

ASX Announcement

25 May 2020

# NSW Project Update

## New Gold Targets Identified, Copper Studies Underway

Helix Resources Limited (ASX:HLX) (**Helix** or the **Company**) is pleased to announce an exploration update from its Central NSW projects.

### HIGHLIGHTS

#### Cobar Gold Project

- **Comprehensive review completed** of the Cobar Gold Project assessing exploration potential for large scale gold systems with strong similarities to the nearby Peak Trend gold field (+4Moz.)
- **Several new, high priority targets identified** using remote sensing data, available geochemistry and structural interpretation.
- First pass field assessment of historic workings and priority structural positions has commenced with 70 rock-chip samples collected.
- Several new targets located in the northern portion of the historic goldfield, with site access only recently granted.
- Understood to be the first field reconnaissance by any company in over 16 years, with only very limited and sporadic surface sampling evident in modern times.
- Rock-chip samples have been dispatched to the laboratory for assay with results pending.

#### Collerina Copper Project

- Scale potential confirmed and geophysical targets defined for additional shoots from 2020 drilling <sup>(Refer ASX releases on X & Y)</sup>
- New 3D implicit modelling including 2020 drill results nearing completion.
- Consulting engineers engaged to assess conceptual pit designs.
- Modelling and conceptual pit will be used to prioritise future drill targeting within the new target zones.

Helix Executive Chairman, Peter Lester, said: *“Helix has taken full advantage of the recent lock-down period to undertake comprehensive technical reviews of our high-quality NSW assets. Recent advances in resolution and access to remote-sensing data, combined with reviews of our broader exploration datasets, has resulted in compelling target outcomes for both our copper and gold projects. Significantly, at the Cobar Gold Project, studies have highlighted the potential for new large-scale gold-systems with a series of quality priority targets identified. Helix has also recently gained ground access to the northern 50km<sup>2</sup> of the goldfield, believed to be the first time in a couple of decades. First-pass field examinations have commenced, with the first batch of rock chips from this area dispatched to the laboratory for assay. Meanwhile our flagship Copper Project, Collerina, is receiving initial conceptual open-pit design studies and new target 3D implicit modelling of the mineralisation. These studies will help refine the positioning and priorities for the next phase of exploration, targeting the new copper zones identified in the breakthrough drilling earlier this year. We are genuinely excited by the value opportunities emerging from these reviews and studies.”*

## Cobar Gold Project

The Cobar Gold Project comprises a landholding of ~600km<sup>2</sup> within 50km of the mining hub of Cobar in Central NSW. The project encompasses the entire historic Battery Tank gold field within a prospective geological setting, and hosts regionally significant structures. The geological and structural setting is analogous to the nearby multiple-mine Peak Trend (over 4 million ounce gold endowment) refer Figure 1.

