

**Corporate Details****Ordinary Shares**  
424.47m**Market Cap**  
8.1m**ASX Code**  
HLX**Board of Directors****Mr Peter Lester**  
*Non-Executive Chairman***Mr Michael Wilson**  
*Managing Director***Mr Timothy Kennedy**  
*Non-Executive Director***Mr Jason Macdonald**  
*Non-Executive Director***Contact**78 Churchill Avenue  
Subiaco, WA 6008**T:** +61 8 9321 2644**F:** +61 8 9321 3909**E:** [helix@helix.net.au](mailto:helix@helix.net.au)**W:** [www.helix.net.au](http://www.helix.net.au)**MORE COPPER ANOMALIES IDENTIFIED ALONG COLLERINA  
COPPER TREND – NSW****Highlights**

- ❑ **Regional auger sampling has outlined four brand new copper targets, along the Collerina Trend**
- ❑ **Initial portable XRF (pXRF) readings\* form coherent copper-in-soil anomalies at each prospect.**
- ❑ **These copper anomalies are coincident with geological/structural targets and supported by geophysics(magnetics and airborne EM) including:**
  - **At Collerina South, copper-in-soil anomalism coincides with intense folding in the SE extension of the Collerina Deposit host rocks;**
  - **At Widgelands NE, a copper anomaly has been identified where the Collerina Trend splits into the regionally extensive host trends containing both the Tritton Mine and Kurrajong Deposit**
  - **At Tindalls, a 1km long copper-in-soil anomaly coincides with untested copper workings and two historic mine shafts**
- ❑ **Helix is continuing its regional auger programs, and plans infill auger sampling at these new areas of interest to prioritise the targets**

**Significance**

- ❑ **Evidence for a potential copper camp (on a scale of 10's of kilometres) surrounding the Collerina Deposit:-**
  - **Consistent with the "clustering" of mineral deposits in the region**
  - **Multiple priority drill targets are emerging from internally generated prospects**
- ❑ **Ongoing auger programs continue to identify additional copper fertility on Helix's +1,000km<sup>2</sup> of copper perspective tenements**
  - **Recent base metal target identified on Rochford Project (EL8633), approximately 65km NW of Collerina and 7km SE of the Canbelego Copper Deposit.**
  - **Rochford target defined by copper anomalous ironstone sub-crops in open 1.7km x 0.7km copper-in-soil anomaly.**

*\*Note: pXRF readings are qualitative in nature, therefore the samples collected from these priority areas will go on to be tested at an analytical laboratory for accuracy.*

Helix Resources Limited (ASX:HLX) (**Helix** or **the Company**) is pleased to announce initial pXRF readings from the recently completed auger soil surface sampling program, targeting additional copper systems along the Collerina Trend.

Helix has continued to work-up regional targets along the broader Collerina Copper Trend with over 1,000 first pass auger soil samples collected using the Company's Landcruiser mounted hydraulic auger rig.

All samples collected have been initially tested with a pXRF. Samples from anomalous areas are being sent to a certified laboratory to assay for precious and base metals. This pXRF work is being utilised during the programs to prioritise areas for infill, fast-tracking targeting for follow-up drilling.

### Collerina South Prospect

Auger sampling has covered the south east extension of the host rocks of the Collerina Deposit, by approximately another 2km.

Whilst sampling to date is on a 100m x 200m grid, and much broader than the surface sampling over the Collerina Deposit, a pattern of complex folding (mimicking the complexity noted in the magnetics) appears to be emerging in the copper-in-soil anomalism at this Prospect. This pattern is very similar to the folding seen at the micro-scale in Collerina Deposit core (refer Figure 1). Thickening of sulphides o fold noses will be the priority areas to follow-up and infill at the Collerina South Prospect.

