

ASX Announcement 14 June 2023

Canbelego Resource Increases 77% in Contained Copper

HIGHLIGHTS

- Updated Mineral Resource estimate completed for the Canbelego Main Lode deposit:
 - 1.83 million tonnes (Mt) at 1.74% copper (Cu)
 - Containing 31,800 tonnes (31.8Kt) of copper metal
- Compared to the 2010 Mineral Resource estimate:
 - o 22% increase in tonnage (+0.33Mt) and 45% increase in Cu grade (0.54% Cu)
 - o 77% increase in contained copper metal (+13.8kt)
- The Mineral Resources comprises 18% Indicated and 82% Inferred categories grouped for potential opencut extraction to a depth of 70m beneath surface and underground mining beyond that depth
- Further resource potential around the Main Lode will be tested at the nearby, parallel trending Western Lode targets, south along strike including the Caballero prospect and potential depth extensions guided by ongoing modelling work

Helix Resources Limited (ASX: HLX) ("Helix" or "the Company") is pleased to provide an update on its Mineral Resources located in the Cobar region of central NSW, Australia. The focus is on the Company's lead Canbelego Project which is a 70:30 contributing joint venture with Aeris Resources Ltd (ASX:AIS). Reviews of the geological models underpinning the CZ (copper) and Restdown (gold) Mineral Resources have also been undertaken.

Commenting on the new Canbelego Mineral Resource estimate, Helix Managing Director Mike Rosenstreich said:

"We are very much focused on copper and finding new copper deposits. This new Mineral Resource estimate for the Main Lode at Canbelego creates a solid platform from which to start building up our copper inventory. It is critical that we now leverage our improved geological understanding of this deposit to find new deposits - and we are certainly generating some interesting new targets.

Looking outward from this resource we see additional potential with the Western Lodes, only 200m to the west of the Main Lode, as well as the prospects that we have to the south such Caballero where we still have unfinished business. Regional-scale exploration also continues to yield new, large anomalies which further add to the potential of Helix's ground in this prolific copper region.

A solid, realistic Mineral Resource estimate provides a platform from which to assess any development opportunities possibly with a partner – which enables us to maintain our focus on discovery activities."



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

CONTACT US

helix@helixresources.com.au Level 13, 191 St Georges Terrace Perth WA 6000 helixresources.com.au ASX: HLX



Canbelego Project

A mineral Resource estimate for the Canbelego Main Lode was completed by MEC Mining. This was the first update of the Canbelego resource since the 2010 resource estimate.

The 2023 updated Mineral Resource Estimate for the Canbelego Main Lode is presented in **Table 1** below.

Table 1: 2023 Canbelego Main Lode Mineral Resource Estimate (MRE)

MRE Category	Tonnes	Grade (Cu%)	Cu-Metal (t)
Total opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade & underground MRE, <240mRL; 0.8 Cu% cut-off grade			
Indicated	340,600	1.65	5,620
Inferred	1,493,700	1.75	26,140
Total: Opencut & Underground	1,830,000	1.74	31,842
Comprising:			
MRE Category	Tonnes	Grade (Cu%)	Cu-Metal (t)
Potential opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade			
Indicated	99,700	1.28	1,276
Inferred	282,300	1.21	3,416
Total: potential opencut MRE	377,000	1.23	4,637
Potential underground MRE, <240mRL; 0.8 Cu% cut-off grade			
Indicated	240,900	1.81	4,360
Inferred	1,211,400	1.88	22,774
Total: potential underground MRE	1,453,000	1.87	27,171
* Numbers may not sum due to rounding			
* Numbers are rounded to reflect that they are estimates			
* A top-cut grade of Cu 12% was applied to the MRE			

* Stated MRE complies with Reasonable prospects of eventual economic extraction

Table 2: 2010 Canbelego Main Lode MRE (0.8% Cu cut-off)

MRE Category	Tonnes	Grade (Cu%)	Cu-Metal (t)
Indicated	-	-	-
Inferred	1,500,000	1.20	18,000
Total:	1,500,000	1.20	18,000
* Reported in accordance with the 2004 JORC Code			

Table 3: Summary Comparison between 2010 and 2023 Canbelego Main Lode MRE's

	Tonnes	Grade (Cu%)	Cu-Metal (t)
Total MRE:	Up 22%	Up 45%	Up 77%

Helix restarted work at Canbelego in early 2021, the first exploration work undertaken at the project since 2013. The Company completed a total 68 drill holes at the Main Lode and surrounding prospects for a total of 16,666m. The Main Lode drilling was targeted at depth extensions of the copper shoots and to better define copper grades and mineralised widths at shallow levels broadly above the base of the 2010 MRE, as shown in Figure 1.

