

# ASX Announcement 2 March 2023

# Shallow High-Grade Copper Potential Confirmed at Canbelego

- High-grade copper zone identified by recent intercept of 16 metres (m) at 3.21% copper (Cu) now defined from surface to 150m down dip and remains open at depth
- Reverse circulation (RC) drill follow-up assay highlights include:
  - 6m at 4.72% Cu from 103m within 10m at 3.02% Cu from 100m (CBLRC062)
  - 4m at 3.27% Cu from 70m within 10m at 1.58% Cu from 68m (CBLRC063)
  - 3m at 2.45% Cu from 78m within 23m at 0.75% Cu from 62m (CBLRC058)
  - 9m at 1.3% Cu from 108m within 16m at 0.9% Cu from 108m (CBLRC059)
- Diamond core hole intersected ~22m of medium to strong intensity copper sulphides<sup>1</sup> potentially extending the down-dip continuity another 40m to over 150m down dip
- New shallow, high-grade 'oxide' copper potential highlighted by intercept ~13m below surface which is open 130m to the south toward the historic underground copper workings:
  - 5m at 5.35% Cu from 18m and 2m at 6.42% Cu from 31m within 25m at 1.87% Cu from 13m (CBLRC064)
- Diamond drilling to test continuity of high-grade shoot positions identified by downhole electromagnetics and recent copper sulphides<sup>2</sup> in diamond drill core is ongoing.

**Helix Resources Limited** (ASX: HLX) ("Helix" or "the Company") is pleased to provide an update on its drilling activities at the Canbelego Copper Project located southeast of Cobar in central NSW, Australia.

Testing the 'Upper Canbelego Main Lode' with a modest RC drilling program has successfully mapped out a highgrade copper zone from near surface to over 120m down-dip. Copper sulphides observed over nearly 22m downhole in diamond drill core appears to have further extended that trend by another 40m, and it remains open at depth (refer **Figure 1** – Cross section). Initial estimates of the true thickness of these mineralised zones is between 15 to 20m consistent with the interpretation illustrated in **Figure 1** – Cross section.

Additional potential is highlighted by a very shallow, high-grade intercept of 25m at 1.87% Cu, which includes 5m at 5.35% Cu and 2m at 6.42% Cu – which is open to the south for 130m toward the historical underground workings.

Deeper diamond drilling to test high-grade copper shoots identified by downhole electromagnetic (DHEM) surveys is ongoing. The objective is to follow up on the 14m intercept of copper sulphides from the first successful drill test of the conductive DHEM targets<sup>2</sup>.

#### Commenting on the latest copper assays for Canbelego, Helix Managing Director Mike Rosenstreich said:

<sup>&</sup>lt;sup>2</sup> Refer ASX Report 7 February 2023.



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

#### **CAPITAL STRUCTURE**

Shares on Issue 2,323M Market Cap 13.94M Share Price \$0.006

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<sup>&</sup>lt;sup>1</sup> Refer Cautionary Note regarding visual estimates of mineralisation on page 2.



"These new copper intervals from the RC drilling confirm the extension of shallow high-grade copper zone identified in October last year; 16m at 3.2% Cu. Reviewing the drill cross-section and including the visual copper mineralisation in diamond hole 17 – this zone looks to extend from almost surface to over 150m down dip and remains open at depth.

Furthermore – one of the very shallow intercepts, just 13m beneath surface with 5m at 5.4% Cu within 25m at 1.9% Cu is open to the south for 130m to the historical underground workings.

These results are highly encouraging for increasing the copper grade in this area compared to the current mineral resource estimated in 2010 – which should add copper tonnes to our inventory. The Helix team is well prepared for the Mineral Resource update with consultants engaged and it's really just a matter of when we have sufficiently tested these 'easy' extensions which could add significant copper tonnes. Our schedule for that resource estimate is completion before the end of the June quarter."

The Company looks forward to providing further updates.

### **Cautionary Note – Visual Estimates of Mineralisation**

References in this announcement to visual results are from diamond drill core from CANDD017. Fresh sulphide mineralisation consisted of chalcopyrite in stringers and veins, and semi-massive chalcopyrite and pyrite. Minor malachite is also present on fractures surfaces. Visual estimates of percentages are based on logged visual observations of the drill core surface 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 in drill core will be cut, and half-core sampled the for assays. Assay results are expected in April 2023.