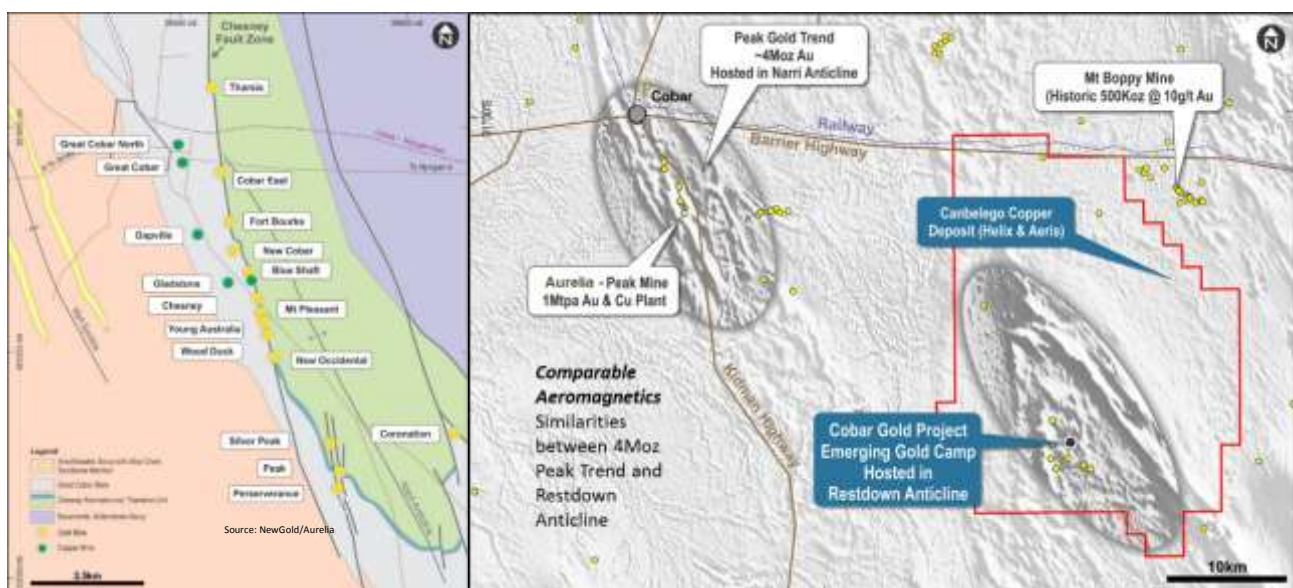
### Key Features of Project

- Potential for the delineation of substantial gold deposits as evidenced from previous drilling which has returned intersections including –
  - **20m @ 25.5g/t Au and 39m @ 2.4g/t Au<sup>1</sup>** – Good Friday,
  - **45m at 3.4g/t Au, and 70m at 1.1g/t Au<sup>1</sup>** - Boundary Prospect,
  - **28m @ 2.3 g/t Au<sup>1</sup>**: Sunrise Prospect and
  - **43m at 2.3g/t Au<sup>1</sup>** at Battery Tank.
- An Inferred 100,000oz gold JORC2012 oxide gold resource (refer to table A &B) – derived from these four prospects, with opportunity to significantly expand with further drilling.
- Resource grade intersections from near surface in first-pass drilling, and high-grade rockchips at new prospects requiring immediate follow-up drilling.
  - **20m at 1.1g/t Au<sup>1</sup>** at Reward Prospect,
  - **17.7g/t Au<sup>1</sup>** rockchip from historically mined lode at Lone Hand Prospect and
  - **2.2g/t Au<sup>1</sup>** from grab sample of spoil at the Girl in Blue Prospect.
- Several other historic prospects exist with shafts, pits and dry blowing activity evident, including Homeward Bound and Republic Prospects.

### Geology Review

During the COVID19 lock-down, a comprehensive technical review was undertaken. Using high resolution satellite data (photo imagery and spectral data), our structural interpretation, overlaid with both Company and historic geology, geophysics and geochemical databases. A large gold system model was developed and a series of specific target areas were identified and prioritised.

The exploration model shows common geological features to Aurelia's nearby Peak Gold Trend (4Moz gold endowment). There, short strike, near vertical deposits of gold and base metal mineralisation to depth over 1 kilometre, are also hosted in an anticline. The gold mines are typically located on or adjacent to regional structures (see Figure 1).



**Figure 1: Local Peak Trend geology and mines – Left, regional geophysics showing similarity in magnetic responses of the two host anticlines Narri (Peak Trend: AMI) and Restdown (Cobar Gold Project: HLX)- Right**

A recent positive development for Helix at the Cobar Gold Project has been gaining access to the northern portion of the goldfield, which encompasses the fold closure of the Restdown Anticline (see Figure 2). This part of the project had not been accessible since Helix's involvement in the region. It is believed that no company has had access to the area since at least the early 2000's, with only minor surface sampling evident from public domain data, mostly collected in the 1980's. The limited and broad spaced surface sampling indicate pathfinder minerals (arsenic and antimony) are both present and elevated in the fold nose area.

The fold nose target zone covers approximately 50km<sup>2</sup>. For this first-pass assessment, 70 Rock-chip samples have been collected from priority structural and geological targets. The initial first batch of samples have been sent to a laboratory for assay and results are pending.

With COVID19 travel restrictions easing, exploration activities are now expected to continue throughout the winter field season. Approximately 50 priority points of interest have been identified across the goldfield during the review. Each of these are expected to be visited and assessed for gold prospectivity.