The 2023 MRE has been reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code). The 2010 MRE was reported in accordance with the JORC 2004 code.



The 2023 MRE has increased contained copper by 77% or 13.8Kt. A detailed comparison is provided in **Table 3** – **Summary Comparison**. The 2010 MRE was classified as Inferred. The increased drill density and improved geological data has resulted in 18% of the total new MRE now classified as Indicated, while the balance is Inferred.

Details on the 2023 MRE are provided in the Technical Report below and the JORC Tables attached.



Figure 1: Schematic Long Section Canbelego Main Lode



Figure 2: Canbelego Project Location Plan

CZ Copper Project

A Mineral Resource Estimate for the CZ (also known as Collerina) deposit was released by Helix on 11 June 2019¹.

Since that estimate, the Company undertook a drill program which was completed in late 2021. The ensuing interpretation and targeting work highlighted a significant proportion of the pre-2021 drillholes that had not been geologically logged nor sufficiently sampled and assayed. This led to a detailed new interpretation process focused on assessing the validity of the geological model which underpinned the 2019 Mineral Resource estimate.

¹ Refer ASX Report 11 June 2019



Based on this recently completed major geological review the Company has elected to no longer quote a Mineral Resource for the CZ Project pending further work.

The CZ Project is an advanced copper project with significant high-grade copper intercepts both at depth and in newly delineated shallow oxide zones. The Company intends to leverage from its improved understanding of the CZ geology to undertake further target generation and drill testing work in the greater CZ area.

Restdown Gold Project

A Mineral Resource Estimate for the Restdown Gold Project located on the Western Group tenements approximately 17km southwest of Canbelego was released by Helix on 7 November 2019. The shallow predominantly oxide style gold mineralisation was defined across four proximal project areas.

A recent review of the geological model underpinning the Restdown Mineral Resource estimates indicates material uncertainty of various technical assumptions. Based on this work the Company has elected to no longer quote a Mineral Resource for the Restdown Gold Project.

A major regional work program is being undertaken in the broader Restdown area (refer ASX Report 4 May 2023) principally targeting copper mineralisation. This includes regional scale multi-element geochemical auger sampling useful for detecting anomalies prospective for copper, gold or other types of mineralisation.

The Restdown Gold Project data will be incorporated into this work program. The new geochemical and geophysical work in progress is providing insights on the prospectivity of this area which is generally under deeply weathered or transported cover.

TECHNICAL REPORT – CANBELEGO MINERAL RESOURCE ESTIMATE

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%) covering Exploration Licence 6105.

Canbelego Geology

The primary stratigraphy at Canbelego comprises a steeply west dipping and west 'younging' sequence of interbedded quartz sandstone, siliceous siltstone and mudstone which has been metamorphosed to psammite and pelite. Dolerite sills and dykes, which have been metamorphosed to mafic schist, intrude the psammite and pelite in the upper part of the stratigraphy, and gabbro intrusions are a feature of the lower part of the stratigraphy.

The copper mineralisation is hosted by a deformed sequence of intercalated psammite, pelite and mafic schist, which also dips steeply to the west. The main sulphide phase is associated with pervasive chlorite-carbonate-rich alteration that is often texturally destructive. Mineralisation is mostly in the form of a chalcopyrite-pyrite ±pyrrhotite ±sphalerite bearing breccia and vein network accompanied by a carbonate-quartz-rich gangue. The distribution of the mineralisation is controlled by late faults and shears and is hosted by highly chloritised and brecciated zones within pelite, psammite and mafic schist units.