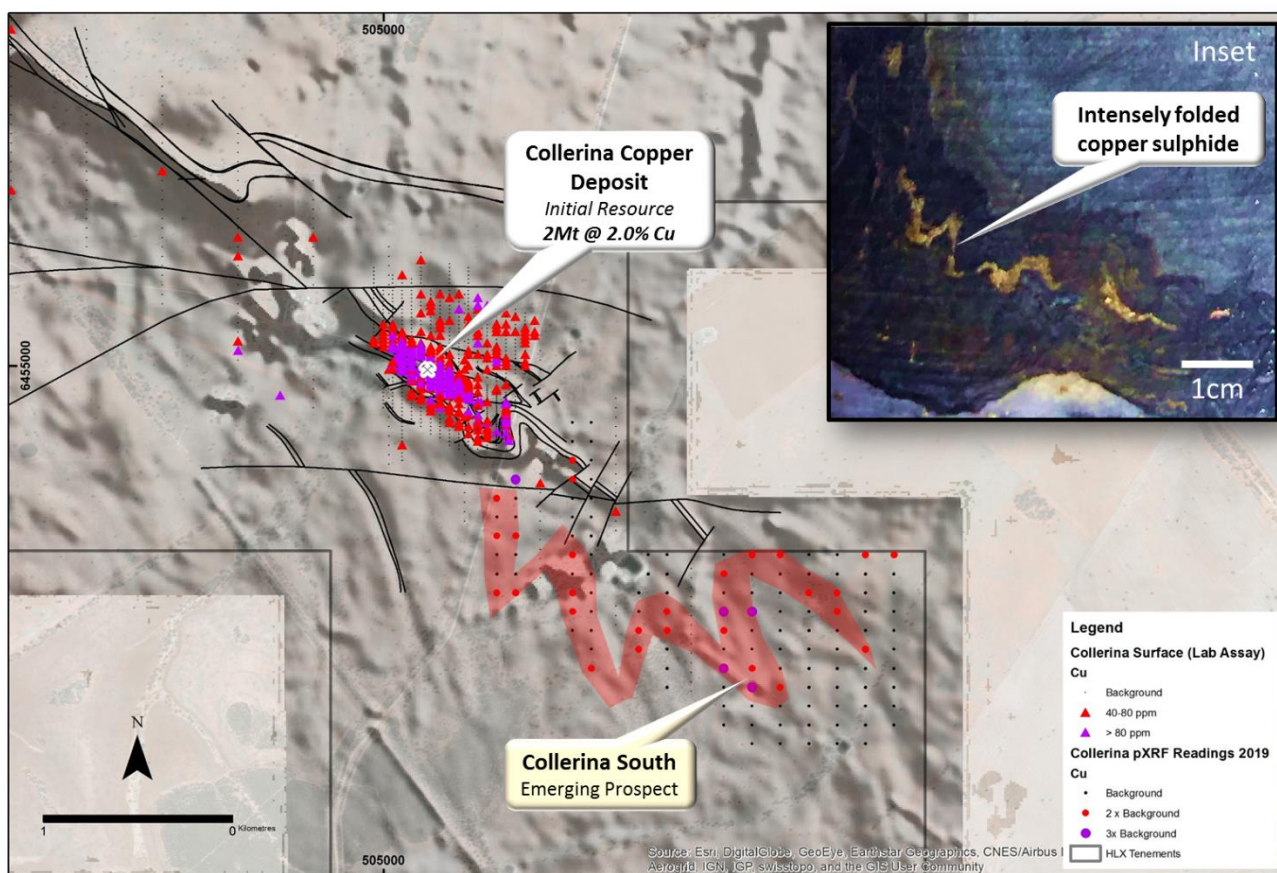


Figure 1: Collerina South Prospect: initial copper-in-soils readings mimic the complex folding noted in the magnetics. Inset: fractal representation showing intense folding of a chalcopyrite vein in drill core from the Collerina Deposit.

## Widgelands NE Prospect

First-pass auger sampling has been undertaken on a 400m x 100m grid over the northern end of the Collierina Copper trend. Helix has previously reported **surface rockchips returning up to 7.3% Cu and 0.5g/t Au** from sub-cropping ironstones in this area (*refer ASX ann 13 Feb 2018*).

The Collierina Copper Trend bifurcates here with two prospective trends present. These trends continue NNW on Helix's Quanda and Honeybugle tenements to become the Tritton Mine and Kurrajong Deposit trends in Aeris' Tritton-Girilambone mine camp.

Surface sampling across this target area identified a series of elongate copper-in-soil anomalies that coincide with geological, magnetic and subtle airborne EM trends. Infill sampling to refine anomalies is planned.

