

# ASX Announcement 8 December 2022

# New Conductive Copper Targets at Canbelego and Further Confirmation of Main Lode Depth Continuity

# HIGHLIGHTS

- Downhole Electromagnetic (DHEM) survey of second deep drill test identifies new major off-hole conductive copper targets (surveyed from CANDD016)
  - Two large conductive plates discovered adding to conductive targets already detected at depth 200 metres (m) to the south by CANDD015<sup>1</sup>
  - Highest conductive response ever measured at Canbelego of 1,500 3,000 Siemens (S). This is new and <u>is not attributable</u> to the disseminated and veins of chalcopyrite (copper sulphide) intersected within the respective drill holes
  - The conductive targets plunge north and south and remain open at depth
- Canbelego Main Lode and Western Lode positions also confirmed with copper sulphide mineralisation observed<sup>2</sup> in drill core (CANDD016) within respective shear zones which host these lode positions
- Preliminary conclusions the second drill test (CANDD016):
  - The observed copper-sulphide mineralisation indicates that the overall mineralised shear zone continues with depth – now, at least to 600m from surface
  - New, high-grade copper shoots are indicated by the high-intensity conductive plates associated with both recent deep drill holes with the intensity of the DHEM readings highly encouraging of better developed, higher-grade, copper-sulphide mineralisation than that already intersected
- Drilling of two 'daughter-holes' to test the high-grade copper targets is underway to rapidly assess these exciting emerging exploration outcomes with further news expected mid-December

**Helix Resources Limited** (ASX: HLX) ("Helix" or "the Company") is pleased to announce the discovery of further large scale, conductive targets from DHEM surveying on the second of two deep diamond drill holes completed at the Company's Canbelego Joint Venture (JV) Project located in the Cobar region of NSW.

The conductive targets are interpreted as distinct, high-grade copper shoots, not intersected by any previous drilling.

In addition to identifying further conductive anomalies, this second 'deep-drill' test, CANDD016 (following on from CANDD015 reported to the ASX on 30 November 2022), also intersected copper sulphide mineralisation at the predicted down-dip position of the lode structure.

<sup>&</sup>lt;sup>2</sup> Refer Cautionary Note on visual estimates of mineralisation on page 2



BOARD & MANAGEMENT Non-Executive Chairman Peter Lester Non-Executive Director Kyle Prendergast Managing Director Mike Rosenstreich

#### CAPITAL STRUCTURE Shares on Issue

2,323M Market Cap 16.3M Share Price \$0.007

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<sup>&</sup>lt;sup>1</sup> Refer ASX report 30 November for 'first results' reported for CANDD015.



The two, deep 'Parent' holes, were drilled to definitively test the down-plunge continuity of high-grade copper shoots identified by drilling over the past year extending up to 200m below the base of the 2010 Inferred Mineral Resource estimate<sup>3</sup> (refer **Figure 1**). The results highlighted above and described fully in the following "**Technical Report**" section, demonstrate drill holes CANDD015 and 016 which are 200m apart, have identified a series of new, large-scale, highly conductive targets. These are in an area not previously intersected by any drilling within the interpreted host shear of the Canbelego copper mineralisation. Several conductive plates were modelled from the CANDD016 survey;

- north-plunging and measuring 225m by 25m and
- south plunging plate measuring 265m by 25m

both of which extend well below the drill hole, demonstrating further depth potential. A major 400m by 70m plate was detected by the CANDD015 DHEM survey, as reported 30 November 2022.

Critically, these 'strong' off hole conductive zones <u>do not appear to be linked</u> to the disseminated and vein chalcopyrite (CuFeS<sub>2</sub>) mineralisation intersected within the respective drill holes. Furthermore, the DHEM survey in CANDD016 has recorded the highest conductive responses ever measured on the Canbelego Lode structure.

These are ongoing positive and highly significant technical outcomes which the Company is pursuing with two drill holes in progress to follow-up and test these highly conductive zones. Going well, the drilling currently in progress will intersect well developed copper sulphide zones, either thicker or higher grade, occurring as sizable shoots within the Canbelego shear zone.

Geological logging and sampling are underway for CANDD015 and 016 and assays are expected early in the new year.

