

### **11.8m @ 6.6% Cu, 1.8% Zn AT COLLERINA**

- **Diamond hole 1 has returned spectacular copper grades:**
  - **11.8m @ 6.6% Cu, 1.8% Zn from 81.4m, including 3.3m @ 10.8% Cu and 5.6m @ 7.3% Cu**
- **Hole 1 peak copper value was 12.3% versus 9.3% peak copper value from the nearby RC hole**
- **The diamond program has also provided invaluable structural and lithological information**
- **Consultant Paul Payne has been engaged to assist in developing a program for advancing the project with report completion by end of February.**

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Helix Resources Limited (ASX:HLX) is pleased to advise that results from the diamond drilling program at the Collierina Copper-Zinc Prospect have been received.

Diamond hole 1 (CDD001) has returned spectacular copper grades including

**11.8m @ 6.6% Cu, 1.8% Zn, 0.9g/t Au and 22g/t Ag from 81.4m.**

Higher grade zones within the intercept include

**3.3m @ 10.8% Cu, 2.5% Zn 1.5g/t Au, and 37g/t Ag from 81.4m and**

**5.6m @ 7.3% Cu, 1.4% Zn, 1g/t Au and 24g/t Ag from 87.6m.**

The copper grades in the diamond drilling are significantly higher than the nearby RC hole (CORC002) with the comparable intercept returning 12m @ 4.3% Cu from 80m<sup>2</sup>.

The 410m diamond program in three holes has also provided invaluable structural and lithological information about the Collierina copper-zinc system.

The main zone of mineralisation appears to comprise of two zones variably separated by thin zones of country rock. A high-grade copper sulphide-rich (>5% Cu) zone (refer Photo 1) and the lower massive pyrite-rich zone (typically 1-3% Cu), refer Photo 2.

The Company is very encouraged about the results so far from Collierina and has engaged geological consultant Paul Payne to review the results and assist in determining a program to advance the Project. His report will be completed by the end of February and the Company expects to advance the Project with a combination of additional geochemical sampling, geophysics and drilling.



*Photo 1: Example copper-rich zone from 83m in CODD001 – returned 12.3% Cu, 2.5%Zn, 1.5g/t Au, 45g/t Ag*



*Photo 2: Example pyrite-rich zone from 104m in CORC001 – pyritic zone returned 1.4% Cu ( 103-104m). Blackish zone at the bottom of the photo contains chalcocite and returned 5.2% Cu from 104-105.3m.*

The remaining holes, Holes 2 and 3, were drilled at the eastern end of the drilling to date. Hole 2 was drilled east of CORC019 passing through a shear-zone before intersecting the base of the main zone of mineralisation. A 0.5m zone of copper-rich zone material was intersected on the top side of a massive sulphide zone (pyrite-rich) abutting the shear zone. The intersection returned 4.3m @ 2% Cu from 171m including the 0.5m @ 5.2% Cu relating to the copper sulphide. Hole 3 was drilled behind Hole 2 as a diamond tail on RC hole CORC018 also intersecting the shear zone at 218m.

Surface mapping of the gossan, indicates the possible offset of the eastern shear to be limited, as the gossan continues for at least a further 120m beyond the interpreted shear position.

The main zone of mineralisation is expected to continue east and down dip from the shear position where there is a continuation of the broader EM conductor. This portion of the system remains completely untested by drilling from the gossan at surface to the EM conductor at depth.

Table 1: DDH Collar details – Collierina Copper-Zinc Prospect

Project	Site_ID	Easting	Northing	Dip	Azi	Total Depth	HoleType
EL6336	CODD001	505409	6455010	-70	204	120.8m	DDH
	CODD002	505615	6455000	-70	206	198.5	DDH
	CODD003	505630	6455000	-60	212	276.8	
	(CORC018 Tail)					(198RC)	RC/DDH

Table 2: DDH Significant Results – Collierina Copper-Zinc Prospect

Hole ID	From	To		width	Cu %	Au g/t	Ag g/t	Zn %
CODD001	81.40	93.20		<b>11.8m</b>	<b>6.6</b>	0.9	22	1.8
	81.40	84.70	incl.	<b>3.3m</b>	<b>10.8</b>	1.5	37	2.5
	87.60	93.20	incl.	<b>5.6m</b>	<b>7.3</b>	1.0	24	1.4
	101.00	105.30	and	4.3m	2.5	0.4	3	0.5
	104.00	105.30	incl.	<b>1.3m</b>	<b>5.2</b>	0.8	6	0.2
CODD002	171.00	175.30		4.3m	2.0	0.2	3	0.7
	171.00	171.50	incl.	<b>0.5m</b>	<b>5.1</b>	0.2	6	0.7
CODD003	Diamond Tail CORC018			No Significant result				

*Intersections based on 1m or lithological boundary sampling, assayed using mixed acid digest technique for base metal and fire assay for gold.*

*Results are based on a 1% Cu cut-off grade and subject to rounding. Significant results(>5% Cu) are highlighted in bold.*

Copper and zinc mineralisation at the Collierina Copper-Zinc Prospect is defined by drilling over a 500m length with the high grade zone (>3% Copper) defined over a strike exceeding 250m. It remains open in all directions.





Figure 1: Photos of core from 79.4m in CODD001 illustrating copper mineralisation in massive, semi-massive and vein type mineralisation from 81.4m – 99.8m





Figure 2: Photos of core from 99.8m in CODD001 illustrating copper mineralisation in massive, semi-massive and vein type mineralisation from 99.8m-105.5m, core photo finishes at 108.5m

## ABOUT THE COLLERINA COPPER-ZINC PROSPECT

The Collerina Copper-Zinc Prospect is located within a regionally significant VMS prospective belt between the Tritton Mine to the North and Tottenham deposits to the south on the eastern edge of the Giralambone Basin in Central NSW.