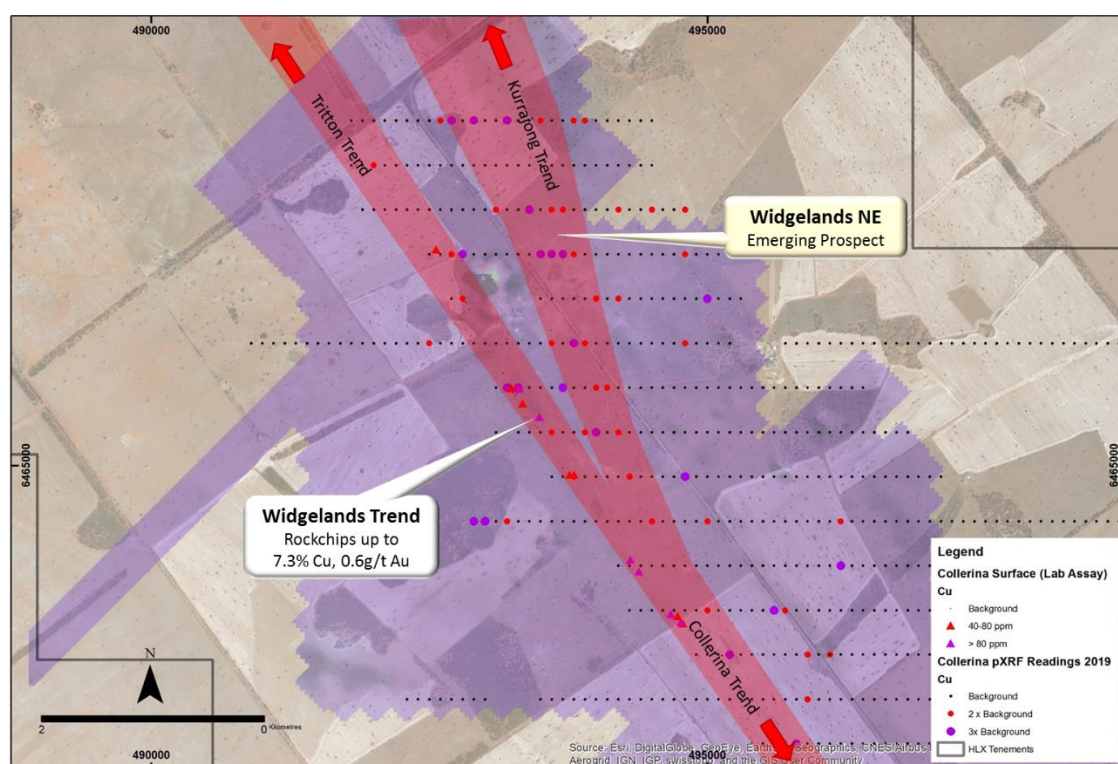


Figure 2: Recent Soil Auger in Widgelands area: copper-in soil anomalism on 400m x 100m sampling is coincident with the split of the Collierina trend into the regionally extensive Tritton and Kurrajong Trends

## Tindalls Prospect

At the Tindalls Prospect area, two historic shafts (approximately 50m deep) are located on a favourable geological and structural trend (refer Figure 3).

An Ironstone breccia similar to that seen at the Collierina Deposit has been mapped at surface along this trend. Interpretation of the local Magnetics suggests evidence for multiple deformation events across this area, a key component to developing structural thickening and copper enrichment at the Collierina Copper Deposit.

The recent auger sampling has confirmed a continuous trend of copper in soil anomalism between the Yathella Prospect to the North and Max's Folly to the south (refer Figure 4.)





Figure 3: Tindall's Prospect: Yellow arrows define positions in photos of the two +50m deep historic shafts approximately 40m apart (E-W strike). Brecciated Ironstones sub-crops along this trend (similar to Collerina Deposit) - foreground of third photo.

