were conducted in six selected holes drilled in the recent shallow RC drilling program. The surveys were targeting transitional copper enrichment and primary sulphides in plunge planes associated with the newly identified oxide copper zones. Modelling of all of the Company’s geophysical data (including data from the recent DHEM surveys) has resulted in the identification of three interpreted conductive plates (refer to Figure 2).

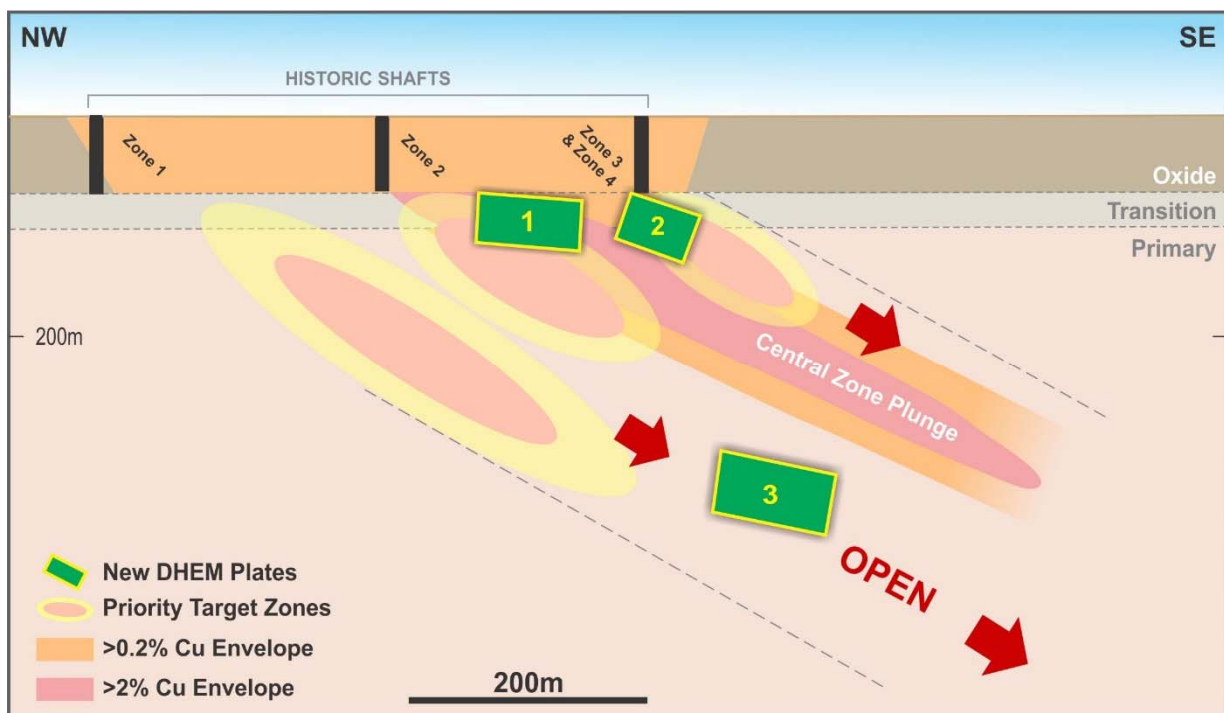


Figure 2: Schematic Long-section showing the 3 modelled EM plates and target zones for drilling south of, and below, the Central Zone mineralisation at the Collerina Copper Project.

EM Plate 1: Derived from a DHEM survey in CORC049<sup>1</sup>, the off-hole EM conductor has modelled below and down plunge of Zones 3 and 4 where surface geochemistry peaks at 1720ppm Cu. The plate has a conductance of 135 Siemens and dips at approximately 50 degrees NE (similar to the dip of the Central Zone copper mineralisation).

EM Plate 2: Derived from a DHEM survey in CORC062<sup>1</sup>, the off-hole EM conductor has modelled along strike and down plunge of Zone 2 where surface geochemistry peaks at 2610ppm Cu. The plate models in front of CORC060<sup>1</sup>, a hole which was abandoned in an historic stope at 47m after losing sample return. The plate has a conductance of 150 Siemens and also dips at 50 degrees to the northeast.