The Collerina Copper-Zinc Prospect was subject to small-scale mining in the early 1900's and a three hole drilling program by CRA in the 1980's; all three holes intersected copper mineralisation. No modern exploration had been undertaken on the Prospect until Helix's involvement, commencing in mid-2014.

- ENDS -

For further information:

Mick Wilson  
Managing Director  
mick.wilson@helix.net.au  
Ph: +61 8 9321 2644

Pasquale Rombola  
Chairman  
pasquale.rombola@helix.net.au  
Ph: +61 413 239 630

### **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 10 November 2015. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

<sup>2</sup> For full details of exploration results refer to ASX announcements dated 15 December 2014, 4 February 2015, 1 April 2015. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

## 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 Prospect drilling used a commercial contractor for DDH drilling. The first hole was drilled to 120.8m The Hole was orientated to Grid SW (204-212), and was drilled at dips of between 60 to 70°.</li> <li>The drill hole location was located by handheld GPS. Down hole surveys were conducted during drilling, using an in-rod down-hole system.</li> <li>DDH drilling was used to collect core samples over the entire hole length with samples collected on 1m or geological boundaries (~3kg). The samples were sent to a commercial laboratory, pulverized to produce a representative charge with gold and base metals assayed.</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>	<ul style="list-style-type: none"> <li>DDH Drilling was the method chosen for the hole. the hole was drilled at an HQ size and will be oriented where possible</li> </ul>
<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> <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>The sample recoveries are observed during the drilling and any sample under-sized or over-sized was noted the geological logs.</li> <li>Core is checked by the geologist. Any issues are discussed with the drilling contractor.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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 core is being geologically logged.</li> <li>Logging of records lithology, alteration, degree of oxidation, fabric, colour, RQD and magnetic susceptibility, . All core intervals are stored in plastic trays, labeled with interval and hole number.</li> <li>The holes will be graphically logged in full.</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 Core follows industry practice, with half core collected on a cutting line to retain representative sampling. Samples are then prepared at the laboratory. This involves oven drying, coarse crushing (core-only), pulverization of total sample using LM5 mills until 85% passes 75 micron.</li> <li>The laboratories standard QA_QC procedures were conducted.</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled. Repeatability of assays was good.</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 have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All assays were conducted at accredited assay laboratory. The analytical technique used for base metals, a mixed acid digest with a ICP-AES &amp; MS detection. Gold via the fire assay method.</li> <li>Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials), replicates as part of in-house procedures.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures,</li> </ul>	<ul style="list-style-type: none"> <li>Results have been verified by Company management.</li> <li>Geological data was collected using handwritten log sheets which detailed geology (weathering, structure, alteration, mineralisation), sampling quality and intervals, sample numbers, QA/QC and survey</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>data verification, data storage (physical and electronic) protocols.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>data. This data, together with the assay data received from the laboratory and subsequent survey data were entered into a secure Access databases and verified.</p>
<b>Location of data points</b>	<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.</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>
<b>Data spacing and distribution</b>	<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 Drill hole was targeting a zone of mineralisation to identify geological and structural controls.</li> <li>• This was the first DDH program for the Project and therefore the amount of drilling remains insufficient to establish a JORC compliant resource.</li> <li>• Sampling involved approximate 1m interval samples collected and sent to the laboratory for assay.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>• Inclined RC drilling has been completed within the mineralised zones with good correlation observed between data sets.</li> <li>• No orientation based sampling bias has been identified in the data to date.</li> <li>• Massive sulphides including copper sulphides were intersected in the hole.</li> </ul>
<b>Sample security</b>	<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>• When sampling, Chain of Custody is managed by the Company. Samples collected onsite after cutting core. The bags are securely tied and freighted directly to the laboratory with appropriate documentation listing sample numbers and analytical methods requested.</li> </ul>
<b>Audits or reviews</b>	<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>• No additional QA/QC has been conducted for the drilling 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 Prospect is located on EL6336 (Collierina Project), which is subject to a exploration and development agreement between the tenement owner, Augur Resources Limited and Helix Resources Limited, via its 100% owned subsidiary Oxley Exploration Pty Ltd, Helix has earned 100% of the precious and Basemetal rights which are subject to a 1.5% net smelter royalty retained by Augur. 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>
<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 Prospect was limited to mapping and three 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>
<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 prospect is considered to be a base metal VMS hybrid style system consistent with the deposits and mines of the Girilambone-Tottenham district.</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>Refer to table 1 &amp; 2 in the body of the text</li> <li>No material information was excluded from the photos of core provided</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</li> </ul>	<ul style="list-style-type: none"> <li>A cut-off grade of 0.1% Cu was used</li> <li>No weighting has been used</li> <li>No metal equivalent results were reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>be 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>Hole1 were designed to drill next to CORC002 which reported 14m @ 4% Cu. Holes 2 and 3 were targeting the eastern end of the drilled zone being a hole 5m east of CORC019 and a tail on previous RC hole CORC018. Photos are shown as down hole length in CORC001, with true width not definitive at this early stage.</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>Holes were twins or tails of previous previously drilled holes.</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>Refer to Table 1 for all results exceeding 1% Cu cut-off</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 on the Collierina Prospect included a three RC drilling programs of 2643m, soil auger sampling, mapping and rockchip sampling and surface EM and DHEM Surveys. 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>A program to advance the Collierina asset is currently being prepared and is expected to consist of geochemistry, geophysics and further drilling</li> </ul>