

## ASX Announcement 10 October 2022

# High-Grade Copper Assays Support Bold Drilling at Canbelego

### HIGHLIGHTS

- **'South Shoot' infill and extensions to Mineral Resource<sup>1</sup> identified:**
    - **16 metres (m) at 3.21% copper (Cu) from 117m downhole (CBLRC057)**  
**Incl. 11m at 4.58% Cu**
    - **highest-grade copper intercept in the upper 150m of the Main Lode to date - confirms potential for high-grade copper mineralisation at shallower depths and remains open at depth and to the south**
    - **10.8m at 0.52% Cu from 153m downhole (CANDD013)**  
**Incl. 1.3m at 4.0% Cu**
    - **Likely edge of shoot, indicates open at depth and to the south**
  - **'North Shoot' extensions below Mineral Resource<sup>1</sup> outline identified:**
    - **14.3m at 1.96% Cu from 417m downhole (CANDD012)**  
**Incl. 8.3m at 2.82% Cu**
- (Refer Figure 1 – Canbelego Main Lode Long Section)
- **Bold, expansive diamond drilling underway at Canbelego Main Lode – testing 200m beneath currently known mineralisation to 'map' extent of copper lodes and establish downhole electromagnetic survey platform (Refer Figure 2 – Canbelego Main Lode Cross Section)**

**Commenting on the latest drill results, Helix Managing Director Mike Rosenstreich said:**

*"Last week Helix was excited to report results for extensive drill testing of early-stage copper targets and the identification of a new, emerging prospect, Caballero. This week, we are equally excited to deliver high-grade copper results from our advanced Canbelego Main Lode project which consists of wide intervals with high-grade, featuring two to nearly five percent copper assays. Results also included the highest-grade intercept to date in the upper 150 metres of the Main Lode, confirming the potential for high-grade copper mineralisation at shallower depths.*

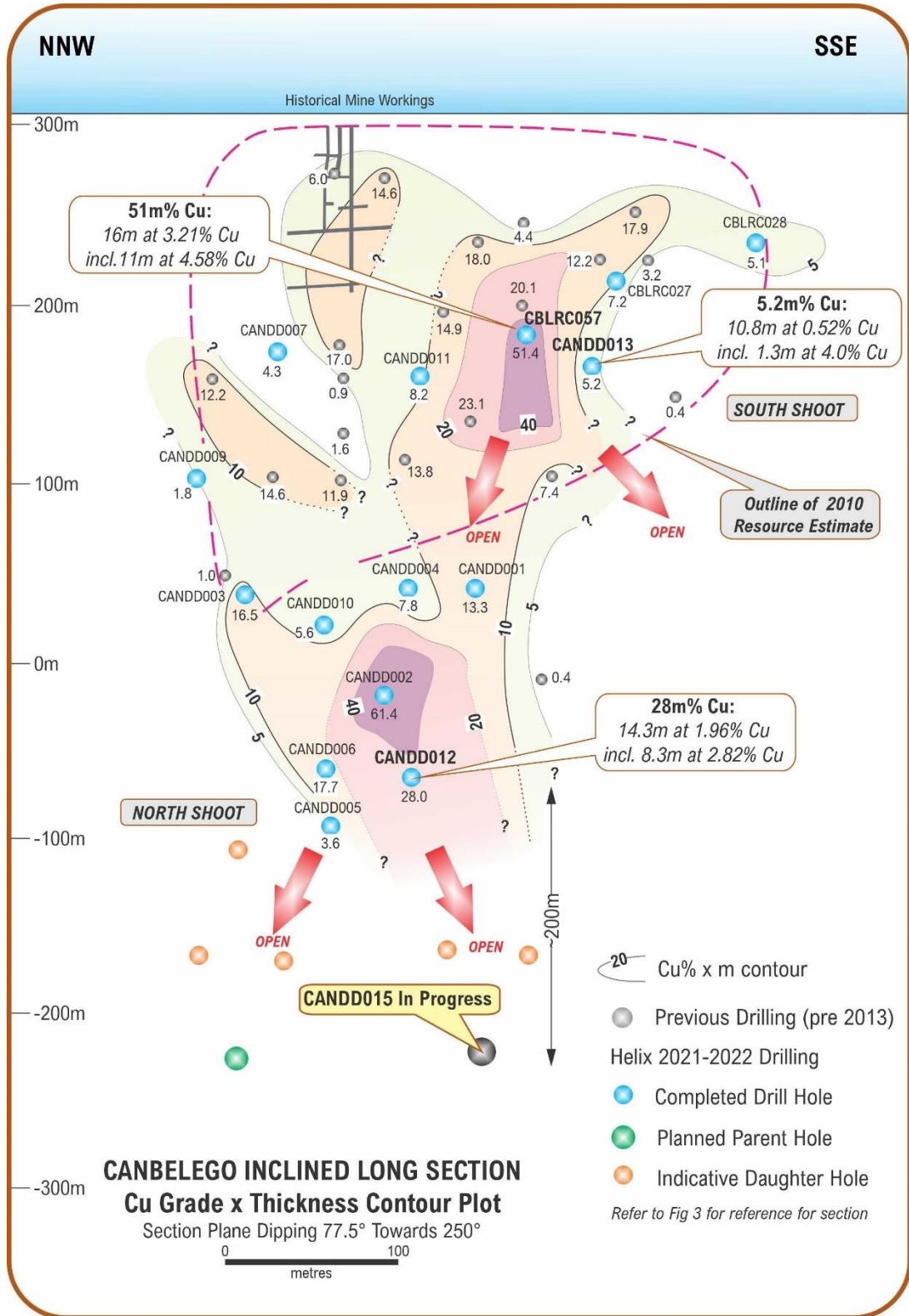
*These results are significant because they are extending known high-grade shoots and with new higher grades from infill drilling, both aspects potentially adding copper tonnes.*