## Commenting on these initial results, Helix Managing Director Mike Rosenstreich said:

"We could be on the cusp of identifying major new mineralised positions at Canbelego. The scale and intensity of the conductive models indicates 'high-grade copper shoots'. It is worth noting that in May last year we hit 18 metres at 3.4% copper – the highest tenor intercept ever on the Main Lode. This interval had a conductance level of ~400-600S, so 'conductance wise' the off-hole source detected from CANDD016 at ~1,500 to 3,000S, is the highest conductance noted to date at Canbelego.

Reports on 'conductivity and visual copper estimates' are very technical and not definitive like a straight-out assay interval – but they are an essential and very exciting part of the discovery process. We know 'Cobar copper systems' go deep; we have proven the depth potential, but we now need to demonstrate the high grades that they are also renowned for. These technical results are very encouraging for finding higher grades than those intersected to date.

The modelling suggests the Company is zeroing in on something significant and fortunately, there are two rigs drilling daughter holes specifically targeting these conductive targets. We potentially have some very exciting short-terms news flow coming up as we further assess these targets and I look forward to providing investors further updates."

## Cautionary Note – Visual Estimates of Mineralisation

References in this announcement to visual results are from NQ diamond drill core. Fresh sulphide mineralisation in CANDD016 consisted of chalcopyrite in stringers and veins, clots with quartz veins and semi-massive chalcopyrite and pyrite in quartz breccia. Visual estimates of percentages are based on logged visual observations of the drill core surface as presented in the core trays and may not be representative of the entire sample interval. Laboratory assays are required for representative estimates of copper and other metal content abundance. Mineralised sections will be cut, and half-core sampled the for assays. Assay results for CANDD016 are expected in January 2023.

<sup>&</sup>lt;sup>3</sup> Refer Appendix A for further details.

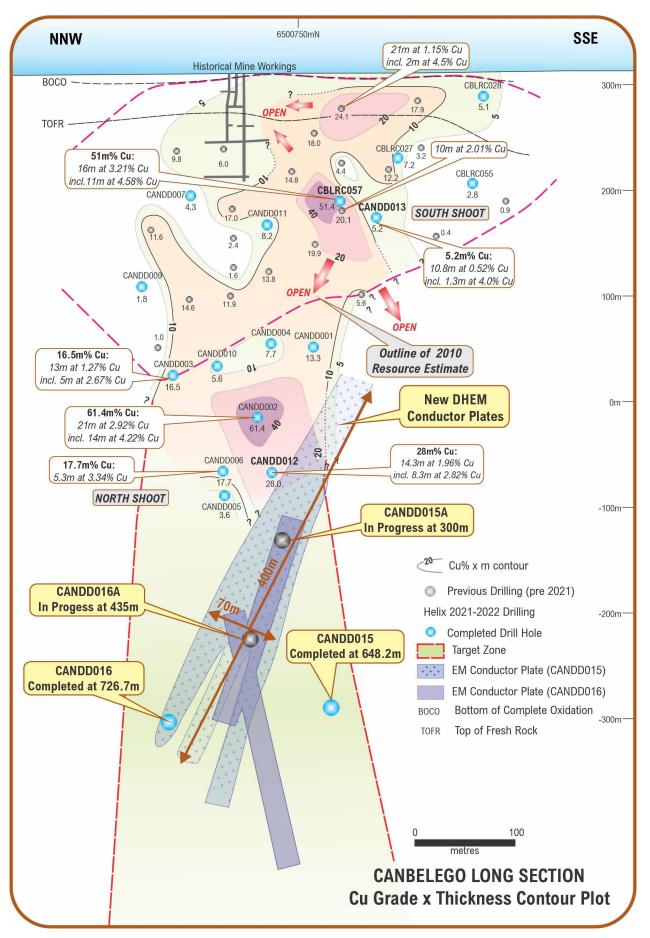


Figure 1: Canbelego Main Lode Long Section – grade-thickness contour plot (all widths reported are downhole)



### **TECHNICAL REPORT – CANBELEGO DRILLING**

The following section provides an update of the drilling at the Canbelego Main Lode, in particular observed copper mineralisation at the predicted target zone and details of a major conductive anomaly detected by downhole electromagnetic (DHEM) surveys in drill holes CANDD015 and CANDD016.

#### Introduction

The Canbelego Copper Project lies along the regional scale Rochford Copper Trend. The Project falls within the 70:30 'contributing' joint venture (JV) with Aeris Resources Ltd (ASX: AIS) (Helix 70% and Manager, Aeris 30%).