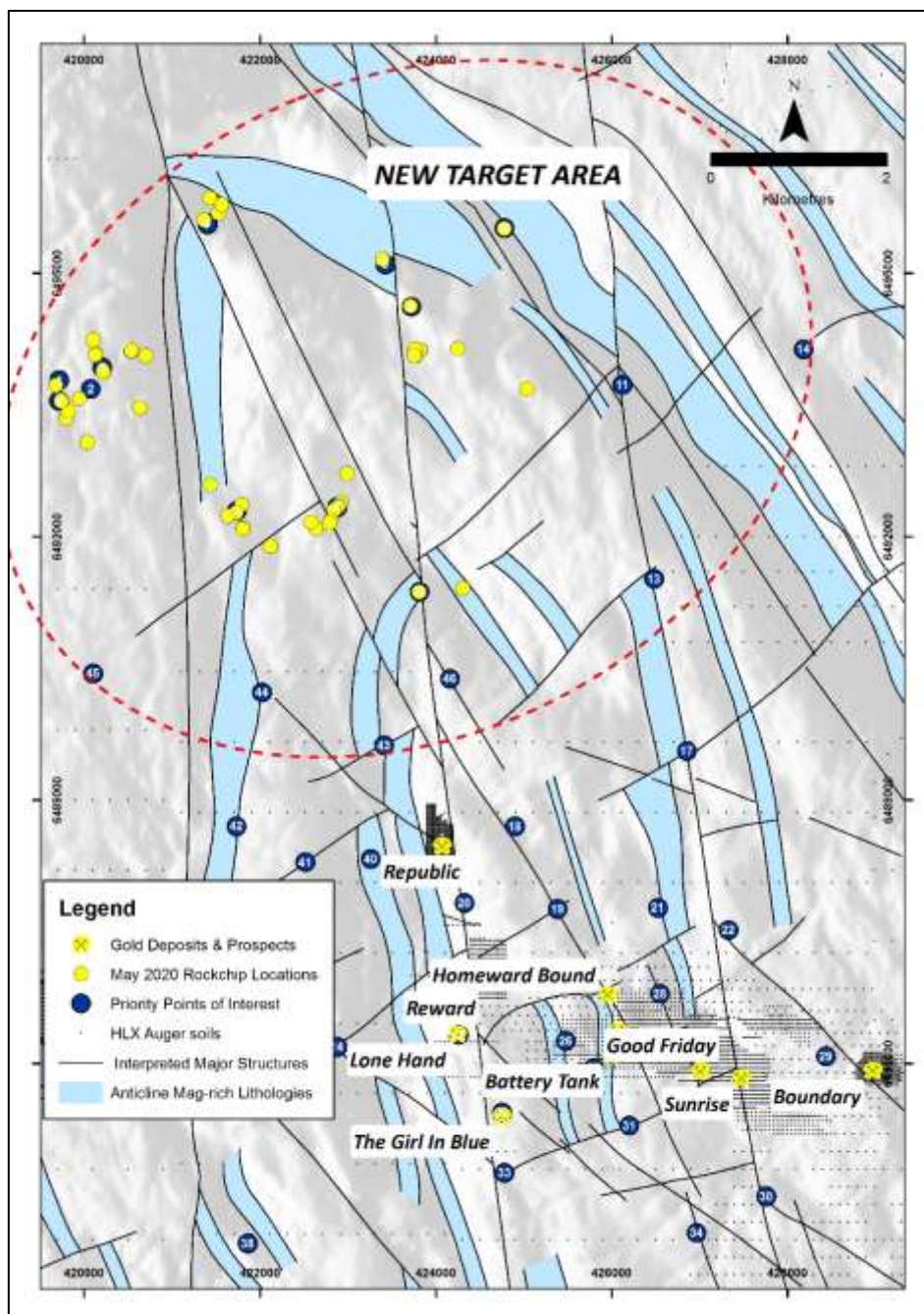
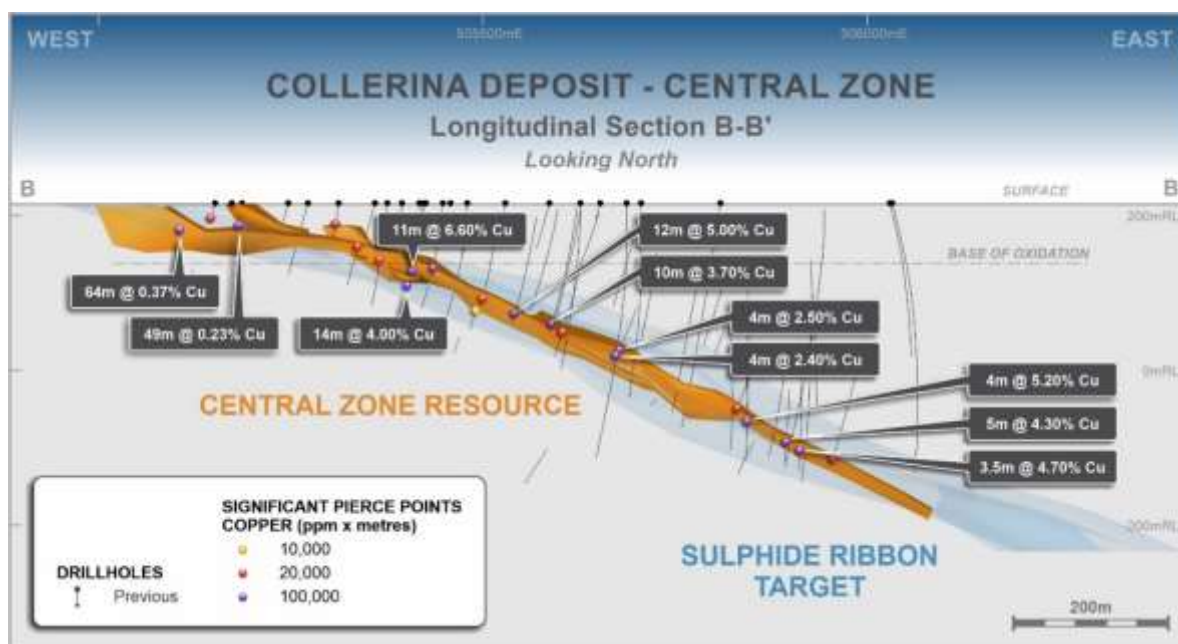


Figure 2: Location of May 2020 rock chip samples, priority pts of interest and known prospects in the Battery Tank Goldfield, over aeromagnetics outlining the structurally disrupted host Restdown Anticline

## Collerina Copper Project

The primary objective of the RC drilling program completed at the Collerina Copper Deposit earlier this year was to test for further high-grade copper mineralisation in the Exploraton Target zone immediately surrounding the initial Central Zone resource<sup>(refer Table C)</sup>.