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

The following section provides an update of the drilling at the Canbelego Main Lode, in particular, recently completed RC holes CBLRC058 to CBLRC064 and observed copper mineralisation in diamond hole CANDD017.

#### 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, under offer from Metals Acquisition Corp (NYSE: MTAL.U).

#### Upper Canbelego Main Lode Drilling

A total of 906m of RC drilling in 7 holes<sup>3</sup> and 212.1m of diamond core drilling in CANDD017 were completed in January-February 2023.

The objective was to follow-up a high-grade intercept in the upper portions of the Canbelego Main Lode of 16m at 3.2% Cu (CBLRC057) reported in October 2022<sup>4</sup>. This intercept highlighted the potential for shallow extensions of high-grade copper mineralisation within the Main Lode south of the historical underground workings. Assay results for the RC holes and visual observations of copper sulphide minerals in the drill core<sup>5</sup> confirm that potential.

The following significant high-grade copper intercepts were returned from the RC drilling (refer **Table 1**):

- 5m at 5.35% Cu from 18m and 2m at 6.42% Cu from 31m within 25m at 1.87% Cu from 13m (CBLRC064)
- 6m at 4.72% Cu from 103m within 10m at 3.02% Cu from 100m (CBLRC062)

<sup>&</sup>lt;sup>3</sup> Refer ASX Report 17 January 2023.

<sup>&</sup>lt;sup>4</sup> Refer ASX Report 10 October 2022.

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

- 4m at 3.27% Cu from 70m within 10m at 1.58% Cu from 68m (CBLRC063)
- 3m at 2.45% Cu from 78m within 23m at 0.75% Cu from 62m (CBLRC058)
- 9m at 1.3% Cu from 108m within 16m at 0.9% Cu from 108m (CBLRC059)

The results demonstrate that near-surface oxide and sulphide copper mineralisation within the Main Lode extends for over 130m south along strike from the historic workings with true widths ranging from 15m to 20m at a 0.1% Cu cut-off. The 'true width' estimate range is based on interpretations of the mineralisation trend as illustrated in **Figure 1** – Drill Cross Section. The shallow CBLRC064 intercept (**5m at 5.35% Cu** from 18m) is associated with strong malachite and chalcocite mineralisation approximately 13m vertically below surface. There is no drilling at this level between CBLRC064 and the historic workings 130m to the north, suggesting further potential for shallow high-grade oxide copper mineralisation within this part of the Main Lode, as shown in the long section (refer **Figure 2**).

The Main Lode oxide copper mineralisation transitions to sulphide mineralisation between 50m and 70m below surface, with similar mineralised drill widths in both the oxide and sulphide zones. Recently completed diamond hole (CANDD017) was completed at 212.1m targeting down-dip of CBLRC057. It intersected a 21.7m zone of medium to strong intensity chalcopyrite mineralisation from 155.7m, including 1.3m of semi-massive chalcopyrite and 4.6m of flanking 2-5% chalcopyrite veins and stringers. A summary of the mineralised intervals in CANDD017 is provided in **Table 2**. This hole is currently being logged and processed with assay results expected in April 2023.

Hole ID	0.1% Cu cut-off	0.5% Cu cut-off	1.0% Cu cut-off
		9m at 0.6% Cu from 65m	1m at 1.09% Cu from 70m
CBLRC058	23m at 0.75% Cu from 62m	-	3m at 2.45% Cu from 78m
CBLRCUS8		-	6m at 1.62% Cu from 77m
	2m at 0.14% Cu from 109m	-	-
CBLRC059	16m at 0.9% Cu from 108m	9m at 1.3% Cu from 108m	7m at 1.47% Cu from 109m
CBLRC059	3m at 0.48% Cu from 128m	2m at 0.61% Cu from 129m	-
	2m at 0.14% Cu from 69m	-	-
CBLRC060	10m at 0.87% Cu from		
	102m	-	2m at 3.42% Cu from 103m
	3m at 0.31% Cu from 23m	1m at 0.69% Cu from 24m	-
CBLRC061	5m at 0.17% Cu from 30m	-	-
CBERCOOI	6m at 0.77% Cu from 74m	4m at 1.13% Cu from 75m	2m at 1.57% Cu from 75m
	5m at 0.49% Cu from 81m	2m at 1.04% Cu from 82m	1m at 1.33% Cu from 82m
	6m at 0.28% Cu from 36m	-	-
CBLRC062	8m at 0.42% Cu from 89m	3m at 0.84% Cu from 92m	-
CBERCOOZ	18m at 1.77% Cu from	10m at 3.02% Cu from	
	100m	100m	6m at 4.72% Cu from 103m
	3m at 0.19% Cu from 10m	-	-
CBLRC063	9m at 0.31% Cu from 43m	2m at 0.76% Cu from 43m	-
	10m at 1.58% Cu from 68m	7m at 2.17% Cu from 70m	4m at 3.27% Cu from 70m
	25m at 1.87% Cu from 13m	9m at 3.29% Cu from 18m	5m at 5.35% Cu from 18m
CBLRC064		3m at 4.51% Cu from 30m	2m at 6.42% Cu from 31m
	2m at 0.25% Cu from 48m	-	-