The Rochford Trend has the potential to host 'Cobar-style' copper deposits analogous to the large-scale, highgrade mineralisation found at the nearby CSA Copper Mine, owned by Glencore and under offer from Metals Acquisition Corp (NYSE: MTAL.U).

In 2021, the JV drilled five diamond drillholes for nearly 2,000 metres around and beneath the Canbelego Mineral Resource<sup>2</sup> at Main Lode, after an 8-year exploration hiatus. Positive results led to further RC and diamond drilling highlighting high-grade shoot extensions on the Canbelego 'Main Lode' and identifying new, multiple, parallel lode positions, the 'Western Lodes' to the west of the Main Lode (refer **Figure 2 – Location Plan**).

This report provides an update on the current diamond drilling and downhole EM surveys. Two Parent diamond drill holes have been completed, which were designed to reach 660m depth to test the down-plunge extension of the high-grade copper shoots identified at the Canbelego Main Lode.

A critical design aspect of the Parent holes is that they also provide a platform for DHEM surveys, which are vital for detecting a 'near-miss' and vectoring additional drilling toward conductive targets – interpreted to be copper mineralisation. Electromagnetic surveys whether at a regional, prospect or drill hole scale are proven copper 'discovery tools' in the region. In this case the DHEM data provides a unique opportunity to test a large volume of the prospective target zone for conductive targets which could represent copper-rich shoots. Any encouraging mineralisation or DHEM targets will be followed up with the daughter holes that wedge-off the parent holes. The daughter holes will save time and money and reduce the surface ground disturbance by minimising the need for new drill sites.

The first parent hole, CANDD015 was completed to a depth of 648.2m, and the second parent hole, CANDD016 was completed at a depth of 726.7m. CANDD016 which had a planned depth of 660m was extended to ensure an adequate test of the CANDD015 conductor at depth<sup>4</sup>. CANDD016 intersected weak to strong stringer and vein chalcopyrite in the target zone between 604.5m and 628m, however the results from the CANDD016 DHEM survey suggests that this zone is a 'near miss' to a significant off-hole conductor. Geological observations and details of the DHEM interpretation are provided below.

#### **Copper Mineralisation – Observed<sup>5</sup>**

Copper mineralisation at Canbelego is hosted in sub-parallel NNW-trending shear zones. CANDD016 intersected two mineralised shear zones, interpreted to coincide with the Western Lode and Main lode positions, consistent with the previously reported observations from CANDD015:

- The upper shear zone was intersected between 362m to 371m downhole in the down dip position of the West Lodes and may be the down dip extension of the CBW1 lode intersected in previous RC drilling.
- *The lower shear zone* from 604.5m to 628m downhole corresponds to the targeted Main Lode, confirming that the mineralised structure that hosts the Main Lode continues vertically.

The shear zones consist of bucky and brecciated quartz veins with variable vein densities accompanied by intense dark green to black chlorite alteration. Weak to strong chalcopyrite mineralisation is present within the shear zones as stringers along the shear fabric or coarser clots within the quartz veins (**Table 1**).

<sup>&</sup>lt;sup>4</sup> Refer ASX report 30 November 2022

<sup>&</sup>lt;sup>5</sup> Refer Cautionary Note on visual estimates of mineralisation on page 2



Geological logging and sampling are in progress for CANDD015 and CANDD016, and assay results are expected in the new year. Mineralised intervals in CANDD016 are summarised in **Table 1** and drill hole details and status are provided in **Table 2**. Mineralised intervals in CANDD015 have been reported previously<sup>6</sup>.

## Downhole Electromagnetic (DHEM) Surveys

Extensive plunging, strong (1500-3000S) off-hole conductors were identified south of CANDD016, which have the highest conductance noted to date at Canbelego. Both north- and south-plunging conductor plates have been defined for CANDD016, which overlap the CANDD015 conductor plates reported previously (**Figure 1**). The north-plunging plate is approximately 225m long by 25m wide and the south-plunging plate is 265m long by 25m wide. Significantly, this is the first time a south-plunging conductor has been defined at the Main Lode, confirming recent, updated geological interpretation of a potential south plunge for some of the higher-grade copper grade shoots.

