

## Copper Exploration Update

Helix Resources Limited (ASX:HLX) (**Helix** or the **Company**) is pleased to provide an update on its copper exploration program in the Cobar region of NSW.

Of particular note is that the assay laboratory Helix is using to process samples from recent copper focused drilling has advised the Company that results are unlikely to be available until mid-February. This is due to sustained, overwhelming demand and logistical challenges imposed by COVID-19 restrictions over late December and January in the eastern states. The Company has provided a further update below relevant to the outstanding copper results.

Helix's Managing Director, Mike Rosenstreich commented "*We see exciting opportunities for developing and growing our existing copper deposits in the Cobar region. We have been tackling Collerina for some time – and we think that, subject to the forthcoming assay results, we now have further indications of having intersected an extension of the mineralised horizon, opening up the potential for a high-grade shoot parallel to the Central Zone, which will enable us to step-out the drill spacing 'more boldly' to hopefully achieve larger increments in the defined copper mineralisation for each drill hole. The assay turn-around times are frustrating, but we are making the most of this time to upgrade more advanced targets with surface geochemical sampling and geophysical surveys.*"

### Exploration Update

In late 2020 the Company focused its copper exploration work on the Rochford Trend which includes the Canbelego Copper project and the new Bijoux prospect (refer Figure 1: Outline (red) of Helix's copper and gold prospective land position in the Cobar Region of NSW, draped on TMI aeromagnetic image). Please refer previous update dated 23 December 2020.

Most recently, copper exploration completed includes extensional reverse circulation (RC) drilling surrounding the Collerina Copper deposit and scout RC drilling at the Bijou Prospect, as updated below:

#### Collerina

*Extensional Drilling* – 9 RC drill holes testing:

- Northwest extensional shallow, copper oxide mineralisation.
- New 'parallel' copper rich shoot positions.

Geological logging indicates the presence of shallow oxide copper mineralisation over widths consistent with the Central Zone oxide zones - potentially extending the indicated and inferred copper resource (see Appendix 1) along strike to the west. (refer Figure 2: 3D schematic of the Collerina Central Zone Copper Deposit showing current drill pierce points, the maiden resource envelope and new target zones.).

Fresh, sulphide copper mineralisation was intersected in the holes targeting new parallel shoot positions. Preliminary interpretations suggest that this extends the mineralised horizon further down dip/plunge and that the drill holes have intersected the margin of a potential new shoot position; defined by the NE plunging fold-hinge zone (refer Figure 3 – Late time FLEM image draped on figure 2 highlighting several untested priority EM

anomalies in the new target zones, as well as the down plunge extension of the Central Zone Resource. Expanding FLEM coverage is a priority.)

*Geophysics* – Four holes have been prepared for downhole EM surveying and an additional Fixed Loop Electromagnetic (FLEM) surveying is planned to extend the geophysical coverage over this zone to define vectors to potential new, parallel, copper rich shoots.

*Commentary* - Subject to receipt of the assay results for these deeper drillholes, the presence of further copper mineralisation over a hundred metres to the northwest and similarly down dip from the maiden Central Zone resource envelope are considered to be encouraging evidence for the potential expansion of the oxide and sulphide resource laterally across a series of parallel shoots. The assay laboratory has reported very high sample volumes and has warned clients of 6-8 week waiting times for results from receipt of the samples. Helix is expecting to receive results by mid-February.

## **Bijoux**

*Scout Drilling (RC)* – four holes testing coincident copper in soil and geophysical anomaly referred to as the Bijoux Prospect occurring along the Rochford Trend. (refer Figure 4: Bijoux Prospect Plan, showing Channel 33 MLEM survey response overlain by scout drilling collars, Bijoux copper-in-soil anomaly (red dashed line) and localised magnetic trend (yellow dashed)).

The Company has previously reported anomalous copper assays for 4 metre composite samples over the areas returning anomalous copper in PXRF readings for the scout holes drilled at the southern end of the Bijoux prospect (BJRC003 & 4). The two scout holes drilled 1.4 km to the north intersected strongly altered and weathered zones beneath the iron-stone outcrops.