The drilling program successfully identified new zones of high-grade copper well outside the current Central Zone resource envelope (see Figure 3). These results represent significant extensional success and clear validation of the broader Collerina Deposit Exploration Target. Importantly they provide an opportunity to substantially grow the high-grade copper resource at Collerina.



**Figure 3: Schematic long section of the Central Zone Resource envelope showing selected intercepts along the plunge extent of the resource** <sup>(refer Table 1)</sup>

### Engineering and Geological Studies

Helix has recently engaged consultant engineers to model conceptual pit designs for the Collerina Copper Deposit. This pit modelling will use the initial Collerina Central Zone JORC Resource block model, a series of mining cost inputs based on those applicable to the region and various copper prices to produce several pit design scenarios.

In parallel, Helix is undertaking an update of the Exploration Target shape, using 3D implicit modelling, and incorporating results from the 2020 RC drilling data.

The combined studies are expected to provide Helix with a clearer understanding how the pit shape is influenced by the current resource model, and where additional drilling could rapidly maximise tonnes and grade from the deposit in open cut mining scenarios. These studies will influence the design and positions of future drilling programs at Collerina.

### Scale Potential

Down dip from Central Zone

- Massive, semi-massive and disseminated copper sulphide mineralisation was intersected in a targeted zone approximately 180m down-dip from the delineated Central Zone resource envelope.
- The key intercept of **4m @ 3.18% Cu and 0.4g/t Au from 218m (including 1m @ 6.44% Cu and 0.8g/t Au from 218m)<sup>2</sup>** (primary material) was returned in CORC116 (see Figure 4 and 5).

Along strike from Central Zone

- Holes drilled into this extensional target intersected zones of oxide and transitional copper mineralisation in two broad fence lines of drilling. The best result of 11m @ 1.04% Cu (oxide/transitional) from 58m (including 3m @ 2.79% Cu (transitional) from 66m)<sup>2</sup> was returned in CORC107.
- Significantly, these results are interpreted to represent the up-plunge position of the Northern Target Zone. **This implies a full structural repeat of the Central Zone style plunge from surface** as the Northern Target Zone extends to untested FLEM targets approximately 1.5km down plunge (which is approx. 550m from surface).

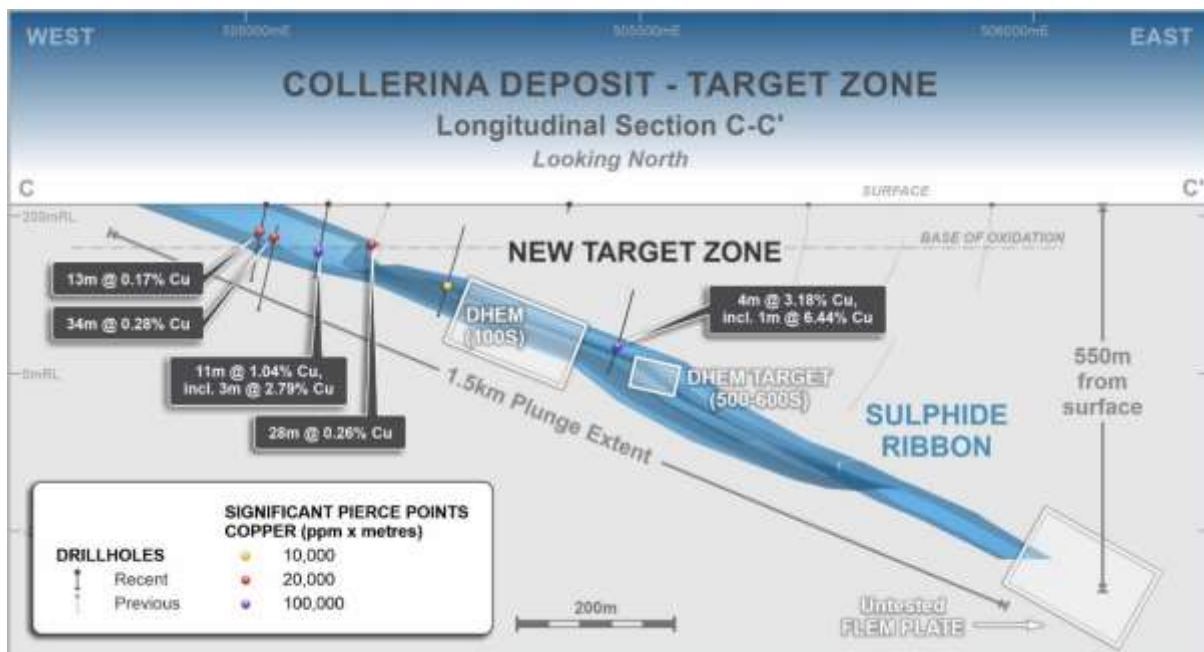


Figure 4: Schematic long section of the Northern Target Zone showing selected intercepts and new EM positions along the plunge extent of the zone down to the FLEM target at depth (Refer Table C)