*This has motivated us to drill deep and test our 'Cobar model' for major increments in copper potential by stepping out 200 metres. There is no doubt that if we are successful the results will have a major impact on how we and our stakeholders regard the scale potential at Canbelego. This drilling has just started and whilst we have some exceptionally wet weather to contend with I look forward to keeping you advised on our progress."*

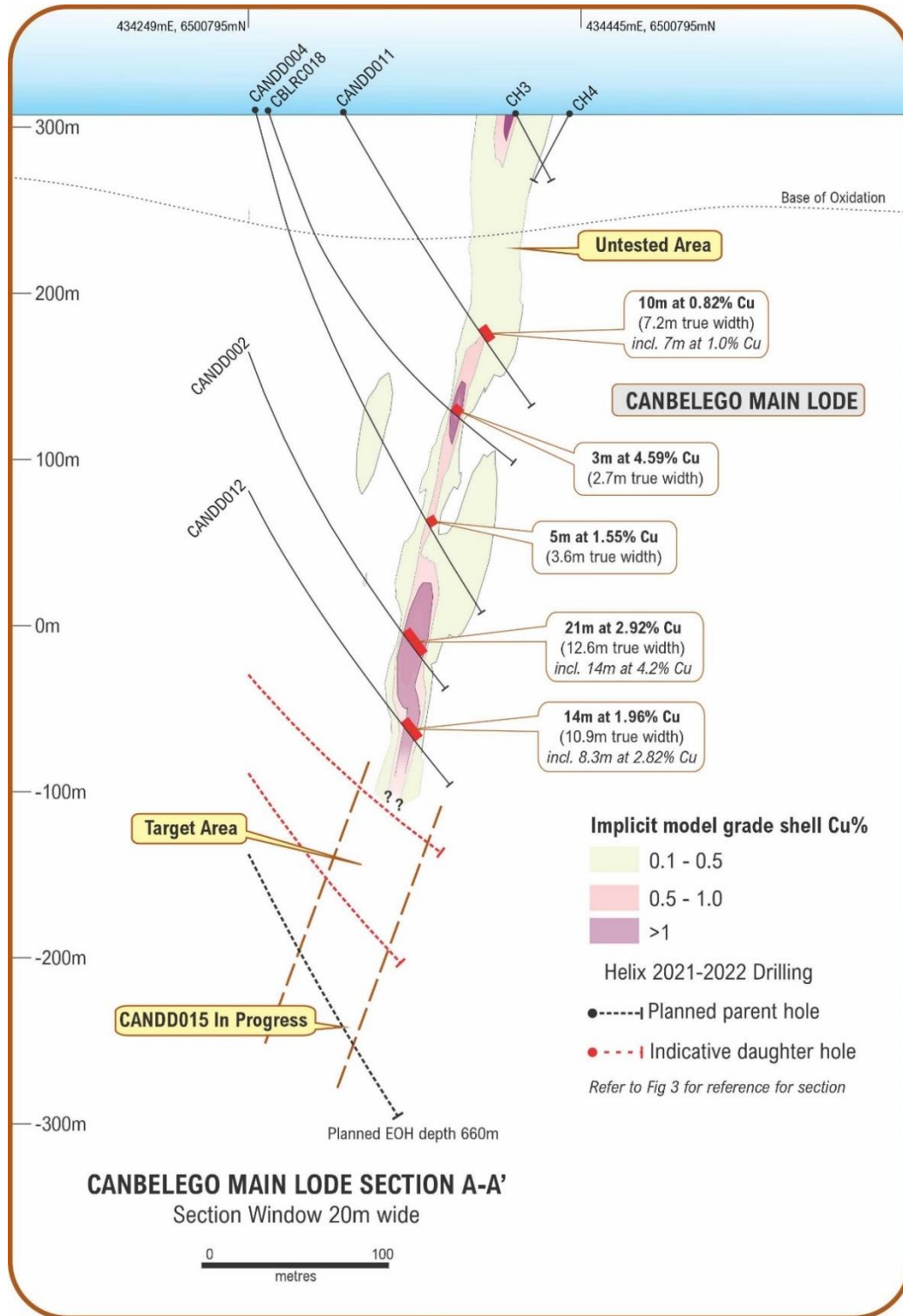
<sup>1</sup> Refer Appendix 1 for further details.



**Helix Resources Limited (ASX: HLX)** (“Helix” or “the Company”) is pleased to provide an update on the ongoing copper exploration drilling at its Canbelego Joint Venture (JV) Project located in the Cobar region of NSW. The Company has received assays for two further diamond drill holes and one RC hole within the Canbelego Main Lode project area.



**Figure 1:** Canbelego Main Lode Inclined Long Section – grade-thickness contour plot



**Figure 2: Schematic Cross Section- Canbelego Main Lode**

**TECHNICAL REPORT – CANBELEGO DRILLING**

**Introduction**

The Canbelego Copper Project lies along the regional scale Rochford Copper Trend. It is a 70:30 ‘contributing’ JV (Helix 70% and Manager, Aeris Resources Ltd (ASX: AIS) 30%).

The Rochford Trend has the potential to host ‘Cobar-style’ copper deposits analogous to the large-scale, high-grade mineralisation found at the nearby CSA Copper Mine, owned by Glencore Ltd (refer **Figure 4 – Schematic CSA Long Section**).



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. Since then, further RC and diamond drilling has been undertaken highlighting high-grade shoot extensions on the Main Lode and identifying new, parallel lode positions to the west of the Canbelego Main Lode.

A total of 3 diamond holes for 1,117.7m (CANDD012 to CANDD014) and 27 RC holes for 4,275m (CBLRC031 to CBLRC057) have been drilled in the Greater Canbelego, Shango and Caballero Target Areas since June 2022.

This report provides an update of the Main Lode assay results from diamond holes CANDD012 and CANDD013 and RC hole CBLRC057. Refer **Figure 1 – Canbelego Main Lode Long Section**, **Figure 2 – Canbelego Main Lode Cross Section** and **Figure 3 – Canbelego Drill Hole Location Plan**.