In December, the Company was able to secure, at short notice and for a limited time period, the services of a geophysical contractor to complete an initial moving loop electromagnetic (MLEM) survey at Bijoux. A partially defined MLEM anomaly was identified in the NE of the survey area that is coincident with a NW trending subtle magnetic anomaly, copper in soil anomaly and a local topographical high. This is emerging as an important copper target.

As with the Collerina drilling – the remaining Bijoux assay results are subject to delays due to very high demand being experienced by the assay labs and results are also expected by mid-February.

## **Work Planned - near term**

Main targeting tools – are surface geochemistry and localised geophysics (electromagnetics) – guided by regional geology interpretation and geophysical surveys including magnetic and gravity surveys. Priority targets defined in this work are then tested with follow-up drilling.

With COVID restrictions easing again on the east coast, Helix's field crew has returned to Central NSW. On site now, the following activities are planned for this quarter:

### *Collerina*

- Preparation for further DHEM surveys (subject to geophysical contractor availability)
- Additional surface Geochemistry surveys over priority targets on the Collerina Trend
- Planned extension of FLEM survey at Collerina to underpin existing targets.
- Plan and secure statutory approvals for a larger scale, step-out drill program – both RC and diamond drilling to test the full extent of the copper mineralisation at the Collerina Deposit.

### *Bijoux*

- Infill surface Geochemistry surveys at Bijoux to better resolve the copper anomaly.
- Extend the initial MLEM survey to the north and southeast looking to model any bedrock conductors interpreted as copper mineralisation.

- Assimilate data from these surveys with existing geological information to plan follow-up drilling at Bijoux.

The Company looks forward to providing further updates as results become available.