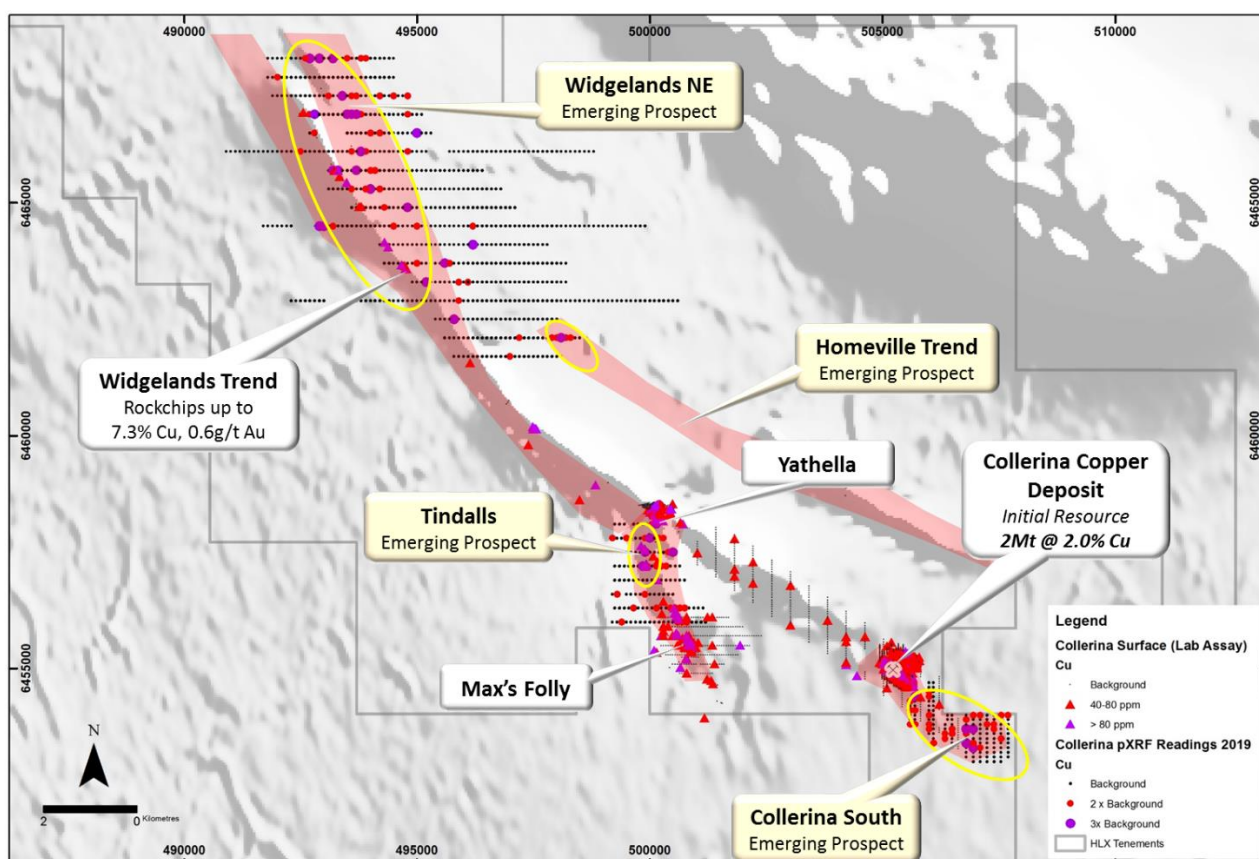


Figure 4: Recent Soil Auger on Collerina Copper Trend with copper in soil anomalies emerging from ongoing regional soil programs. New copper targets areas circled in yellow.

## Ongoing Regional Programs

Further sampling is continuing, testing areas including the **Homeville Trend**, a trend north of the Collerina Deposit and infill target areas identified from the auger programs so far.

Up to 2000 additional samples are expected to be collected during this phase. Robust copper-in-soil anomalous areas will be assessed and prioritised for initial drill testing.

This work continues to illustrate the high value potential targets that are being generated from within Helix's asset portfolio. The new prospect areas being targeted have not been subject to modern exploration.

## Rehabilitation

During the 2019 field season Helix has also systematically completed its rehabilitation commitments on its NSW tenements. Clearing rehabilitation liabilities provides flexibility and up-scaling of future drill programs on our flagship Cobar Region assets.