### Canbelego Main Lode Drilling Results

#### *South Shoot: Infill confirmation within resource outline<sup>2</sup> and potential extensions*

RC hole, CBLRC057 intersected a 16m zone from 32m of disseminated malachite and azurite, with chalcocite at the base of the oxide zone (all copper 'oxide' minerals), followed by several zones of chalcopyrite (copper-sulphide mineral) in the primary zone. A 34m zone from 111m consisted of disseminated, vein and semi-massive chalcopyrite in the Canbelego Main Lode position and returned the following significant intercept:

- **16m at 3.21% Cu from 117m, downhole**
- **including 11m at 4.58% Cu from 129m.**

This intercept is approximately 109m vertically from surface and is the highest-grade copper intercept in the upper 150m of the Main Lode to date, confirming potential for high-grade copper mineralisation at shallower depths. This is exemplified by a 3m interval from 120m downhole that assayed 9.54% Cu, with two contiguous samples assaying >10% Cu.

This hole was designed to test the central position of the South Shoot that was initially identified by RC hole CANRC002 drilled by Nord Pacific in 1997, which intersected 10m at 2% Cu from 145m. However, this series of 1997 drill holes were located on a 'local-grid' that was subsequently converted to AMG grid coordinates. Around 2010, when the Mineral Resource estimate<sup>2</sup> was undertaken it was found that the AMG grid conversion was incorrect, the intercept could not be accurately located and therefore the results for CANRC002 had to be excluded from the resource estimate. Helix is reviewing this data as part of its own interpretation and modelling ahead of any updated Mineral Resource estimates and drilled CBLRC057 to ensure accurate modelling of the mineralisation in this area of the South Shoot position.

Diamond core hole, CANDD013 targeted the down-plunge extension of the South Shoot and intersected a 6.3m zone of pervasive chlorite alteration and quartz veins with chalcopyrite veins from 157m, including a 40cm zone of >8% chalcopyrite within a broader **1.3m interval which assayed 4.0% Cu**. The narrow interval of semi-massive chalcopyrite within a broader copper-anomalous zone from 153m indicates that CANDD013 intersected the southern edge of the South Shoot position. This is encouraging for testing the open-ended southerly plunge of this shoot which is also supported by an interpreted downhole electromagnetic plate.

#### *North Shoot: Potential Resource Extensions*

CANDD012 targeted the interpreted 'North Shoot' position 45m down-plunge from CANDD002 (14m at 4.4% Cu<sup>3</sup>) and intersected a 14.3m mineralised interval of chalcopyrite (copper-sulphide) veins from 417m, including a 5.3m strongly mineralised zone from 426m with up to 10% chalcopyrite in veins and breccia matrix within strong green and black chlorite alteration. This interval returned the following significant copper intercept:

- **14.3m at 1.96% Cu from 417m, downhole**
- **including 8.3m at 2.82% Cu from 423m.**

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<sup>2</sup> Refer Appendix 1 for details

<sup>3</sup> Refer ASX report 23 June 2021



The lower 5.3m of this interval assayed 3.68% Cu and included a maximum assay of 5.50% Cu, indicating continuity with similar high-grade copper mineralisation in CANDD002, which is 45m 'up-plunge'. This high-grade copper shoot position occurs well beyond the existing Mineral Resource<sup>4</sup> outline and remains open at depth.

***The assay results for holes CBLRC057 and to some extent CANDD013, confirm the South Shoot as having significant copper grade and the potential to extend beyond the existing Mineral Resource outline. Results for CANDD012 add further high-grade scale to the North Shoot which also remains open at depth to the south.***

Refer **Tables 1 Significant Copper Intercepts** and **Table 2 Drill Hole Details and Status**, also **Appendix 2 JORC Table 1** attached.

### **Planned Canbelego Main Lode Drilling**

**The Company has commenced drilling two, bold, long diamond holes to test the Canbelego Main Lode system to a vertical depth of ~550m depth.** Current drill testing is to ~350-400m depth and the base of the current Mineral Resource<sup>4</sup> estimate is to ~270m depth.