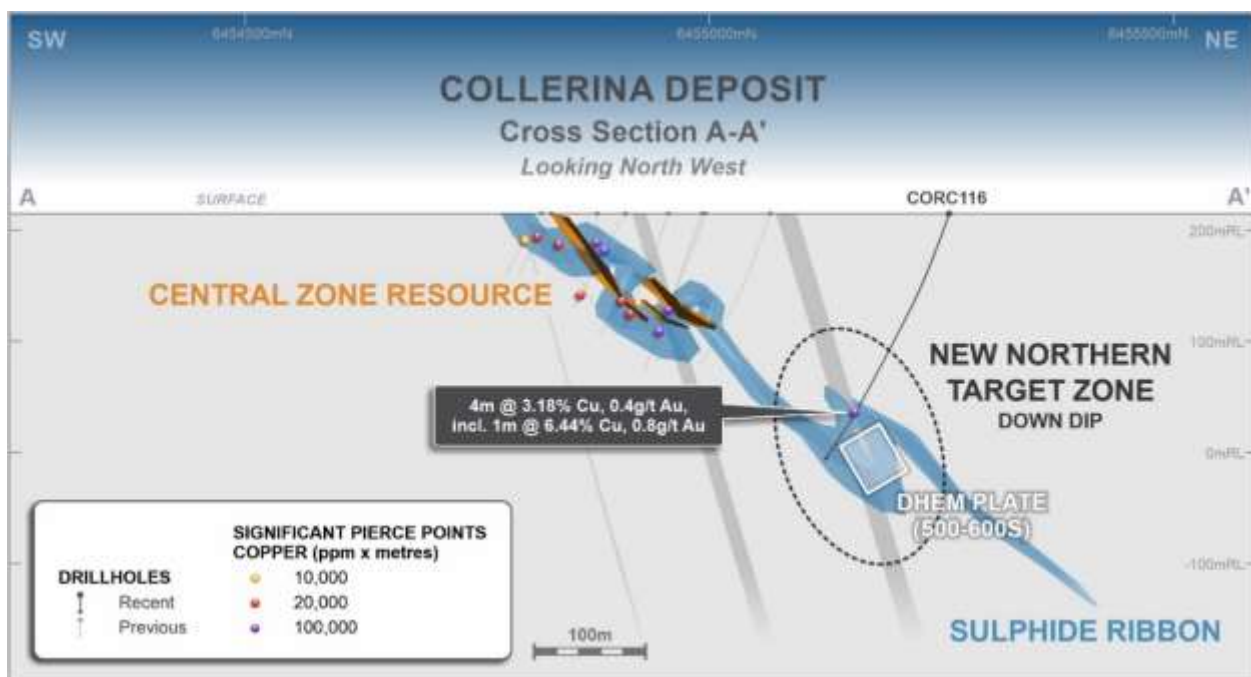
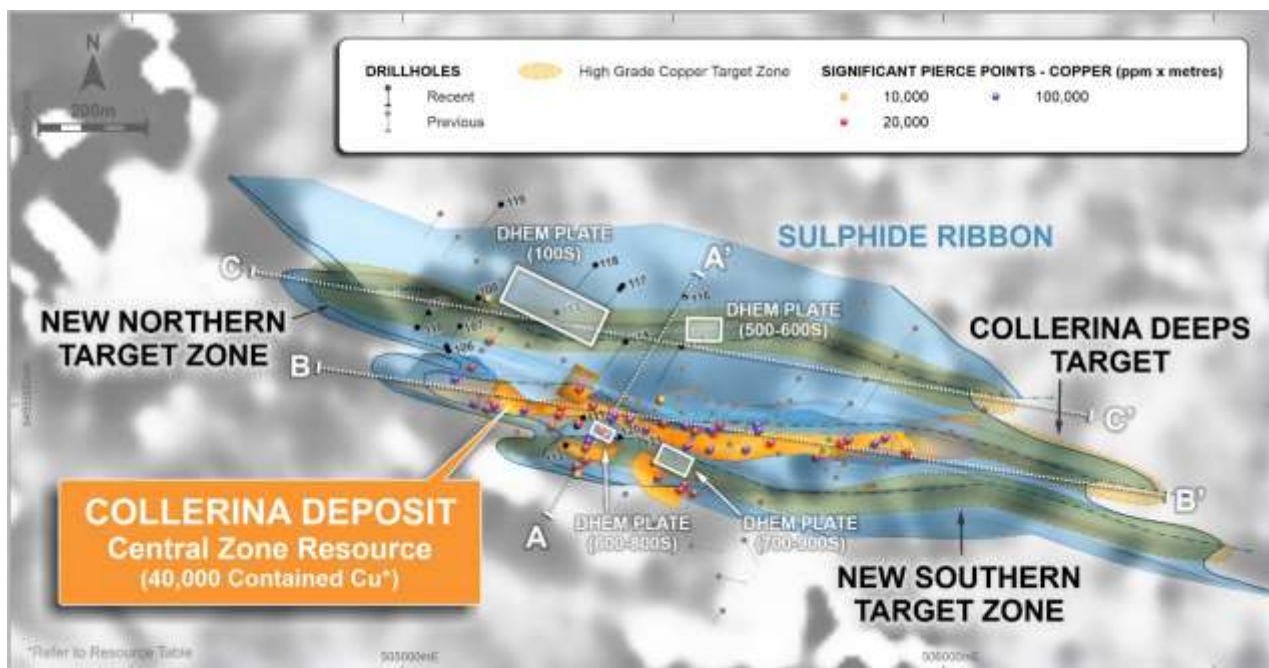