**Table 1** – Copper intercepts in RC holes CBLRC058 to CBLRC064 at a range of cut-off grades

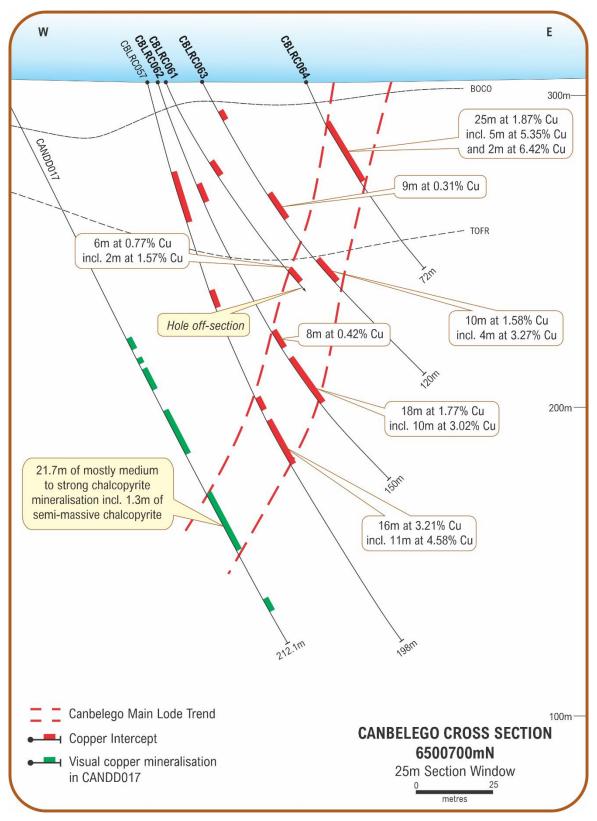


Figure 1 – Canbelego Main Lode Cross Section 6,500,700mN

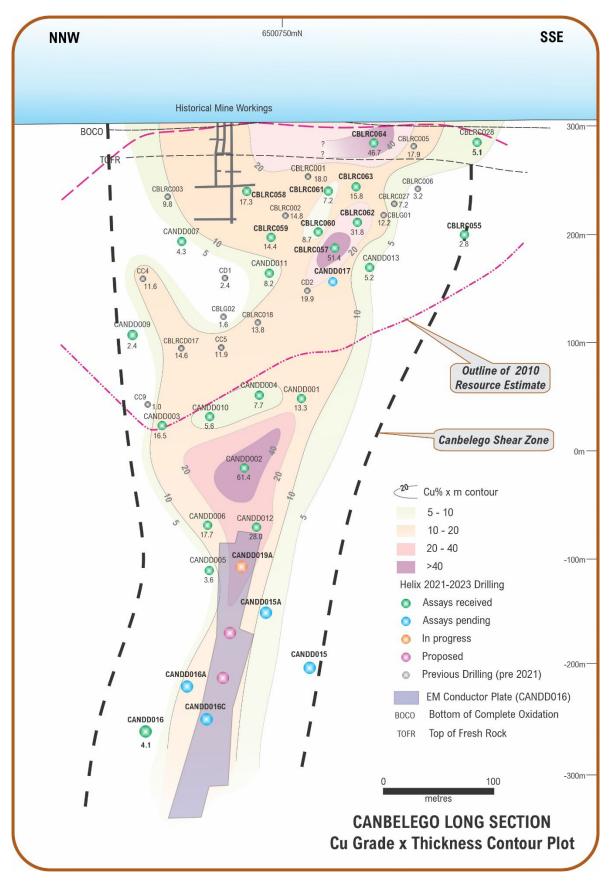


Figure 2 – Canbelego Main Lode Long Section



### Lower Canbelego Main Lode Shoot Drilling

In December 2022 two deep "step-out" diamond drill holes were completed to test the continuity of high-grade copper mineralisation 200m down plunge from known drill intercepts and to create a platform for downhole EM (DHEM) surveys to test for the continuity of high-grade shoots. These were the 'Parent' holes CANDD015 and CANDD016.

Both holes intersected the Canbelego Main Lode Shear and visible copper sulphides were logged<sup>6</sup>. The DHEM surveying of both holes identified highly significant conductive anomalies of a scale and intensity never recorded on the project before. The central position of the modelled conductive plates effectively occurs equidistant from both the Parent drill holes. Hole CANDD016C targeted the intersection of two modelled EM conductor plates, and it intersected 14m of visible copper mineralisation<sup>6</sup> from 594m, which consisted of weak to strong chalcopyrite veins and stringers including a 1m interval of semi-massive chalcopyrite and brecciated quartz veins mineralisation<sup>7</sup>. This is the deepest copper intercept to date at Canbelego and is 320m vertically below the base of the current 2010 Inferred Mineral Resource outline.

A DHEM survey was completed on CANDD016C to further refine the geometry of the conductive anomalies, which have now resolved into a series of steep, north-plunging plates that trend 'up-plunge' and remain open at depth. Hole CANDD019A is currently in progress targeting the conductors approximately 35m down dip of CANDD012. Two further follow-up diamond holes are proposed to test this conductive zone between CANDD012 and CANDD016C (**Figure 2**).