#### *Background*

The Company's exploration team has been building up a geological model based on the 'Cobar-style' of mineralisation with Glencore's CSA Mine an example of these high-grade, vertically extensive large-scale copper deposits (refer **Figure 4 –CSA Mine Long Section**). This deposit style typically has a 'short' footprint but very long vertical dimensions and occurs in a series of parallel, en-echelon lodes. They can extend for +2000m vertically, and typically do not reach the surface, which makes the Western Lodes within the Greater Canbelego project area, ongoing viable targets as well as the depth potential of the Main Lode.

When drilling resumed at Canbelego in April 2021, following an 8 year hiatus, very little of the previous drill core or samples were available to relog to collect specific geological/structural data. Therefore, the 2021 drilling campaign started cautiously stepping away from the known mineralisation on 40-50m spacings and successfully intersected new, high-grade copper zones and generated vital structural data for an updated predictive geological model.

#### *Discussion*

The new data and interpretations generated by Helix generates the confidence to now step-out and down-plunge 150-200m vertically to test, in large increments the depth potential of this lode-system. There remains some ambiguity whether the shoots plunge south but are constrained in an overall north trending 'envelope' or if the whole system plunges south.

Two 'Parent' diamond drill holes are planned, each approximately 660m deep to test the extensions of the north- and south plunges as depicted in the lower portions of **Figure 1 – Canbelego Long Section** and **Figure 2 – Schematic Cross Section**. These drill holes will target the mineralised zones and also create a platform for downhole electromagnetic surveys – vital for detecting a 'near-miss' and vectoring additional drilling toward conductive targets. Subject to these results, the 'Parent' holes can also be utilised to 'wedge-off' daughter holes to rapidly and more cost effectively test whatever mineralisation or geophysical targets are generated.

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<sup>4</sup> Refer Appendix 1 for further details.