Additional weakly developed in-hole conductors were also identified associated with the semi-massive and stringer chalcopyrite-pyrite intervals listed in **Table 1**. The in-hole EM response is significantly less than the off-hole response and is not considered to be linked to the new off-hole conductors, which are considerably stronger and are interpreted to be associated with better developed sulphides.

## **On-Going Drilling**

Two daughter holes (CANDD015A and CANDD016A) are in progress designed to intersect the conductor plates identified by DHEM surveys in the parent holes. CANDD015A (planned depth 580m) is targeting approximately 70m below the mineralisation intersected in CANDD012 and CANDD016A (planned depth 660m) is targeting the high-conductance zone approximately 50 south of CANDD016. These holes will be completed in mid-December with logging and processing of these holes to continue into the new year.

From	То	Interval	Strength	Description			
Wester	Western Lodes Position						
362.3	363.4	1.1	Weak	trace to >1% chalcopyrite in quartz-albite veins			
363.4	364.8	1.4	Weak	1% chalcopyrite stringers and blebs in quartz breccia			
364.8	365.9	1.1	Medium	1-2% chalcopyrite in thick quartz veins, green chlorite alteration. Stringers chalcopyrite and pyrite scattered throughout.			
365.9	366.9	1	Strong	20% chalcopyrite in quartz breccia, semi-massive sulphides.			
366.9	370.5	3.6	Weak	trace sulphides in foliation			
370.5	371	0.5	Medium	1% chalcopyrite in veinlets and stringers			
Main L	ode Posit	tion					
604.5	605.2	0.7	Strong	5% Chalcopyrite blebs and stock veins in quartz veins and silicious breccia			
605.2	608.2	3	Medium	1% chalcopyrite veinlets and blebs in foliation, strong dark chlorite alteration.			
608.2	616.3	8.1	Weak	Trace Chalcopyrite disseminated and on quartz veins, moderate chlorite alteration.			
616.3	617.5	1.2	Weak	>1% Chalcopyrite in quartz veins in broader breccia and strong silicification.			
617.5	618.9	1.4	Weak	Trace Chalcopyrite disseminations in highly silicious sheared unit			
618.9	620.9	2	Weak	<1% Chalcopyrite veinlets parallel to foliation			

Table 1 – Logged N	Mineralised In	tervals in CAN	
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<sup>&</sup>lt;sup>6</sup> Refer ASX report 30 November 2022



620.9	621.7	0.8	Medium	3% Chalcopyrite blebs and veinlets and minor breccia fill in strong green chlorite alteration.
621.7	628	6.3	Weak	Trace sulphides in silicified shear breccia with weak chlorite alteration.

### Table 2: Drill Hole Details and Status

Hole ID	Hole Type	Location	Status	Northing	Easting	Dip	Azimuth	RL	Total Depth
CANDD015	DD	Main Lode	Assays pending	6500625	434120	-76	60	315.0	648.2
CANDD015A	DD	Main Lode	In progress – daughter hole	6500625	434120	-76	60	315.0	580
CANDD016	DD	Main Lode	Assays pending	6500760	434090	-78	60	312.3	726.7
CANDD016A	DD	Main Lode	In progress – daughter hole	6500760	434090	-78	60	312.3	660