From	То	Interval	Strength	Copper Mineralisation
59	63	4.0	Weak	Trace chalcopyrite in disseminations and veins
73	81	8.0	Weak	Trace chalcopyrite in disseminations and veins
98	99	0.5	Medium	2% malachite & 1% chalcopyrite in fractures
100	101	1.0	Weak	<1% chalcopyrite in veins
105.5	107	1.5	Weak	<1% chalcopyrite in veins
109	111	2.0	Weak	<1% chalcopyrite in veins
111	117.5	6.5	Weak	1% chalcopyrite in quartz veins
124.9	127.7	2.8	Medium	3% chalcopyrite in veins
128	141	13.0	Weak	Trace chalcopyrite in disseminations
155.7	157.5	1.8	Medium	2% chalcopyrite veins
157.5	160	2.5	Medium	2% chalcopyrite veins
160.3	161.2	0.9	Medium	4% chalcopyrite veins
161.2	169.8	8.6	Weak	1% chalcopyrite veins
169.8	170.2	0.4	Strong	Semi-massive chalcopyrite
170.2	172.2	2.0	Weak	Trace chalcopyrite veins
172.2	173.1	0.9	Strong	Semi-massive chalcopyrite
173.1	176.3	3.2	Strong	5% chalcopyrite veins
176.3	177.7	1.4	Medium	2% chalcopyrite veins
196.8	199.8	3.0	Weak	Trace chalcopyrite veins

Table 2 – Observed Copper Mineralisation in CANDD017 (Main Lode intercept highlighted)

Assay results have been received for parent hole CANDD016, which was primarily drilled to provide a platform for DHEM. It intersected shear zones in the Western Lode and the Main Lode positions, however they are only weakly mineralised outside of the conductive zone. The Western Lode Shear returned 2.9m at 2.25% Cu from 364m within 9m at 0.83% Cu from 362m and the Main Lode Shear returned 2m at 1.65% Cu from 620m within 6m at 0.68% Cu from 616m (**Table 3**).

<sup>&</sup>lt;sup>6</sup> Refer Cautionary Note on visual estimates of mineralisation on page 2.