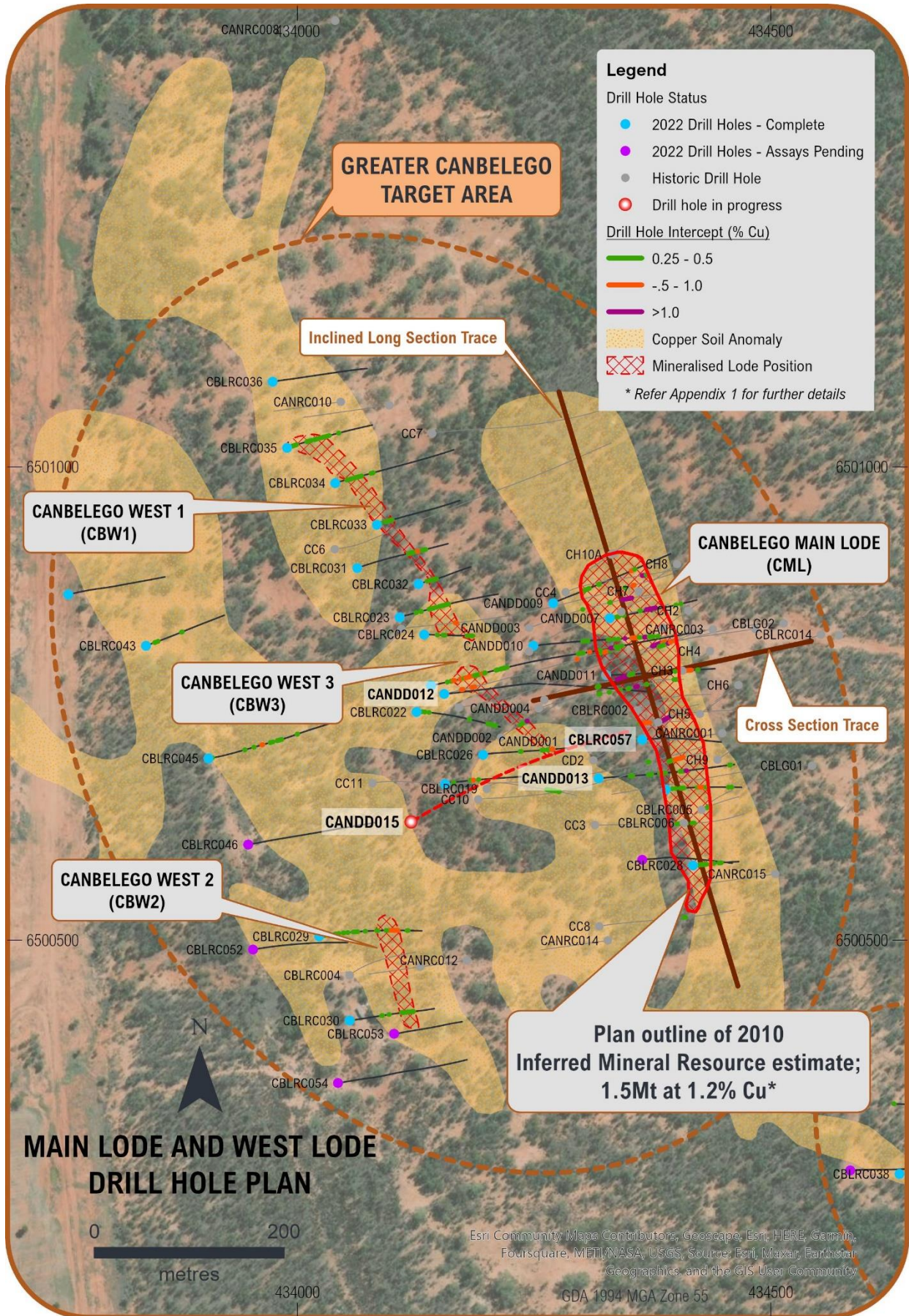