EM Plate 3: Is a re-modelled off-hole conductor initially identified from a historic hole drilled by the Company (CORC031), and was derived from a re-survey of CORC028 and the survey of CORC055. The new DHEM surveys used a different loop configuration designed to test the area south of the Central Zone mineralisation. The EM plate position is open up-plunge and may run under the Collerina Central Zone back to Zone 1. This opens up a large target area below the Central Zone mineralisation, which is completely untested by drilling (refer Figure 2).

The EM survey equipment used for this recent DHEM program was a regular powered (35-40 amps) system suitable for shallow holes and can identify conductors up to approximately 50m from the survey hole. In future DHEM surveys we expect to be able to utilise a high-powered system in the deeper holes that can identify conductors at depth and up to approximately 100m from the survey hole.

### **Next Steps**

A follow up drilling program is being planned targeting the down plunge/dip planes of the EM conductors in the new copper zones. Deeper drilling will also target possible copper mineralisation in other local geological controls. The holes from this planned program are likely to be used as platforms for further high-powered DHEM surveys in order to assist Helix in targeting future drilling. Drilling is expected to be undertaken this quarter.

- ENDS -

### **For further information:**

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### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr M Wilson who is a full time employee of Helix Resources Limited and a Member of The Australasian Institute of Mining and Metallurgy. Mr M Wilson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr M Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Details of the assumptions underlying any Resource estimations are contained in previous ASX releases or at [www.helix.net.au](http://www.helix.net.au)

<sup>1</sup> For full details of exploration results refer to ASX announcements dated 13 July 2017.

<sup>2</sup> For full details of exploration results refer to ASX announcements dated 1 April 2015, 10 November 2015, 18 February 2016, 24 May 2016, 29 June 2016 2 November 2016, 1 December 2016. Helix Resources is not aware of any new information or data that materially affects the information in these announcements.

### Collerina Copper Project Background

The Collerina Copper Project is located in Central NSW, within a 150km long prospective copper belt between Aeris Resources’ Tritton Operations to the north and Mincor Resources’ Tottenham deposits approximately 30km to the south (refer Figure 3).