<sup>&</sup>lt;sup>7</sup> Refer ASX report 7 February 2023



To date, the Western Lodes have only been intersected at relatively shallow levels, but certain positions appear to be persistently mineralised at this level albeit, narrow as highlighted for CANDD016 above. A program to specifically test if the Western Lodes could be "Canbelego look-a-likes" at depth is being planned. Parallel lode sets are a feature of 'Cobar' style mineralisation which forms the basis of Helix's exploration model in this area.

Hole ID	0.1% Cu cut-off	0.5% Cu cut-off	1% Cu cut-off
	2m at 0.35% Cu from 127m	1m at 0.53% Cu from 127m	-
	2m at 0.11% Cu from 141m	-	-
	5m at 0.27% Cu from 145m	1m at 0.66% Cu from 145m	-
	7m at 0.15% Cu from 270m	-	-
	2m at 0.96% Cu from 306m	-	1m at 1.61% Cu from 307m
CANDD016	2m at 0.58% Cu from 330m	1m at 0.95% Cu from 331m	-
	9m at 0.82% Cu from 362m	-	2.9m at 2.22% Cu from 364m
	4m at 0.16% Cu from 401m	-	-
	2m at 0.15% Cu from 586m	-	-
	5m at 0.8% Cu from 604m	4m at 0.91% Cu from 604m	-
	6m at 0.68% Cu from 616m	-	2m at 1.65% Cu from 620m

Table 3 – Copper intercepts in CANDD016 at a range of cut-off grades (Main Lode intercept highlighted)

Difficult drilling conditions due to excessive ground pull through highly deformed host rocks led to the abandonment of holes CANDD018 and CANDD019. Drill hole details are provided in **Table 4**.

Hole ID	Hole Type	Location	Status	Northing	Easting	Dip	Azimuth	RL	Total Depth
RC Drill Holes	RC Drill Holes								
CBLRC058	RC	Main Lode	Assays received	6500818	434437	-60	240	305.5	120
CBLRC059	RC	Main Lode	Assays received	6500745	434352	-70	44	304.1	174
CBLRC060	RC	Main Lode	Assays received	6500727	434368	-76	79	302.2	150
CBLRC061	RC	Main Lode	Assays received	6500711	434368	-61	74	308.1	120
CBLRC062	RC	Main Lode	Assays received	6500688	434367	-70	79	309.1	150
CBLRC063	RC	Main Lode	Assays received	6500687	434382	-61	74	298.3	120
CBLRC064	RC	Main Lode	Assays received	6500645	434382	-61	68	275.8	72
Diamond Dril	Holes								
CANDD015	DD	Main Lode	Assays pending	6500625	434120	-76	60	314	648.2
CANDD016	DD	Main Lode	Assays received	6500759	434083	-78	60	314	726.7
CANDD015A	DD	Main Lode	Assays pending	6500625	434120	-76	60	314	612.7
CANDD016A	DD	Main Lode	Assays pending	6500759	434083	-78	60	314	642.7
CANDD016B	DD	Main Lode	Abandoned						
CANDD016C	DD	Main Lode	Assays pending	6500759	434083	-78	60	314	650
CANDD017	DD	Main Lode	Assays pending	6500670	434315	-78	60	306	212.1
CANDD018	DD	Main Lode	Abandoned						
CANDD019	DD	Main Lode	Abandoned						
CANDD019A	DD	Main Lode	In progress	6500702	434088	-74	54	314	550

Table 4 – Drill Hole Details and Status	(Grid. MGA94 Zone 55)
Table 4 – Dilli Hole Detalis allu Status	(Grid: IVIGA94 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 Ltd ASX: AIS) 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	<b>Contained Copper</b>	<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

February 2023 – Canbelego Drilling

Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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 explanationmaybe 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>	<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 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. Navi drilling, wedges and chrome barrels are used for directional drilling.</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>

Criteria	JORC Code explanation	Commentary
		appropriate documentation listing sample numbers, sample batches, and required analytical methods and element determinations.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No additional audits or reviews have been conducted for the drilling to date.

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 not statutory, minimum annual expenditure. Rather a programbased 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	• Acknowledgment and appraisal of exploration by other parties.	<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 has been estimated from preliminary geological interpretations as summarised in Figure 1 of this report and in terms of the reported intercepts is presented as a range with downhole lengths reported in Table 1 – within the Report.</li> <li>True width 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>