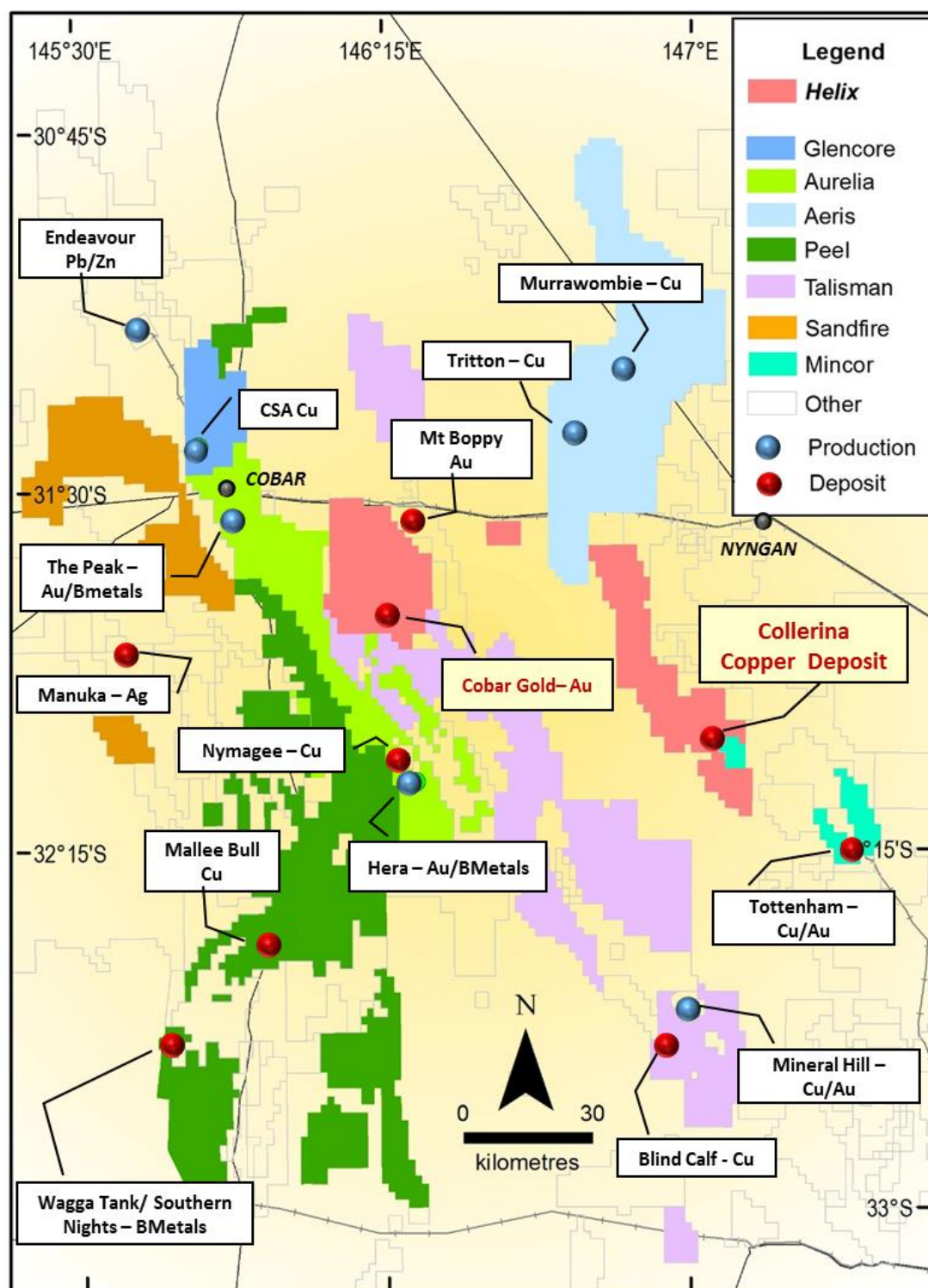


Figure 5: Location of Helix's Collierina Copper Project near mining operations in the Central West Region of NSW

- ENDS -

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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)

For full details of exploration results refer to previous ASX announcements on Helix's website. Helix Resources is not aware of any new information or data that materially effects the information in this announcement

<sup>1</sup> For full details of exploration results refer to the ASX announcements dated 4 February 2015, 29 June 2016, 1 December 2016, 3 August 2017, 8 November 2017, 14 February 2018, 27 February 2018, 5 April 2018, 14 May 2108, 13 June 2018, 18 July 2018, 16 November 2018, 10 December 2018 and 11 June 2019. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

#### **Forward-Looking Statements**

This ASX release may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Helix Resources Ltd.'s current expectations, estimates and assumptions about the industry in which Helix Resources Ltd operates, and beliefs and assumptions regarding Helix Resources Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward- looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Helix Resources Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward- looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Helix Resources Ltd does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.