Figure 5: Cross section showing down dip Northern Target Zone located over 180m down dip from current Central Zone Resource envelope

### Footwall to Central Zone

- A broad zone of oxide copper mineralisation had previously been observed in a hole drilled approximately 40m west-southwest of CORC009 (53m at 0.5% Cu from surface, including 5m at 4.2% Cu from 48m to end-of-hole)<sup>2</sup>.
- Targeting a footwall fold nose target, and drilled in the current program, CORC111 returned **46m @ 0.44% Cu from 3m including 1m @ 4.9% Cu from 31m<sup>2</sup>** (massive copper oxide – malachite). This **provides strong confirmation of additional footwall mineralisation behind/below the Central Zone resource (Southern Target Zone)**.
- Broad zones of shallow oxides were also present in CORC112 (12m @ 0.11% Cu from 20m) and CORC120 (30m @ 0.18% Cu from 33m). CORC121 intersected semi-massive chalcopyrite in a fault zone (1m @ 2.88% Cu from 58m)<sup>2</sup>.
- Significantly, the host geology is similar to the Central Zone however appears to be overturned, consistent with a repeat fold closure.

Downhole Electromagnetic (DHEM) analysis has proven to be a highly effective tool for targeting thicker, higher grade copper sulphide mineralisation within the Central Zone Resource envelope at Collerina. DHEM surveys were undertaken on select holes from the recent RC program. A number of strong on-hole and off-hole responses have been identified and plates modelled. The positions of the new plates boost confidence in the plunge targets on both the new Northern Target Zone and the new Southern Target Zone (see Figure 6).



**Figure 6: Plan view of the Collerina Deposit, showing the current resource (Orange) within the new sulphide ribbon (Blue) interpretation. DHEM modelled plates complement recent drilling results confirming strike, dip and plunge extensions well outside the current Central Zone resource envelope.**