The Main Lode has a strike extent of 350m, a true thickness averaging approximately 5m, and a true depth of approximately 600m. The Main Lode pinches and swells and although continuous can be highly variable in width. Smaller lodes occur parallel and adjacent to the Main Lode.



Drilling and Sampling

The current MRE is based on 16,224 metres of drilling comprising 56 drill holes and 15,143 drill samples from the Canbelego Main Lode. This includes a total of 25 diamond holes (10,116m) and 14 RC holes (2004m) drilled since 2021.

Sampling Techniques and Analytical methods

Diamond drill core was mostly sampled in 1m intervals within a range of 0.5m to 1.5m, taking half core samples within mineralised zones, plus longer composite samples up to 3m outside mineralisation for host rock characterisation. The drill core was cut with a Corewise automatic core cutter. RC drill holes were sampled at 1m intervals via a cyclone cone splitter into a numbered calico bag for the laboratory sample, and a large plastic bag for the remaining sample.

ALS Laboratory Services completed the multi-element analysis work carried out on the post-2021 drill samples. Samples were analysed for gold (selected samples only) by fire assay and for other elements by four acid digest ICP-MS and ICP-AES. Further details on sampling techniques are provided in Appendix 2.

Estimation Methodology

The mineralisation was digitised on section and wireframed. A block model was developed and restricted to the wireframes. The parent block size was 5m east, by 10m north, and 2.5m in elevation. Parent cells were sub blocked to 1m east, by 2m north, and 1.25m in elevation. Grade estimation was Ordinary block kriging with discretization of 2 x 2 x 2 within the parent cells. The points were estimated and then averaged to produce the block estimate. Parent cells were estimated, and the grade defaulted to the sub cells within the parent cell. Further details on estimation methodology are provided in Appendix 2.

Mineral Resource Classification

Mineral Resources were classified as both Indicated and Inferred category Mineral Resources. The drillhole spacing along strike is approximately 35m, and down dip it is highly variable ranging from approximately 30m to approximately 100m. The parent block dimensions were selected to provide resolution within the narrow lodes, and 10m along strike to match the 35m spacing, without having blocks too small which may bias the Mineral Resource estimate. The classification was based upon spacing using a search ellipse to establish Indicated Mineral Resources using a minimum of three drillholes with ellipse dimensions of 45m down dip, 32m along strike and 14m across strike to create discrete classified areas. Remaining blocks were assigned to an Inferred Mineral Resource category because the distance in three dimensions was acceptable to denote as Inferred classified Mineral Resources as opposed to unclassified Mineral Resources. Further details on the mineral resource classification are provided in Appendix 2.

Refer Figures 3 & 4 for representative long section and cross section views through the deposit model.



Figure 3: Long section view of the deposit model looking east

Reporting Criteria – Cut-off grades

The geological cut-off used to differentiate mineralised material from weakly mineralised material was 0.1% Cu. A minimum of two intervals were used for the interpretation of the mineralised envelope, with maximum total internal waste of two metres included, providing the minimum composite grade was above 0.1% Cu.

The economic cut-off grade of 0.3% Cu was applied to potential opencut Mineral Resources above the 240mRL level. The 240mRL level is approximately 70m from surface. A cut-off grade of 0.8% Cu was applied below the 240mRL level due to the higher costs of exploiting Mineral Resources at depth.

Metallurgy

No metallurgical assumptions were made for the MRE. Metallurgical testwork and scoping studies will be completed in the future.



Figure 4: Cross section through the deposit model

COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results, 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.

The Mineral Resource estimate was completed by Mr Dean O'Keefe the Principal Resource Geologist of MEC Mining. MEC Mining is a global technical consulting firm specialising in mining services capabilities across the mining life cycle from early-stage exploration through development, mine planning, onsite management, to mine closure and rehabilitation. Mr O'Keefe is a Fellow of the Australasian Institute of Mining and Metallurgy.

Mr Gordon Barnes, Mr Mike Rosenstreich, and Mr O'Keefe have sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to 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, Mr Rosenstreich, and Mr O'Keefe have consented to the inclusion of this information in the form and context in which it appears in this report.