No new information that is considered material is included in this document. All information relating to exploration results has been previously released to the market and is appropriately referenced in this document. JORC tables are not considered necessary to accompany this document.



## JORC Code – Table 1

### Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>The Collierina (and Rochford) auger sampling was conducted by Helix technical staff in zones considered prospective in the areas of interest. Samples are a representative sieved soil on a nominal grid pattern</li> <li>The sample locations were located by handheld GPS.</li> <li>Samples were collected in soil satchels and transported to head office for initial XRF assessment.</li> </ul>
<b>Drilling techniques</b>	<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>	No Drilling Reported
<b>Drill sample recovery</b>	<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> </ul>	No Drilling Reported

Criteria	JORC Code explanation	Commentary
	<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>	
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are representative of the collection areas.</li> <li>Logging of depth to sample, colour and moisture content noted at each location.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The preparation of the samples follow industry practice for XRF sampling, with a small charge of material placed in a CRM cup. Remaining material is retained for follow-up lab assay.</li> <li>Field QA/QC was undertaken, lab QA/QC is expected to be completed on lab samples</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled. Repeatability of check assays was good.</li> <li></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> <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 acceptable levels of accuracy (ie lack of bias) and precision</li> </ul>	<ul style="list-style-type: none"> <li>All XRF readings from Rochford were conducted at Helix's head office in a controlled environment. Using an Olympus Delta XRF seated in a desk stand. Standards are used to calibrate the unit and the the standard geochemistry mode setting is used for the readings.</li> <li></li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>have been established.</i>	
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Results have been verified by Company management.</li> <li>• This data, together with the readings data received from the XRF and subsequent location data were entered into the corporate database and verified.</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> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• The positions were picked-up using GPS.</li> <li>• Grid system is GDA94 Zone 55.</li> <li>• Surface RL data collected using GPS. Topography around the areas is a slight slope grading from Grid North-East to drainage west of the areas. Variation in topography is less than 5m across the sampled area.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Sampling was targeting various regional targets.</li> <li>• Auger soil sampling was first pass</li> <li>• Sampling involved collecting samples from the rock/soil interface in areas of interest.</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> <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>• No orientation bias is considered to affect the results tabled</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Chain of Custody is managed by the Company. The samples were freighted directly to head office with appropriate documentation listing sample numbers intervals.</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 additional QA/QC has been conducted for the sampling to date.</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 Collierina Project is on EL8768. Helix has secured the precious and base metal rights, and certain rights to lateritic cobalt and nickel rights under a split commodity agreement with the owners Augur minerals Limited (now Alpha HPA Limited). The tenements are in good standing. There are no known impediments to operating in this area.</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>Previous modern exploration on the Collierina tenement for copper was limited to Historic copper shafts and pits that are present in the area, which date back to small scale mining activities in the early 1900's. CRA completed 3 holes at Collierina prior to Helix's involvement</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>The prospects are considered to be similar to Cobar and Tritton-style mineralisation and structurally modified VMS systems, similar to the many similar copper systems in the region.</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:</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 Reported</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</li> </ul>	<ul style="list-style-type: none"> <li>Results were reported for soils collected.</li> <li>No weighting has been used however as they are XRF readings the Company prefers to list results as orders of magnitude rather than absolute</li> <li>No metal equivalent results were reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<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>The program was designed to assess the potential of the Collerina Trend to host further copper deposits.</li> <li>No Drilling Reported</li> </ul>
<b>Diagrams</b>	<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 figure 1 -4</li> </ul>
<b>Balanced reporting</b>	<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>Anomalous XRF readings are shown for Collerina, these samples will be now sent to the Laboratory for an accredited assay, whereby the results will be tabulated and released upon receipt. XRF readings should be considered a guide only. This approach to reporting the readings is deemed appropriate for an early stage greenfield program such as this.</li> </ul>
<b>Other substantive exploration data</b>	<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>
<b>Further work</b>	<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>Further mapping, surface sampling, drilling and regional geophysics is considered appropriate to further assess the potential of t regional Collerina Prospects and the Rochford Project.</li> </ul>