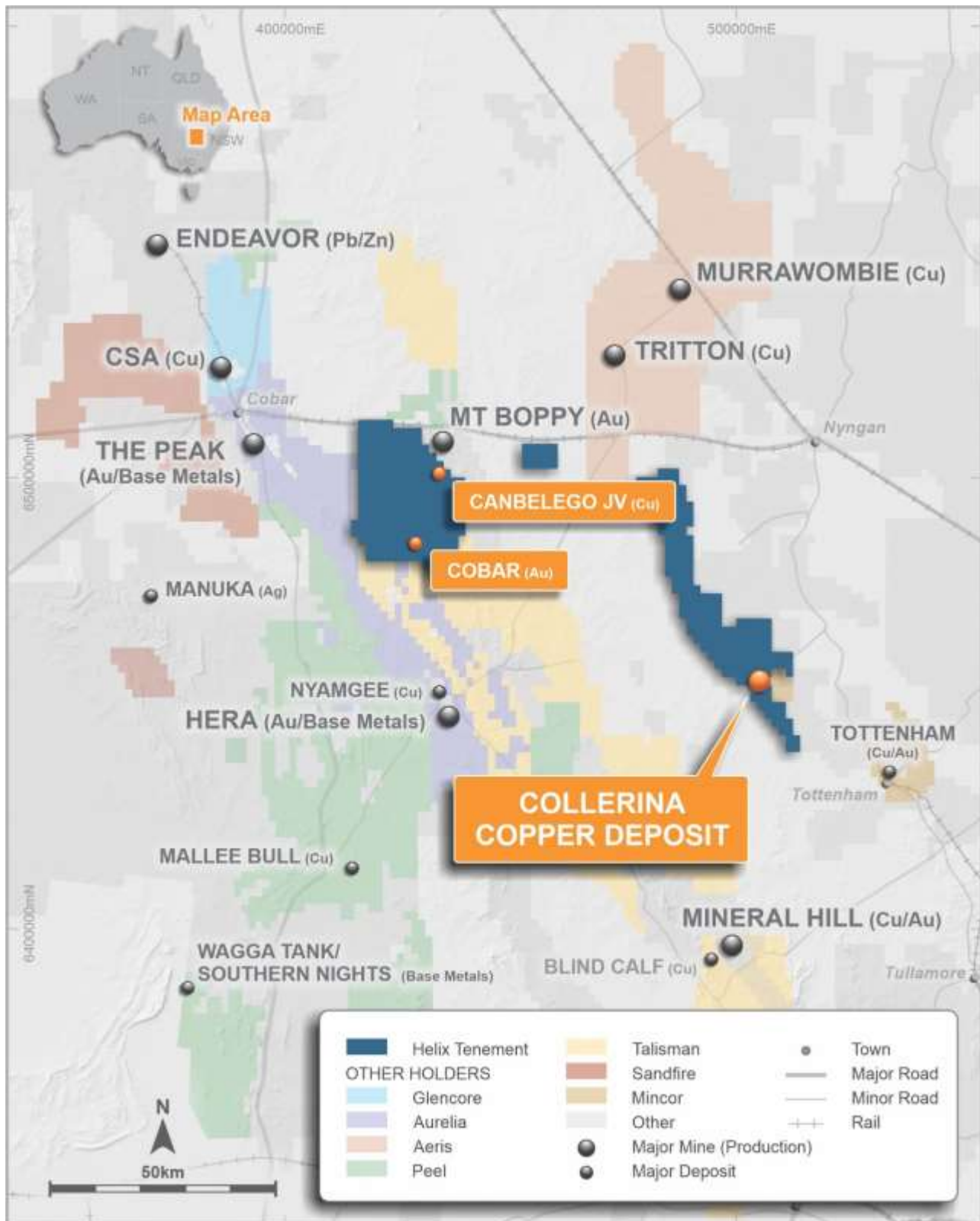


Figure 7: The Collerina Project and Helix's regional assets are located in a proven gold and base metals district with intensive mining and exploration activities across the region.

**This ASX release was authorised on behalf of the Helix Board by: Peter Lester - Executive Chairman**

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<sup>1</sup> For full details of exploration results refer to the ASX announcements 25 Nov 2010, 22 Feb 2011, 24 May 2011, 13 July 2011, 17 Aug 2011, 4 Oct 2012, 24 Jan 2017, 26 Apr 2017, 17 Jul 2017, 23 Aug 2017 and 6 November 2019. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

<sup>2</sup> For full details of exploration results refer to Helix ASX releases dated 4 February 2015, 29 June 2016, 1 December 2016, 3 August 2017, 8 November 2017, 14 February 2018, 27 February 2018, 5 April 2018, 14 May 2108, 13 June 2018, 18 July 2018, 16 November 2018, 10 December 2018, 11 June 2019, 17 November 2019, 4 December 2019, 14 January 2020, 24 March 2020 and 2 April 2020. Helix is not aware of any new information or data that materially effects the information in these announcements.

The Information in this report that relates to Exploration Results is based on information compiled by Mr Michael Wilson, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a full-time employee and shareholder of Helix Resources Limited. Mr Wilson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## **Forward-Looking Statements**

This ASX release may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Helix Resources Ltd.'s current expectations, estimates and assumptions about the industry in which Helix Resources Ltd operates, and beliefs and assumptions regarding Helix Resources Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Helix Resources Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Helix Resources Ltd does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.



## Appendix 1

### Cobar Gold Project Context

The Cobar Gold Project is 30km east-southeast of Aurelia's Peak Gold Operations and only 16km from the privately owned Mt Boppy Gold Mine (historic production 500,000oz at 10g/t average grade). The project shares similar geological and structural controls to the nearby Peak Trend deposits, being relatively short strike sediment hosted and structure related gold deposits. The Cobar Gold project resource estimate was defined below historic prospects (Sunrise, Good Friday and Battery Tank) and an internally generated greenfield discovery (Boundary).

Whilst a high-level mining study assessment is yet to be conducted, the "from surface" nature of the gold mineralisation suggests the deposits may be amenable to initial open cut mining methods. There remains **significant potential for locating additional gold mineralisation throughout the broader goldfield.**

The deposits were mostly delineated by Helix with RC and diamond drilling completed in drilling campaigns between 2011 and 2017. The Mineral Resource is defined by a **total of 135 RC and diamond drill holes for 15,390m** for a total discovery cost per ounce of approx A\$25 per oz.

The Mineral Resources have been classified as Inferred Mineral Resources in accordance with the JORC Code, 2012 Edition and are shown in Table A. This table represents the total resource from deposits and is reported using a cut-off grade of 0.4 g/t Au and a higher cut-off grade of 1.2g/t Au.