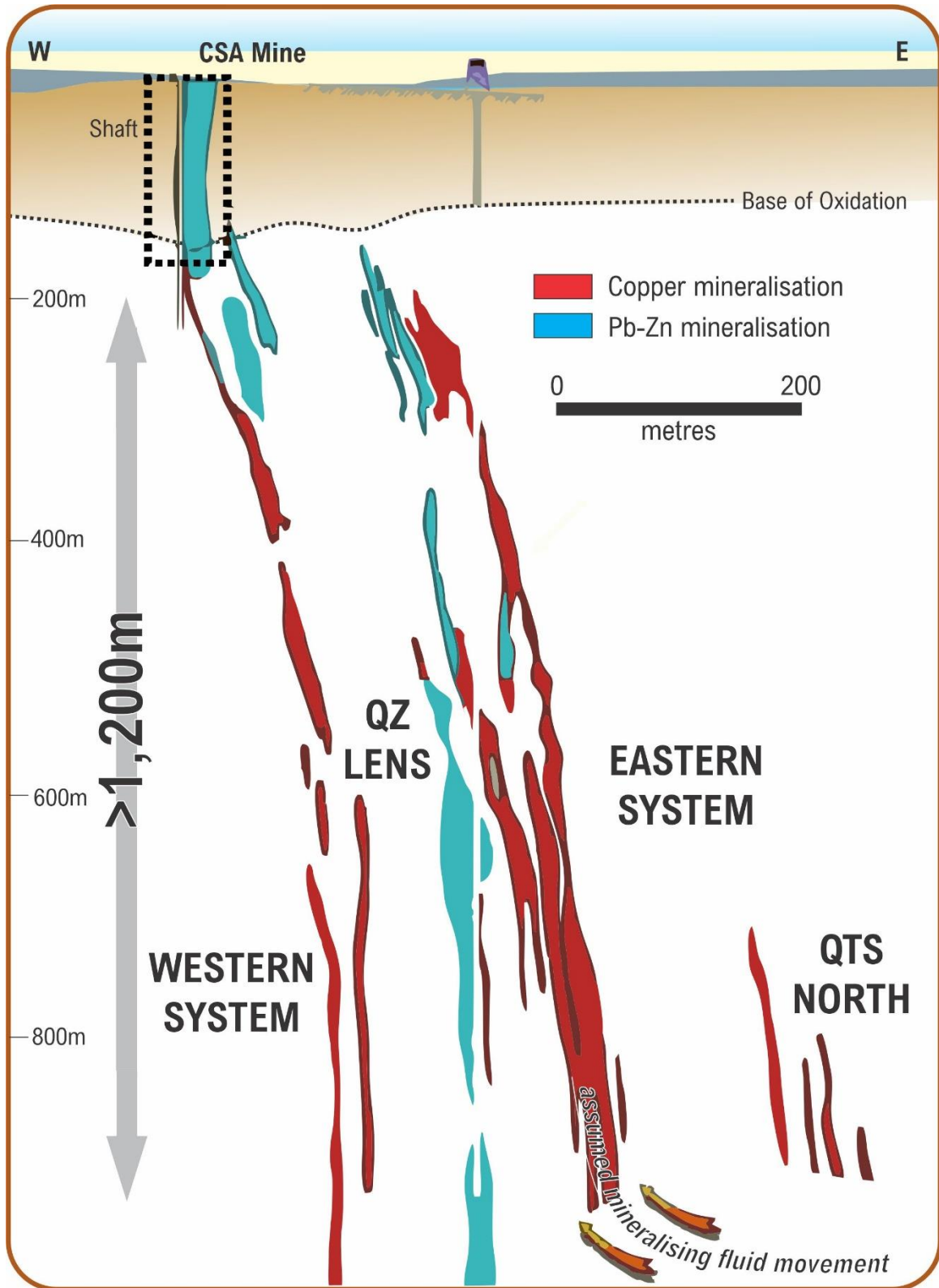