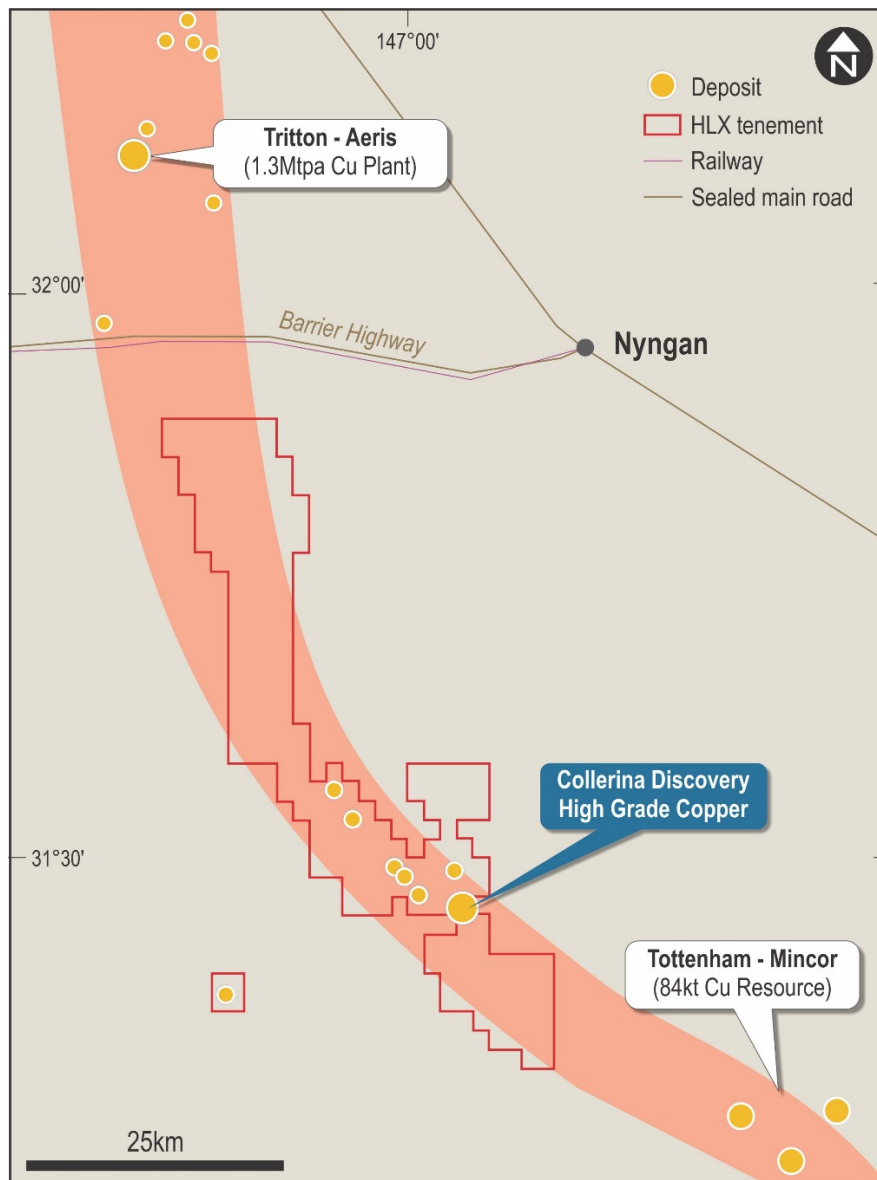


Figure 3: Regional location map – the Collerina Project sits within a 150km long copper prospective belt.

The Collerina Copper Deposit is on EL6336. Helix secured the precious and base metal rights in 2014 under a split commodity agreement with the owners Augur minerals Limited (now Collerina Cobalt Limited), who retain certain nickel laterite rights over weathered ultramafic sills geologically and geographically separate from the Collerina Copper Deposit and other regional copper prospects.

Helix controls approximately 80km of this highly prospective belt. Within the Collerina Deposit tenement, there are several historic copper and gold workings along a 25km portion of the belt. These regional prospects remain largely unexplored (refer Figure 4).

### Collerina Copper Deposit

The most advanced prospect at Collerina is the Collerina Copper Deposit. The Collerina Copper Deposit is defined by an open-ended large copper-gold soil anomaly. At surface, the central portion of the mineralised zone hosts one of three known historic shafts. The shaft is located in the hanging wall of a semi-exposed gossan. The overall system trends in a north-westerly direction.