ABN: 27 009 138 738 **Board of Directors:** ASX: HLX Peter Lester Non-Executive Chairman Kylie Prendergast Non-Executive Director **Contact Details:** Mike Rosenstreich Managing Director Helix Resources Limited Level 13, 191 St Georges Terrace, **Company Secretary**

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

Ben Donovan



Perth, WA, 6000

Email: helix@helixresources.com.au Web: www.helixresources.com.au Tel: +61 (0)8 9321 2644

Investor Contact:

Mike Rosenstreich Email: helix@helixresources.com.au

Media Contact: David Tasker **Chapter One Advisers** Email: dtasker@chapteroneadvisors.com.au Tel: 0433 112 936

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 three tenement groups which are largely untested despite being located within ~50km of significant copper producing operations. The western tenements cover 30km of contiguous strike of the Rochford Copper Trend. At Rochford, 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 a Mineral Resource of 31.8Kt of contained copper at 1.74% Cu has recently been estimated. The eastern tenement group encompasses more than 150km of prospective strike, principally the Collerina Trend which includes the 100% owned, advanced CZ copper Project and numerous recent targets currently being tested. A northern tenement application takes in the northern extension of the Collerina Trend, north of Aeris's Tritton Copper Operations.

Helix has additional exposure to 'energy metals' through its Homeville Nickel-Cobalt resource and numerous, high-grade laterite, nickel-cobalt prospects. It is presently seeking to consolidate various regional nickel-cobalt opportunities in the region into 100% owned Ionick Metals Ltd for a potential IPO.

APPENDIX 2: JORC Code Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 Diamond Core Drilling (DD) Commercial drilling contractor Mitchell Services conducted the DD drilling. The holes were orientated approximately ENE and drilled with starting dips of 60° to 78°. Drill hole locations were determined using a hand-held GPS. Down-hole surveys were conducted using the Reflex multi-shot gyro system. Diamond core was sampled in 1m intervals, taking half core at various intervals (=/<1m). The samples were collected and supervised by Helix staff. The samples were in the direct control of Helix staff and transported to the laboratory by Helix. Reverse Circulation (RC) Drilling 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°. Drill hole locations were determined using a hand-held GPS. Down-hole surveys were conducted using the Reflex multi-shot gyro system. 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. The lab samples were collected and always supervised by Helix staff.
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, tripleorstandard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 DD: PQ, HQ and NQ drill core was collected using triple tube and all other industry practice methods. Navi drilling, wedges and chrome barrels were used for directional drilling. RC: 5 ½ inch diameter drill bit.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Core recoveries are recorded by the driller on core blocks and checked by a geologist or field technician. Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking and depths were verified against the depths recorded on core blocks. Rod counts were routinely undertaken by drillers as a further cross-reference for depth and core recovery. Samples were checked by the geologist for consistency and compared to the sample interval data for accuracy. RC bulk bag samples were not weighed, however recoveries were monitored and recorded by the supervising geologist. When poor sample recovery was encountered during drilling, the geologist and driller attempt to rectify the problem to ensure maximum sample recovery. Sample recoveries at Canbelego were typically good for both RC and DD, apart from when voids were intersected, which was rare. The void intervals were recorded on geological logs.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 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. The drill core and RC chips are stored at Helix's secure facility in Orange. The drill core and RC chips were 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. 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 underestimated 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. Diamond core and RC chips were logged to an appropriate level of detail to increase the level of geological knowledge and increase the geological understanding of the deposit.

Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected includingfor instance results for field, duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled 	 Drill core was cut with a Corewise automatic core cutter, and a half core sample was collected for laboratory analysis. The RC drilling rig was 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. All RC samples were split using the system described above to maximise and maintain consistent representivity. The majority of the samples were dry. Bulk samples were placed in green plastic bags, with the sub-samples placed into calico sample bags. Field duplicates were collected by spear from green plastic bags. These duplicates were designed for laboratory checks. Certified Reference Material (CRM) standards and blanks are inserted into the sample stream at approximately 1:35. Laboratory duplicate samples are split with a riffle splitter. 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.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 ALS Laboratory Services completed the Au and multi-element analysis work carried 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: Crush and pulverize sample. Au-AA25 Ore Grade Au 30g FA AA Finish (only on selected samples) ME-ICP61 48 element 4 acid digest ICP-AES. OG62 Ore Grade finish for non-Au over range samples. The QA/QC data includes standards, duplicates, and laboratory checks. Duplicates for percussion drilling are collected from the one metre sample bag using a spear. QA/QC tests are conducted by the laboratory on each batch of samples with CRM standards.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Assays results are validated by standard database procedures and are verified by Helix management. Assay data are not adjusted. Geological data is logged into laptop using OCRIS mobile software. This software includes validation procedures to ensure data integrity. Logged data includes detailed geology (weathering, structure, alteration, mineralisation), sample quality, sample interval and sample number. QA/QC inserts (standards, duplicates, blanks) are added to the sample stream. Magnetic susceptibility data is collected using a datalogger. All logged data, the assay data received from the laboratory, and survey data is loaded into a secure database and verified.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 The drill collar positions were determined using a GPS (±5m). Grid system is MGA94 Zone 55. Surface RL data collected using GPS and verified by public Digital Elevation Models. Relief with the drilling zone ranges from 0m to 15m.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Drilling has been conducted by Helix, Aeris (Straits) and historic drilling by companies in the 1970's. The drilling had been conducted in a manner consistent with the procedures set out in this JORC table. Assays used in the current resource were generated by Straits or Helix and include some re-sampling of the historic core.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 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. The distribution of copper is known to be variably enriched and depleted within the structurally controlled, sub vertical copper deposit at Canbelego. Drilling is designed to intersect mineralisation as close to perpendicular as possible. 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. Drill hole intersections of mineralisation are not considered to be biased.
Sample security	• The measures taken to ensure sample security.	• 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

Criteria	JORC Code explanation	Commentary
		appropriate documentation listing sample numbers, sample batches, and required
		analytical methods and element determinations.
Audits or	• The results of any audits or reviews of sampling	• The drilling database was audited for the updated 2023 Mineral Resource Estimate.
reviews	techniques and data.	Refer to further details provided in Section 3.

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	 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. 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. 	 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. The tenement is in good standing. There are no known impediments to operating in this area. The drill area is situated in a vegetated grazing paddock and can be accessed all year round.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Previous drilling, soil sampling and early geophysics was conducted by Straits (Aeris) and companies during the 1970's. Several small historic mines and workings are present throughout the tenement.
Geology	Deposit type, geological setting and style of mineralisation.	The project is prospective for structurally controlled copper.
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	 No new exploration results are reported in this release. 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.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 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. 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. 	 Assays included in intercept calculations are weighted by interval width. 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. Cu intercepts were calculated for Cu cut-off grades of 0.1% Cu, 0.5% Cu and 1% Cu. No assay cut of high-grade material has been applied. No metal equivalent values have been calculated.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. 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'). 	 Drilling is designed to intersect mineralisation as close to perpendicular as possible. Drill hole deviation will influence true width estimates of mineralisation. 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. True width will be further assessed on analysis of orientated structural data and when the resource model is updated.
Diagrams	 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. 	 Refer to Figures in this announcement.
Balanced reporting	 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. 	 The reporting is balanced, and all material information has been disclosed.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further DD and RC drilling, assaying and EM surveys are planned. Regional auger soil sampling and lag sampling is also planned.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 The database is contained in the Micromine software. Drillholes CH1 to CH9, drillhole CH10A, and CH10B were removed from the database due to doubts relating to the sample locations. The validation tools within the software have been used to check the data, checking for missing intervals, missing hole ID, intervals exceeding total depth. Three abandoned drillholes were removed from the database, CANDD008, CANDD016B, CANDD018. Nine drillholes had no survey at zero depth, this was added to the database. Eleven CH series drillholes drilled in 1974 have not been utilized for interpretation and were not utilized for the MRE. The drillholes are percussion holes and the veracity of the drillhole data is questionable, resulting in their exclusion. Drillholes CANRC001 to CANRC017 were adjusted by Helix Resources Geological staff to best fit, due to uncertainty regarding the initial collar position, these drillholes were included within the interpretation and modelling only where consistent with the adjacent mineralized lodes. The dip field in the survey file was positive, this was changed to negative to ensure the drillhole trace extended downward. The collar file, downhole survey file, and the interval files were added to the database, which cannot be saved if it has validation issues, all validation issues between files were resolved prior to creating the database file. 1,844 assays are in the database above the 0.1% Cu geological cut-off grade within the wireframes. 13,299 assays are in the database below the 0.1% Cu geological cut-off grade.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• A site visit to Canbelego project was conducted by MEC Mining Principal Resource Geologist Mr. Dean O'Keefe on the 7 th of December 2022, accompanied by Helix Resources Limited Exploration Manager Mr. Gordon Barnes.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions 	 The deposit is dominated by a Main lode that has strong continuity. The lode is continuous along strike and down dip, and dilates in some areas where the thickness increases. The lodes pinch and swell. A number of parallel lodes occur adjacent to the Main Lode. In addition to the eastern lodes, central and western lodes run almost parallel to the eastern lodes, however, the mineralisation is