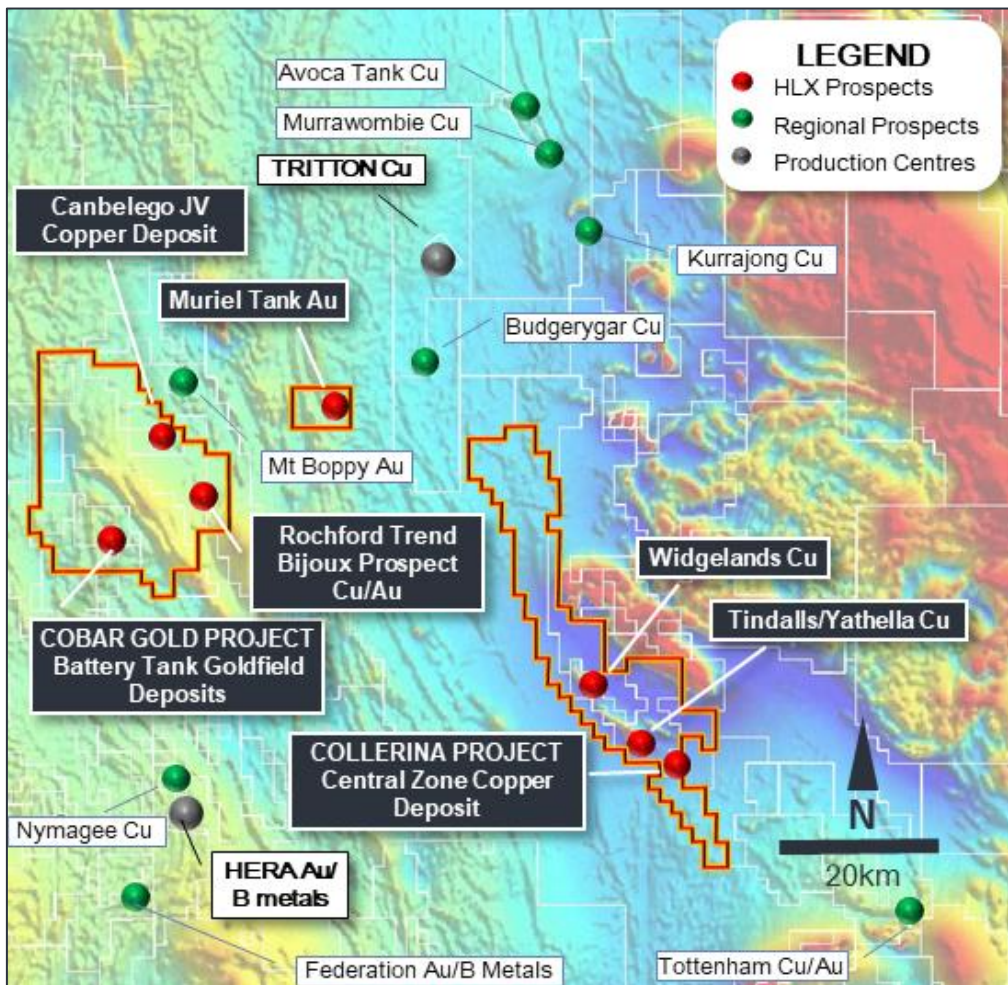


Figure 1: Outline (red) of Helix's copper and gold prospective land position in the Cobar Region of NSW, draped on TMI aeromagnetic image

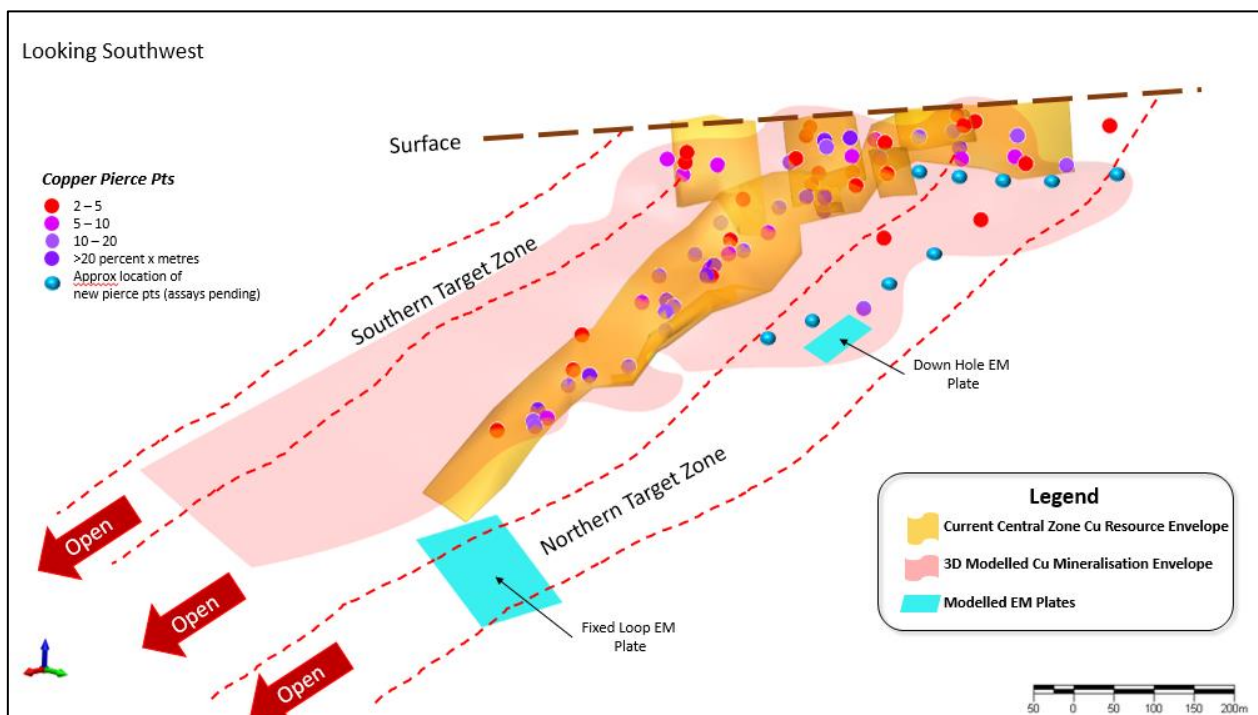


Figure 2: 3D schematic of the Collerina Central Zone Copper Deposit showing current drill pierce points, the maiden resource envelope and new target zones.