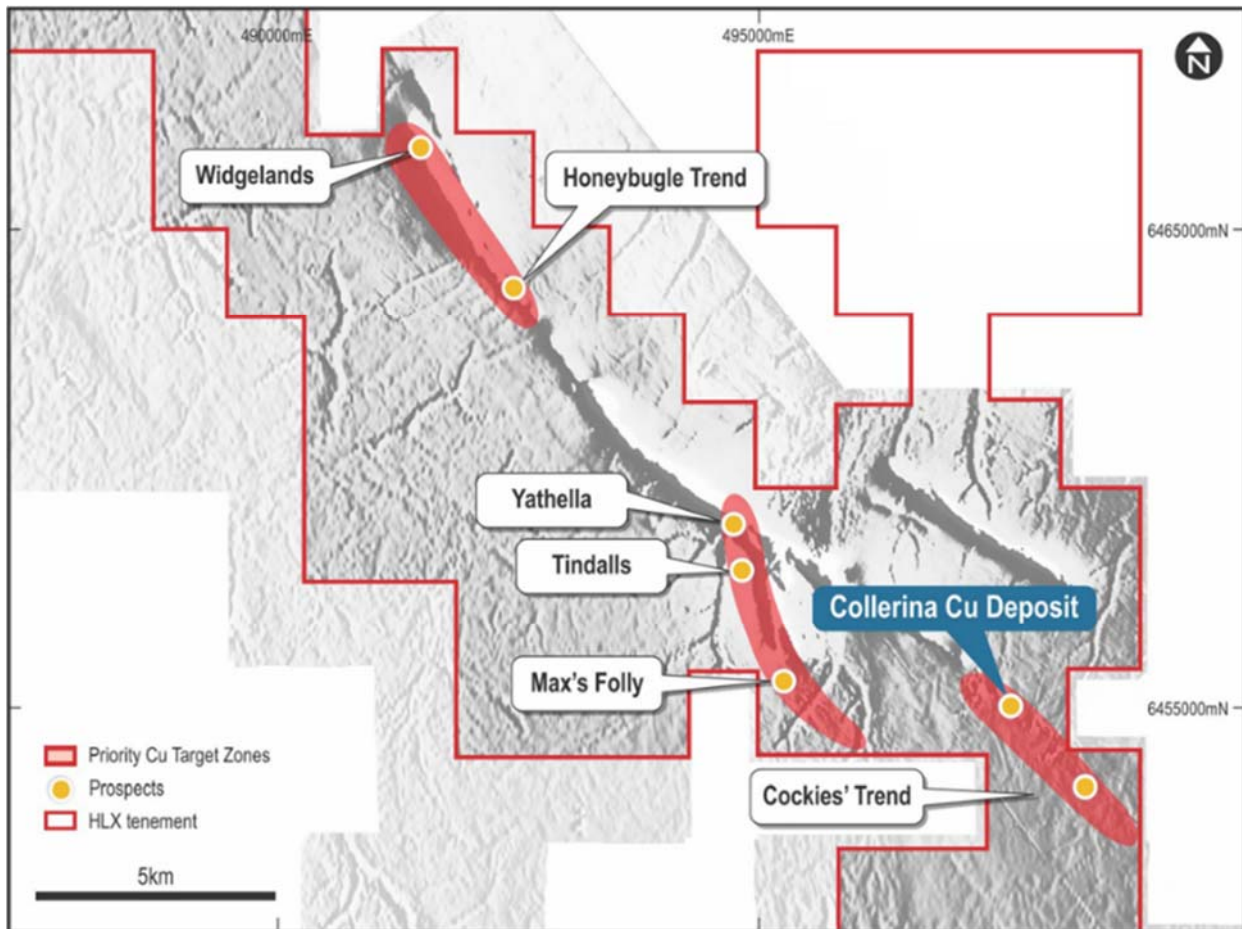


Figure 4: Location Plan showing the Collerina Deposit and regional prospects which remain largely unexplored.

Earlier drilling of the Collerina Deposit by Helix focussed on targeting the down plunge extent of the Central Zone mineralisation. Central Zone mineralisation has been identified along approximately 150m of strike at surface and is characterised by broad zones of low-grade copper in oxides to approximately 60m below surface. Higher grade mixed oxides, chalcocite and patches of native copper are present in previous drilling results in the transition zone (approximately 60-80m from surface). In fresh rock (approximately 80m below surface), high-grade copper sulphide mineralisation has been intersected and is dominated by chalcopyrite, chalcocite and massive pyrite, with coincident sphalerite (zinc sulphide).

Previous drilling highlighted the remarkable local plunge continuity of the Central Zone mineralised system, commencing from the semi-exposed gossan at surface. In particular, a zone of massive sulphides bearing high grade copper mineralisation was defined over a plunge extent of in excess of 500m. Individual peak values in 1m samples were up to 12% Cu, 1.5g/t Au and 4.6% Zn<sup>2</sup>.



Subsequent drilling by Helix in late 2016 targeted further depth extensions of the Central Zone plunge in an east, north-easterly direction. Intersected mineralisation transitioned from a massive/semi-massive copper zone with coincident zinc to a stringer copper-only style of mineralisation within the plunge plane. Closer to surface, RC drilling continued to show evidence for strike extensions beyond the Central Zone, however it was not clear how local folding and faulting was influencing the copper lenses and their distribution.