Criteria	JORC Code explanation	Commentary
	 made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 patchier and is not drilled out sufficiently to currently state economic Mineral Resources. The lode geometry and continuity are strong. All interpretation was snapped to the drillholes in 3d. Interpretation was conducted in section. The interpreted lodes were wireframed to create mineralised envelopes that were then used to constrain the block model. The Geological cut-off used to differentiate mineralised material from weakly mineralised material was 0.1% Cu. A minimum of two intervals were used for the interpretation of the mineralised envelope, with maximum total internal waste of two metres included, providing the minimum composite grade was above 0.1% Cu. A lithological model was built for Canbelego using the Leapfrog software by Helix Resources geological staff. The model was a representation of the understanding of the geology of the deposit. Most structures were internal, such as folding and there were no significant structures that resulted in dislocation of the ore lodes. The Main lode was distinct from parallel lodes with the occurrence of higher grades often above 2% Cu. This provided a signature that could be traced between drillhole intersections.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The Main Lode has a strike extent of 350m, a true thickness averaging ~5m, and a true depth of ~600m. The Main Lode pinches and swells and although continuous can be highly variable in width. Smaller lodes occur parallel and adjacent to the Main Lode.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous 	 During geological modelling using Micromine software the strings were extrapolated to half the section spacing, and a shorter distance at the base of the deposit. The wireframes were extrapolated to half the section spacing and, in some instances then scaled to 90% of the original. A historic Mineral Resource estimate was conducted in 2010, significant additional drilling has since been completed resulting in an increase in tonnes and grade as shown for the "Current Mineral Resource estimate, June 2023".