Grid: MGA94 Zone 55

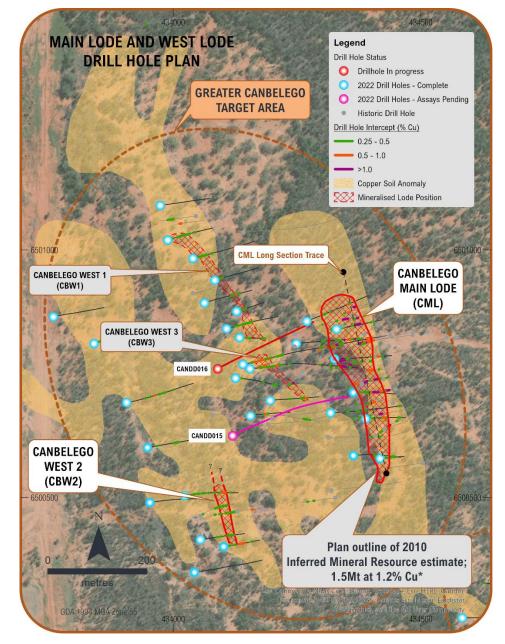


Figure 2: Location Plan – Greater Canbelego Area



#### **COMPETENT PERSON STATEMENT**

The information in this report that relates to exploration results, Mineral Resource estimates and geological data for the Cobar projects is based on information generated and compiled by Mr Gordon Barnes and Mr Mike Rosenstreich who are both employees and shareholders of the Company. Mr Barnes is a Member, of the Australian Institute of Geoscientists and Mr Rosenstreich is a Fellow of the Australasian Institute of Mining and Metallurgy. They both have sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to each qualify as Competent Person(s) as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Barnes and Mr Rosenstreich have consented to the inclusion of this information in the form and context in which it appears in this report.

#### This ASX release was authorised by the Board of Directors of Helix Resources Ltd.



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### **Board of Directors:**

Peter Lester Non-Executive Chairman Kylie Prendergast Non-Executive Director Mike Rosenstreich Managing Director

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#### **About Helix Resources**

Helix Resources is an ASX-listed resources company which is 'all-in on copper' exploration in the prolific copper producing region of Cobar, NSW. The Company possesses a sizable ground position across two tenement groups which are largely untested despite being located within ~50km of significant copper producing operations. The western tenement consists of 30km of contiguous strike and the Company is advancing a pipeline of wholly owned copper opportunities, as well as the Canbelego JV Project (70% owned and operated by Helix and 30% owned by Aeris Resources) where massive copper sulphides have been intersected. The eastern tenement group encompasses more than 150km of prospective strike and includes the 100% owned CZ copper deposit.



#### **APPENDIX 1: Canbelego Copper Deposit - Context**

The Canbelego Deposit is located 45km south-east of Cobar and 5km south of the historic Mt Boppy Mine along the Rochford Copper Trend. Historic production from the Canbelego Copper mine was reported (1920) to be ~10,000t of hand-picked ore grading 5% Cu with mining stopped at the water table at ~80 metres depth.

Canbelego is located on EL6105 which is a joint venture with local copper producer Aeris Resources (ASX: AIS). Helix holds 70% and is the Manager and AIS is a contributing, 30% partner.

Structural remobilisation is considered an important control on high-grade copper in these mineralised systems, termed Cobar-style base metal deposits. Copper mineralisation is developed as structurally controlled, sub-vertically plunging, semi-massive to massive sulphide shoots.

A mineral resource compliant with the 2004 JORC Code of 1.5Mt at 1.2% Cu (oxide, transition and fresh), 100% Inferred was reported in October 2010 as presented in Table A1. This Mineral Resource estimate is based on a total of 39 holes for 8,080 metres of RC and diamond drill core.

Other than results contained in this ASX release, Helix confirms that it is not aware of any new information or data that materially affects the Mineral Resource information included in Helix ASX release dated 7 October 2010 *Initial Copper Resources for Canbelego and Exploration Update*. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

Classification	Туре	Tonnes	Copper	Gold	Contained Copper	<b>Contained Gold</b>
		Mt	%	g/t	t	Oz
Inferred	Oxide/Transition/Fresh	1.50	1.2	N/A	18,000	N/A
Total	Combined	1.50	1.2	N/A	18,000	N/A

#### Table A1: Canbelego\* (October 2010) (0.5% Cu cut-off)

(Rounding discrepencies may occur in summary tables)