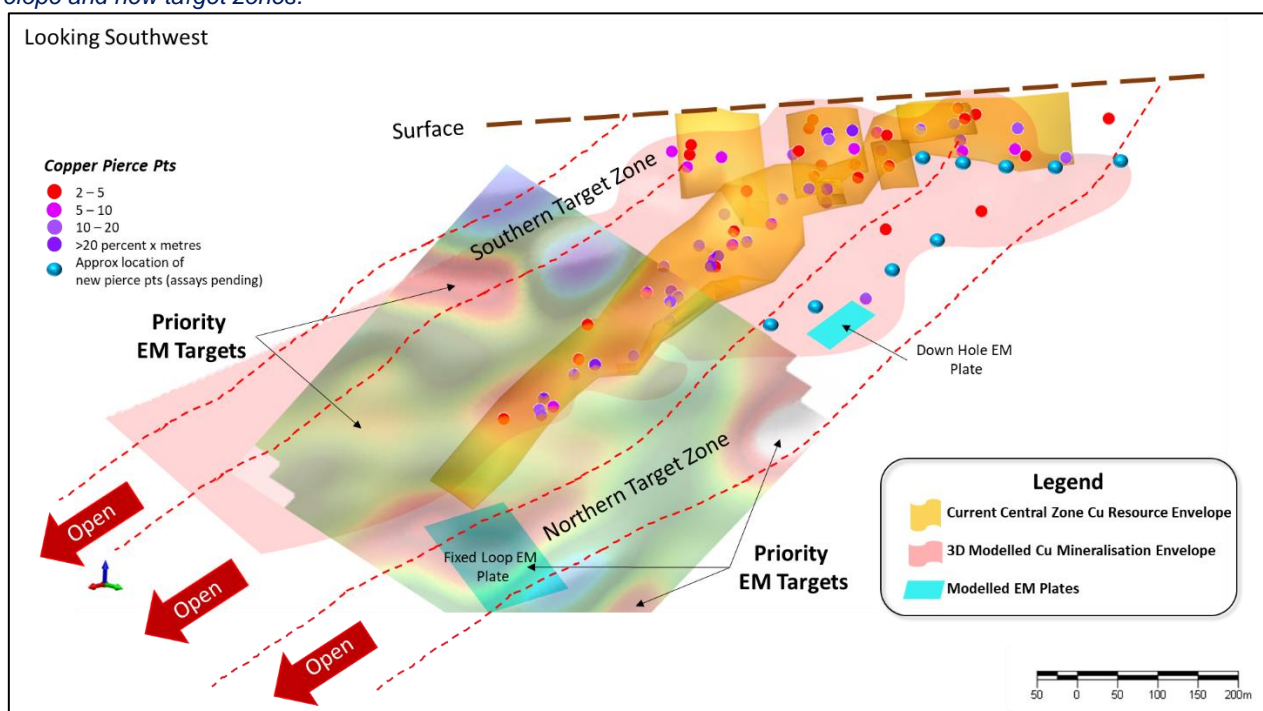


Figure 3 – Late time FLEM image draped on figure 2 highlighting several untested priority EM anomalies in the new target zones, as well as the down plunge extension of the Central Zone Resource. Expanding FLEM coverage is a priority.