Figure 3: Greater Canbelego Location Plan



**Figure 4:** CSA Mine Long Section as an example of 'Cobar-style' deposit (CSA 2020 SMEDG.org.au)



**Table 1: Significant copper intercepts from recent diamond and RC drill holes at a range of cut-off grades<sup>5</sup>**

Hole ID	0.1% Cut-off	0.5% Cut-off	1% Cut-off
CANDD012	4m at 0.34% Cu from 71m	1m at 0.64% Cu from 74m	-
	8m at 0.40% Cu from 78m	6m at 0.50% Cu from 80m	-
	1m at 0.25% Cu from 98m	-	-
	2m at 0.51% Cu from 103m	1m at 0.92% Cu from 104m	-
	1m at 0.21% Cu from 109m	-	-
	4m at 0.26% Cu from 116m	1m at 0.73% Cu from 119m	-
	1m at 0.10% Cu from 126m	-	-
	1m at 0.11% Cu from 142m	-	-
	2m at 0.15% Cu from 150m	-	-
	1m at 0.14% Cu from 156m	-	-
	2m at 0.42% Cu from 160m	1m at 0.51% Cu from 161m	-
	5m at 0.61% Cu from 165m	-	<b>1m at 2.51% Cu from 169m</b>
	1m at 0.27% Cu from 182m	-	-
	1m at 0.16% Cu from 192m	-	-
	2m at 0.18% Cu from 224m	-	-
	1m at 0.19% Cu from 345m	-	-
	1m at 0.15% Cu from 410m	-	-
	<b>14.3m at 1.96% Cu from 417m</b>	<b>14.3m at 1.96% Cu from 417m</b>	<b>1m at 1.83% Cu from 417m 1m at 1.06% Cu from 420m 8.3m at 2.82% Cu from 423m</b>
	1m at 0.15% Cu from 444m	-	-
CANDD013	5m at 0.14% Cu from 65m	-	-
	6m at 0.13% Cu from 99m	-	-
	2m at 0.16% Cu from 119m	-	-
	5m at 0.22% Cu from 124m	-	-
	1m at 0.10% Cu from 153m	-	-
	1.5m at 0.10% Cu from 156.5m	-	-
	1m at 0.17% Cu from 159m	-	-
		-	<b>1.3m at 4.00% Cu from 162.5m</b>
	2m at 0.23% Cu from 228m	-	-
CBLRC057	17m at 0.40% Cu from 31m	1m at 0.75% Cu from 31m 6m at 0.67% Cu from 40m	-
	2m at 0.12% Cu from 49m	-	-
	1m at 0.34% Cu from 67m	-	-
	6m at 0.17% Cu from 71m	-	-
	2m at 0.16% Cu from 80m	-	-
	4m at 0.13% Cu from 99m	-	-
	4m at 0.74% Cu from 110m	<b>2m at 1.18% Cu from 112m</b>	-
	<b>16m at 3.21% Cu from 117m</b>	-	<b>11m at 4.58% Cu from 118m</b>