Criteria	JORC Code explanation	ommentary					
	estimates and/or mine production records and whether the Mineral Resource estimate takes			MRE 20	010	MRE Ju	ine 2023
	 The assumptions made regarding recovery of by- products. 	MRE cu	it-off Cu%	Tonnes	Cu%	Tonnes	Cu% cut-off 12
		0.3% Cu	u Cut-off	1,500,000	1.20	1,830,000	1.74
		• The CP believe		ntum of cha	nge and	increase in ho	1.74 oth tonnage and grade
	• Estimation of deleterious elements or other non- grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	from previous higher grade a • All blocks with	Mineral R and extende	esource esti ed lodes, pro ck model we	mates to duced fro ere restri	be consister om the addition cted to the w	it with the addition of onal drillhole assays. vireframes. The parent
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	block size was 5m east, by 10m north, and 2.5m in elevation. Parent cells were su blocked to 1m east, by 2m north, and 1.25m in elevation. The Run 1 search ellips was orientated 170° strike, 0° plunge, and -75° dip to the west, with 8 sector maximum points 5 per sector. The Run 1 search ellipse radius was 70m down dip		. Parent cells were sub ne Run 1 search ellipse west, with 8 sectors, us was 70m down dip,			
	 Any assumptions behind modelling of selective mining units. 	 49m along strike, and 21m across strike. The Run 2 search ellipse had the same properties with a greater search ellipse radius of 150m down dim. 105m along strike, and 45m across strike. 	ater search ellipse				
	 Any assumptions about correlation between variables. 	• Run 3 had no r	e required minimum h	for both Rur oles criteria	1 and Ru and was	un 2 to popula set at 500m ir	ite blocks. norder to populate all
	 Description of how the geological interpretation was used to control the resource estimates. 	remining blockThe sectors we	ks. ere employ	ed to declus	ter the da	ata on the fly.	
	• Discussion of basis for using or not using grade cutting or capping.	 The drillhole s variable rangir were selected 	pacing alor ng from arc to provide	ng strike is a ound 30m to resolution v	opproximation around vithin the	ately 35m, an 100m. The pa narrow lodes	d down dip it is highly rent block dimensions s, and 10m along strike
	• The process of validation, the checking process used, the comparison of model data to drill hole	to match the 35m spacing, without havi Mineral Resource estimate.	having b	locks too sma	Il which may bias the		
	data, and use of reconciliation data if available.	• The estimation method was Ordinary block kriging with discretization of 2 x 2 x 2 within the parent cells. The points were estimated and then averaged to produce the block estimate. Parent cells were estimated, and the grade defaulted to the subcells within the parent cell.					
		 Geometric ani experimental defaulted to al 	isotropy wa semi-vario Il three vari	as modelled gram prope iograms.	for the t erties inc	three experim cluded a nug	eental variograms. The gget of 0.53 gamma,
		• The experiment spherical mode	ntal semi-v el.	variograms v	vere moo	delled with tw	vo components and a
		 Experimental v 0.37 gamma, r 	variogram 1 range 35.8n	L; 170° strike n; Compone	։, 0° plunք nt 2, part	ge, 40m lag; Co ial sill 1.95 ga	omponent 1, partial sill mma, range 112m.

Criteria	JORC Code explanation	Commentary
		 Experimental variogram 2; 260° strike, -75° dip, 45m lag; Component 1, partial sill 0.37 gamma, range 35.5m; Component 2, partial sill 1.95 gamma, range 67.5m. Experimental variogram 3; 80° strike, 15° plunge, 2m lag; Component 1, partial sill 0.37 gamma, range 2.9m; Component 2, partial sill 1.95 gamma, range 14.9m. Interpolation used only the grades within the wireframes to populate the block model. Grades were composite to equal length within the wireframes prior to interpolation, the composite length was 1m. All composites were started and stopped within the interpreted ore lodes. The Cu% grade was top-cut to 12%, 4 assays were cut, the maximum grade of 17.15% Cu was adjusted to 12% Cu, along with the other three cut assays. The MRE result was validated globally and locally. The global validation result was wireframe volume 770,505m³ versus OBM 760,302m³, the historic mining blocks were removed from the OBM which is the reason for the small discrepancy. The wireframe global grade at zero cut-off was 1.41 Cu% versus MRE 1.56 Cu%, the difference is due to data clustering in the wireframe which is less prominent in the block model. The global validation was acceptable. The local validation was completed by comparing the composite input assay data against the estimated grades. There was a strong correlation with the estimated grades honouring the input data. No support correction was applied to allow for selective mining units at this stage, however, a global affine correction was checked which reduced the overall grade. The correction may be applied at a later stage of modelling when additional drilling has been completed. The parent cells have a cell volume of 125m³.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were established on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The economic cut-off grade of 0.3% Cu was applied to potential opencut Mineral Resources above the 240mRL level. The 240mRL level is approximately 70m from surface. A cut-off grade of 0.8% Cu was applied below the 240mRL level due to the higher costs of exploiting Mineral Resources at depth.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal	• The economic cut-off grade of 0.3% Cu was applied to potential opencut Mineral Resources above the 240mRL level. The 240mRL level is approximately 70m from surface. A short distance (~70M) from surface was selected due to the high strip