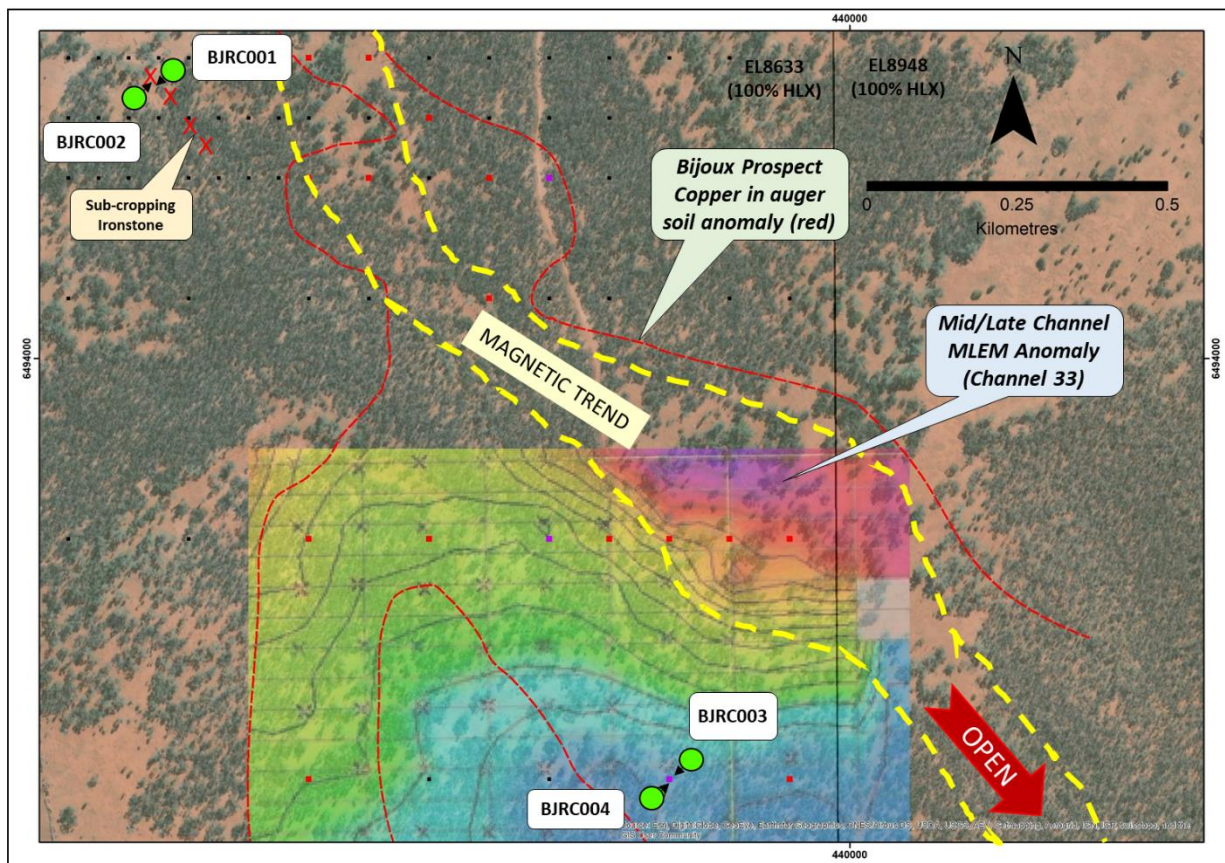


Figure 4: Bijoux Prospect Plan, showing Channel 33 MLEM survey response overlain by scout drilling collars, Bijoux copper-in-soil anomaly (red dashed line) and localised magnetic trend (yellow dashed)

## Competent Person Statement

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.

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



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## About Helix Resources

Helix Resources Limited (ASX:HLX) has been listed on the ASX since May 1986, exploring and developing projects in Australia and globally.

The Company's current focus is its exciting copper and gold projects located near Cobar in New South Wales. The Cobar Region is highly endowed, with a number of gold and base metals mines active in the region including the CSA Mine, Peak Mine, Tritton Copper Operations and Hera Mine.

At the Company's 100% owned **Collerina Copper Project**, the Company discovered the VMS-hosted Central Zone deposit in 2017, with a maiden Mineral Resource defined soon after. The Company is actively exploring in and around the Mineral Resource, looking for both clusters of mineralisation as well as potential extensions to the Mineral Resource.

To the west, the Company's 100% owned **Cobar Gold Project** has identified a number of Mineral Resources, mainly focused around high-grade historical workings. The geology and structure at these prospects are similar to that seen at the 4Moz Peak Gold Mine to the north, where deposits are known to extend to over 1600m depth. The Company is looking to increase the Mineral Resources as well as assess near term mining and processing opportunities.

More recently, the Company identified a 1.7km x 0.7km northwesterly trending zone, which it has called the **Rochford Trend**. Within the trend, the **Bijoux Prospect** was the first drill tested by the Company, with wide zones of anomalous copper identified by pXRF analysis in the field. Detailed gold and base metals assays are pending.

## Appendix 1

### 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 3).

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>1</sup>.

### Mineral Resource

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 1). Almost 50% of that resource tonnage sits in the Indicated categorisation, with the remainder classified as Inferred.

**Table 1: 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.

### Exploration Target

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