Reported as 100% of deposit

# Appendix 2: JORC Code Table 1

December 2022 – Canbelego Drilling

Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, randomchips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sounds, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanationmayberequired, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Core Drilling (DD)</li> <li>Commercial drilling contractor Mitchell Services conducted the DD drilling. The holes are orientated approximately ENE and drilled with starting dips of 60° to 78°.</li> <li>Drill hole locations are determined using a hand-held GPS. Down-hole surveys were conducted using the Reflex multi-shot gyro system.</li> <li>Diamond core is sampled in 1m intervals, taking half core at various intervals (=/&lt;1m).</li> <li>The samples were collected and supervised by Helix staff</li> <li>The samples were in the direct control of Helix staff and transported to the laboratory by Helix.</li> <li>Reverse Circulation (RC) Drilling</li> <li>Commercial drilling contractor Mitchell Services conducted the RC drilling. The holes were orientated approximately E (225°) and were drilled with starting dips of 60° or 70°</li> <li>Drill hole locations were determined using a hand-held GPS. Down-hole surveys were conducted using the Reflex multi-shot gyro system.</li> <li>Holes were sampled at 1m intervals via a cyclone cone splitter into a numbered calico bag with weights typically from 1.5kg to 3kg for the lab sample, and a large plastic bag for the remaining sample.</li> <li>The lab samples were collected and always supervised by Helix staff.</li> <li>The samples were always under the direct control of Helix staff and were transported to the laboratory by a commercial transport contractor.</li> </ul>
Drilling techniques	• Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>DD: HQ and NQ drill core was collected using triple tube and all other industry practice methods.</li> <li>RC: 5 ½ inch diameter drill bit.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <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>	<ul> <li>Core recoveries are recorded by the driller on core blocks and checked by a geologist or field technician.</li> <li>Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking and depths are checked against the depths recorded on core blocks. Rod counts are routinely undertaken by drillers as a further cross-reference for depth and core recovery.</li> <li>Samples were checked by the geologist for consistency and compared to the sample interval data for accuracy.</li> <li>RC bulk bag samples are not weighed, however recoveries are monitored and recorded by the supervising geologist.</li> <li>When poor sample recovery is encountered during drilling, the geologist and driller attempt to rectify the problem to ensure maximum sample recovery.</li> <li>Sample recoveries at Canbelego are typically good for both RC and DD, apart from when voids are intersected. The void intervals are recorded on geological logs.</li> </ul>
Logging	<ul> <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> <li>The drill core is stored in core trays on pallets and the RC chips are stored in standard RC chip trays in numbered boxes on pallets.</li> <li>The drill core and RC chips are stored at Helix's secure facility in Orange.</li> <li>The drill core and RC chips are comprehensively logged and sampled by experienced Helix geologists or consultants, including lithology, alteration, degree of oxidation, structure, colour and occurrence and type of sulphide mineralisation.</li> <li>The visual estimate of the proportion of copper sulphide is from systematic logging of diamond drill core and RC drill chips. The amount of copper sulphide and the relative proportions of the copper sulphide species from metre to metre vary and a detailed estimate of this variability is not possible within the limits of acceptable accuracy. Metal grades of the core are determined by laboratory assay. The copper sulphide typically occurs as disseminations, blebs, stringers, laminations, vein fill and semimassive sulphide. Fine copper sulphide may be under-estimated, if present. Identification of the sulphide species and visual estimates of the proportions of those sulphide species present have been made by an experienced geologist with more than 10 years' experience in copper mineralisation in this region.</li> <li>Diamond core and RC chips are logged to an appropriate level of detail to increase the level of geological knowledge and increase the geological understanding of the deposit.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	<ul> <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 includingfor 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> <li>Drill core is cut with a Corewise automatic core cutter, and a half core sample is taken for laboratory analysis.</li> <li>The RC drilling rig is equipped with an in-built cyclone and cone splitting system, which provided one bulk sample of approximately 20kg to 30kg and a sub-sample of 1.5-3kg per metre drilled.</li> <li>All RC samples were split using the system described above to maximise and maintain consistent representivity. The majority of samples were dry.</li> <li>Bulk samples were placed in green plastic bags, with the sub-samples collected placed in calico sample bags.</li> <li>Field duplicates were collected by spear from green plastic bags. These duplicates were designed for laboratory checks.</li> <li>Certified Reference Material (CRM) standards and blanks are inserted into the sample stream at approximately 1:35.</li> <li>Laboratory duplicate samples are split with a riffle splitter.</li> <li>A 1.5kg to 3kg RC sample was collected from 1m intervals and is considered appropriate and representative for the grain size and style of mineralisation.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>ALS Laboratory Services were used for Au and multi-element analysis work carried on out on 1m split RC samples and half core DD samples. The laboratory techniques below are for all samples submitted to ALS and are considered appropriate for the style of mineralisation at Canbelego:         <ul> <li>Crush and pulverize sample.</li> <li>Au-AA25 Ore Grade Au 30g FA AA Finish (only on selected samples)</li> <li>ME-ICP61 48 element 4 acid digest ICP-AES.</li> <li>OG62 Ore Grade finish for non-Au over range samples.</li> </ul> </li> <li>The QA/QC data includes standards, duplicates and laboratory checks.</li> <li>Duplicates for percussion drilling are collected from the one metre sample bag using a spear.</li> <li>QA/QC tests are conducted by the laboratory on each batch of samples with CRM standards.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <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> <li>Assays results are validated by standard database procedures and are verified by Helix management.</li> <li>Assay data are not adjusted.</li> <li>Geological data is logged into laptop using OCRIS mobile software. This software includes validation procedures to ensure data integrity.</li> <li>Logged data includes detailed geology (weathering, structure, alteration, mineralisation), sample quality, sample interval and sample number.</li> <li>QA/QC inserts (standards, duplicates, blanks) are added to the sample stream.</li> <li>Magnetic susceptibility data is collected using a datalogger.</li> <li>All logged data, the assay data received from the laboratory, and survey data is loaded into a secure database and verified.</li> </ul>
Location of data points	<ul> <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 Resourceestimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The drill collar positions were determined using a GPS (±5m).</li> <li>Grid system is MGA94 Zone 55.</li> <li>Surface RL data collected using GPS and verified by public Digital Elevation Models.</li> <li>Relief with the drilling zone ranges from 0m to 15m.</li> </ul>
Data spacing and distribution	<ul> <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> <li>Drilling has been conducted by Helix, Aeris (Straits) and historic drilling by companies in the 1970's.</li> <li>The drilling had been conducted in a manner consistent with the procedures set out in this JORC table.</li> <li>Assays used in the current resource were generated by Straits or Helix and include some re-sampling of the historic core.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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> <li>Surface sampling, the position of the drill holes and the sampling techniques and intervals are considered appropriate for the early-phase exploration of a system such as that identified at Canbelego.</li> <li>The distribution of copper is known to be variably enriched and depleted within the structurally controlled, sub vertical copper deposit at Canbelego.</li> <li>Drilling is designed to intersect mineralisation as close to perpendicular as possible.</li> <li>Drill hole deviation will influence true width estimates of mineralisation. True width of mineralisation will be further assessed with detailed logging of orientated structural data and when the resource model is updated.</li> <li>Drill hole intersections of mineralisation are not considered to be biased.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Chain of Custody is managed by Helix staff and its contractors. The samples were freighted directly to the laboratory, or transported directly by Helix staff, with</li> </ul>