-

Criteria	JORC Code explanation	Commentary
	(or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 ratio that results from opencut mining of narrow subvertical orebodies. No pit optimization was conducted to determine a crossover point between opencut mining and underground mining potential. A cut-off of 0.8% Cu was applied below the 240mRL level due to the higher costs of exploiting Mineral Resources at depth. This cut-off grade is comparable with nearby copper projects including the Aeris Resources, Constellation project, also located in the Cobar district which utilized an 0.8% Cu cut-off grade for copper only, primary targets. The CP considered the Reasonable Prospects for Eventual Economic Extraction (RPEEE) to include and exclude ore lodes. Only the eastern lodes within close proximity to the Main Lode passed the RPEEE hurdle. The Western Lodes, Central Lodes, and some Lodes adjacent to the Main Lode that were not within an acceptable distance, were all excluded. Grade is sufficiently high to consider that if a 10% dilution factor was applied the Mineral resource would remain economic. Internal dilution was included within the allowance of internal waste during interpretation.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 No metallurgical assumptions were made for the Mineral Resource estimate. Metallurgical testwork and scoping studies will be completed in the future.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a 	 No environmental assumptions were made for the Mineral Resource estimate. Scoping studies will assess these requirements in the future.

-

Criteria	JORC Code explanation	Commentary
	greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 The weathering surfaces were defined from drillhole logging. Three zones were determined, the oxide, transitional, and fresh zones. These surfaces were assigned to the density data to separate the measurements to allow the calculation of average density values for each zone. 10 SG determinations were completed for the oxide zone with SG ranging from 2.65 t/m³ to 3.01 t/m³ for an average of 2.798 t/m³. 17 SG determinations were completed for the transitional zone with SG ranging from 2.69 t/m3 to 3.12 t/m3 for an average of 2.834 t/m3. 132 SG determinations were completed for the fresh zone with SG ranging from 2.65 t/m3 to 3.3 t/m3 for an average of 2.860 t/m3. Densities were determined from core and pulps. The core viewed by the CP was very competent, and the CP believes the results to be representative. The average overall density for all zones is 2.84 t/m3.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The lode geometry and continuity are strong. The veracity of the underlying QAQC data is acceptable. The drillhole spacing along deposit strike is approximately 35m, and down dip it is highly variable ranging from around 30m to around 100m. The density values are acceptable. The Mineral Resources were classified as both Indicated and Inferred category Mineral Resources. Classification was based upon spacing using a search ellipse to establish Indicated Mineral Resources using minimum three drillholes with ellipse dimensions of 45m down dip, 32m along strike and 14m across strike. After the blocks were informed, all islands were then tidied up manually, to create discrete classified areas. Remaining blocks were assigned an Inferred Mineral Resource category as the distance in three dimensions was acceptable to denote as Inferred classified Mineral Resources as opposed to unclassified Mineral Resources. The result does reflect the Competent Persons view of the deposit.

Criteria	JORC Code explanation	Commentary		
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	 An audit of all exploration work contributing to the Mineral Resource estimate was conducted by MEC in December of 2022. This audit identified areas to be addressed, such as a requirement for additional density measurements, a requirement for umpire assays to check for laboratory baseline difference, and further sample recovery data. These issues were addressed by the Helix Resources geological staff prior to completion of the 2023 Mineral Resource estimate. 		
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data where available. 	OBM wireframe validation. All		
		Volume m ³ Cu %		
		OBM 760,302 1.56		
		Wireframe 770,505 1.41		
		 The wireframe volume is 770,505m3 versus OBM 760,302m3, the historic mining blocks were removed from the OBM which is the reason for the small discrepancy. The wireframe global grade at zero cut-off was 1.41 Cu% versus 1.56 Cu% due to data clustering in the wireframe. The difference between the wireframe volume and the OBM volume is very small. Global validation is acceptable. The local validation was checked in cross section by comparing the OBM grade to the sample grade used for interpolation. The modelled grades correlate closely with the input sample grades. The kriging variance was not used for classification, at an early stage of Mineral Resource estimation, which does not have any significant underlying issues, the sample spacing was deemed a suitable method for classification by the CP. However, the kriging variance was checked, and it matched closely with the classification based on spacing, a lower kriging variance occurred in the same areas designated as Indicated Mineral Resources. 		

> data is available for accurate reconciliation and the exact underground workings extent has not been established. A buffer zone was identified for the workings and depleted from the 2023 Mineral Resource estimate. No further production has occurred.