<sup>5</sup> Cut-off grade based on a maximum of 2m of internal dilution



**Table 2: Drill Hole Details and Status**

Hole ID	Hole Type	Location	Status	Northing	Easting	Dip	Azimuth	RL	Total Depth
CANDD012	DD	Main Lode	Assays Received	6500760	434155	-75	84	307.9	465.7
CANDD013	DD	Main Lode	Assays Received	6500671	434318	-60	85	306.0	234.5
CANDD014	DD	Caballero	Assays pending	6498841	435912	-65	65	307.0	250
CBLRC046	RC	West Lodes	Assays pending	6500601	433948	-60	80	315.1	204
CBLRC047	RC	Caballero	Assays pending	6499279	435340	-60	75	313.1	144
CBLRC048	RC	Caballero	Assays pending	6499305	435410	-60	75	313.0	150
CBLRC049	RC	Caballero	Assays pending	6499315	435485	-60	75	313.1	156
CBLRC050	RC	Caballero	Assays pending	6499335	435558	-60	75	312.8	163
CBLRC051	RC	Caballero	Assays pending	6499547	435820	-60	55	309.3	198
CBLRC052	RC	West Lodes	Assays pending	6500490	433953	-60	80	314.7	163
CBLRC053	RC	West Lodes	Assays pending	6500401	434102	-60	80	316.5	114
CBLRC054	RC	West Lodes	Assays pending	6500349	434043	-60	80	317.9	198
CBLRC055	RC	Main Lode	Assays pending	6500585	434364	-70	80	307.1	204
CBLRC056	RC	Shango	Assays pending	6500257	434584	-60	80	311.0	204
CBLRC057	RC	Main Lode	Assays Received	6500712	434364	-75	85	304.8	198

Grid: MGA94 Zone 55

**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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## **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.

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

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

(Rounding discrepancies may occur in summary tables)

Reported as 100% of deposit



## Appendix 2: JORC Code Table 1

October 2022 – Canbelego Drilling

Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<p><b>Sampling techniques</b></p>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as 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 explanation may be required, 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>	<p><b>Diamond Core Drilling (DD)</b></p> <ul style="list-style-type: none"> <li>Commercial drilling contractor Mitchell Services conducted the DD drilling. The holes are orientated approximately ENE and drilled with starting dips of 60° to 70°.</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 (=/<math>&lt;1m</math>).</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> </ul> <p><b>Reverse Circulation (RC) Drilling</b></p> <ul style="list-style-type: none"> <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>
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <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
<p><b>Drill sample recovery</b></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 preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<p><b>Logging</b></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <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 semi-massive 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
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <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>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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
<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>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>
<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 drill collar positions were determined using a GPS (<math>\pm 5m</math>).</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>
<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>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>
<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>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>
<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 Helix staff and its contractors. The samples were freighted directly to the laboratory, or transported directly by Helix staff, with</li> </ul>



Criteria	JORC Code explanation	Commentary
		appropriate documentation listing sample numbers, sample batches, and required analytical methods and element determinations.
<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 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
<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 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>
<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 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>
<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 project is prospective for structurally controlled copper.</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: <ul style="list-style-type: none"> <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 style="list-style-type: none"> <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
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</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> </ul>	<ul style="list-style-type: none"> <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>
<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. 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').</i></li> </ul>	<ul style="list-style-type: none"> <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>
<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 Figures in this announcement.</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>The reporting is balanced, and all material information has been disclosed.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. 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 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>