Earlier this year Helix commissioned an independent geological consultant to undertake a detailed structural review of the Collierina Deposit and surrounding region. This review concluded that locally the system had been kink folded and reverse faulted resulting in extensions of the Central Zone being variably offset. These extensions were interpreted to most likely be present nearby and located south, southeast and northwest of the positions in the system that had been targeted by drilling to that point.

This interpretation formed the basis of the geological model that was tested with the recent shallow RC drilling program. The commencement of this program was announced to the ASX by Helix on 15 May 2017 (*"Drilling underway at Collierina Copper Project"*) and the associated drill results announced on 13 July 2017 (*"Shallow Drilling Identifies New Copper Zones at Collierina"*).

**JORC Code – Table 1**  
**Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A Contractor was secured to complete the survey. DHEM was undertaken in selected holes from the recent slim-line RC drilling program. A 250m x 250m transmitter loop was used to transmit a current of 35-40 amps. A B-field down hole probe was used to measure the EM response with survey stations every 10m and anomalies of interest were infilled to 5m stations.</li> <li>• A Terra-TEM data collection system was used with information transmitted to the Companies Geophysical Consultant (SGC) for QA/QC and data processing and modelling.</li> <li>• Maxwell modelling software was used to model the EM data and produce best-fit plate models where conductors were present.</li> </ul>
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>
<p><i>Drill sample recovery</i></p>	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>preferential loss/gain of fine/coarse material.</i>	
Logging	<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>• No Drilling completed in this phase</li> </ul>
Sub-sampling techniques and sample preparation	<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>• No Drilling completed in this phase</li> </ul>
Quality of assay data and laboratory tests	<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 (eg standards, blanks, duplicates, external laboratory checks) and whether</li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p>	
Verification of sampling and assaying	<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>• No Drilling completed in this phase.</li> </ul>
Location of data points	<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 drill collar positions were picked-up using GPS and cased with PVC for surveying.</li> <li>• Grid system is GDA94 Zone 55.</li> <li>• Surface RL data collected using GPS. Topography around the drilled area is a slight slope grading from Grid North-East to drainage west of the main drilled area. Variation in topography is less than 5m across the drilled area.</li> </ul>
Data spacing and distribution	<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>• The DHEM surveys at the Collerina Deposit was targeting conductors in new zones where shallow drilling had identified oxide copper</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Chain of Custody of data is managed by the Company's geophysical field contractor and geophysical</li> </ul>

Criteria	JORC Code explanation	Commentary
		consultants. The data is transferred daily and QA/QC'd by a qualified geophysicist.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>An internal peer review of the DHEM interpretations are carried out internally within the geophysical consultancy.</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><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Collerina Deposit is located on EL6336. Helix has secured the precious and base metal rights under a split commodity agreement with the owners Augur minerals Limited (Now trading as Collerina Cobalt). The tenement is in good standing, with a renewal due in October 2018. There are no known impediments to operating in this area.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Previous modern exploration at Collerina was limited to 3 holes drilled by CRA in the 1980's. All three holes intersected copper mineralisation. Historic shafts and pits are present in the area, which date back to small scale mining activities in the early 1900's.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The prospect is considered to be a hybrid VMS style system similar to the Tritton style systems in the region.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i></li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this</i></li> </ul>	<ul style="list-style-type: none"> <li>No Drilling completed in this phase</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>
<p><i>Diagrams</i></p>	<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>• Refer to Figures 1 and 2</li> </ul>
<p><i>Balanced reporting</i></p>	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• No Drilling completed in this phase</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<p><i>Results.</i></p> <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; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Previously reported activities Refer to ASX announcements on <a href="http://www.helix.net.au">www.helix.net.au</a> for details</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg 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>Additional deeper drilling and geophysics will be undertaken to further assess the potential of the Collerina Copper Deposit and overall Collerina Project.</li> </ul>