C	Criteria	JORC Code explanation	Commentary
			appropriate documentation listing sample numbers, sample batches, and required analytical methods and element determinations.
	ludits or eviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No additional audits or reviews have 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
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overridingroyalties, 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> <li>The Canbelego JV Project is located on EL6105 approximately 10km SSW of the Canbelego township. Helix has earned a 70% interest in the project and is Manager of the JV, with JV Partner Aeris retaining 30% and contributing.</li> <li>The tenement is in good standing.</li> <li>This is no statutory, minimum annual expenditure. Rather a program-based exploration commitment is applicable.</li> <li>There are no known impediments to operating in this area.</li> <li>The drill area is situated in a grazing paddock and can be accessed all year round.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous drilling, soil sampling and early geophysics was conducted by Straits (Aeris) and companies during the 1970's.</li> <li>Several small historic mines and workings are present throughout the tenement.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The project is prospective for structurally controlled copper.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>Refer to tables included with this report.</li> <li>The zones west of the Canbelego Main Lode have not been subject to previous drilling and represent new mineralised positions parallel to the Canbelego Main Lode.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul> <li>Assays included in intercept calculations are weighted by interval width</li> <li>Mineralised intercepts for Cu are averaged within a contiguous interval above a specified Cu cut-off grade with a maximum of 2m of internal dilution.</li> <li>Cu intercepts were calculated for Cu cut-off grades of 0.1% Cu, 0.5% Cu and 1% Cu.</li> <li>No assay cut of high-grade material has been applied.</li> <li>No metal equivalent values have been calculated.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Drilling is designed to intersect mineralisation as close to perpendicular as possible.</li> <li>Drill hole deviation will influence true width estimates of mineralisation.</li> <li>The true width of mineralisation will be further assessed on analysis of orientated structural data and when the resource model is updated.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	Refer to Figures in this announcement.
Balanced reporting	<ul> <li>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.</li> </ul>	• The reporting is balanced, and all material information has been disclosed.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further DD and RC drilling, assaying and EM surveys will be undertaken. An update of the resource to JORC2012 standard is planned. Regional auger soil sampling is also planned.</li> </ul>