Resource interpretations and wireframes were prepared using a nominal 0.3g/t Au cut-off grade. The boundaries were generally modelled as sharp for this resource.

**Table A: Cobar Gold Project 2019 Mineral Resource Estimate (0.4 g/t Au Cut-off)**

Deposit	Classification	Type	Million Tonnes	Au g/t	Au oz
Sunrise	Inferred	Oxide/Trans	1.58	1.1	56,400
Good Friday	Inferred	Oxide/Trans	0.45	0.9	13,700
Boundary	Inferred	Oxide/Trans	1.54	0.9	42,800
Battery Tank	Inferred	Oxide/Trans	0.18	1.0	5,900
<b>Total</b>			<b>3.75</b>	<b>1.0</b>	<b>118,800</b>

(Rounding discrepancies may occur in summary tables)

**Table B: Cobar Gold Project 2019 Mineral Resource Estimate (1.2g/t Au Cut-off)**

Deposit	Classification	Type	Million Tonnes	Au g/t	Au oz
Sunrise	Inferred	Oxide/Trans	0.50	2.1	33,100
Good Friday	Inferred	Oxide/Trans	0.10	1.7	5,300
Boundary	Inferred	Oxide/Trans	0.22	1.8	12,900
Battery Tank	Inferred	Oxide/Trans	0.05	1.9	3,000
<b>Total</b>			<b>0.87</b>	<b>2.0</b>	<b>54,300</b>

(Rounding discrepancies may occur in summary tables)

## Collerina Copper Project context

Helix's 100%-owned Collerina Copper Project is located in the highly active copper/gold mining and exploration district known as the Cobar Basin, within central NSW, Australia.

The Collerina Copper Project comprises a tenement package in excess of 1,500km<sup>2</sup>, including over 85km of copper-prospective trend. It is surrounded by multiple operating base metal and gold mines within the broader Cobar Basin (Tritton, Hera, Peak, CSA; refer Figure 7).

The Central Zone deposit is an internally generated, high-grade copper discovery within the Collerina Copper Project. High-grade results from previous drilling of the Central Zone deposit include: 11m at 6.6% Cu, 12m at 5.0% Cu, 14m at 4.0% Cu and 10m at 3.7% Cu<sup>2</sup>.

In June 2019, Helix announced a maiden resource estimate for the Central Zone deposit of 2.02 Mt at 2.03% Cu and 0.1g/t Au for 40kt copper and 9.4koz gold (Indicated and Inferred) (refer Table C). Almost 50% of that resource tonnage sits in the Indicated categorisation, with the remainder classified as Inferred.

**Table C: Central Zone Mineral Resource Estimate (June 2019) (0.5% Cu Cut-off)**

Classification	Type	Tonnes	Cu	Au	Cu	Au
		Mt	%	g/t	t	oz
Indicated	Oxide / Transitional	0.17	1.1	0.0	1,900	200
Inferred	Oxide / Transitional	0.46	0.6	0.0	2,700	100
<b>Total</b>	<b>Oxide / Transitional</b>	<b>0.63</b>	<b>0.7</b>	<b>0.0</b>	<b>4,600</b>	<b>300</b>
Indicated	Fresh	0.83	2.6	0.2	21,800	6,600
Inferred	Fresh	0.57	2.5	0.1	14,100	2,500
<b>Total</b>	<b>Fresh</b>	<b>1.40</b>	<b>2.6</b>	<b>0.2</b>	<b>35,800</b>	<b>9,100</b>
Indicated	Oxide / Transitional	0.17	1.1	0.0	1,900	200
Indicated	Fresh	0.83	2.6	0.2	21,800	6,600
Inferred	Oxide / Transitional	0.46	0.6	0.0	2,700	100
Inferred	Fresh	0.57	2.5	0.1	14,100	2,500
<b>Total</b>	<b>Combined</b>	<b>2.02</b>	<b>2.0</b>	<b>0.1</b>	<b>40,400</b>	<b>9,400</b>

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 11 June 2019, *Interim Maiden Resource at Collerina Copper Project*. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

The Central Zone resource lies within a larger Exploration Target envelope (which has been constrained between interpreted cross-cutting faults, coincident with the strike of the surface geochemical footprint and shallow copper oxide drilling). The Exploration Target consists of an *additional* 2 – 5Mt at similar grades of approximately 1.5 – 3.0% Cu (representing a potential *additional* 30 – 150kt contained copper).

*While the near-surface strike continuity of the Collerina mineralisation is now well understood, the potential quantity and grade of the Exploration Target remains conceptual until drill tested. Geophysical and structural evidence provides confidence in the geometry and dimensions, however there has been insufficient drilling within these new plunge extensions to estimate Mineral Resources in the broader shape. It should be considered uncertain as to whether further exploration drilling will result in the definition of additional Mineral Resources within or beyond the Exploration Target envelope.*