

ASX Announcement 16 September 2024

Upgraded Bijoux Copper Anomaly to be drilled in September

- Recent auger geochem results have enhanced the delineation of the higher-grade (+500ppm copper) portion of the kilometers-long Bijoux copper anomaly.
- Helix is mobilising to drill these new areas identified in a 400m long, high-grade portion of the copper auger anomaly at Bijoux in late September.
- Bijoux was a new copper discovery reported on 15 January 2024 where high-grade copper intercepts in several reverse-circulation (RC) holes outlined a 200m long NNW-trending zone which is open to depth and along strike¹. Best intercepts included:
 - o 6 metres (m) at 1.99% copper (Cu) within 36 at 0.99% Cu from 41m in BJRC012 (oxide);
 - o 2m at 5.76% Cu within 10m at 1.48% Cu from 182m in BJRC010 (sulphide); and
 - 4m at 1.90% Cu within 11m at 0.94% Cu from 140m in BJRC013 (sulphide).
- Bijoux is prospective for CSA-type copper deposits and represents an important copper discovery beyond our Canbelego Mineral Resource² located 9km to the north.
- Exploration is progressing on multiple fronts across Helix's NSW tenements. In addition to the upcoming Bijoux drill program:
 - Auger drilling has commenced at the Muriel Tank historical gold field to test for extensions to existing high-grade gold veins and historical workings
 - Geophysical contractors have been secured for the Legacy Minerals JV, Cobar project to undertake surface electromagnetic surveys on multiple high priority targets. Helix geologists are now on site to confirm logistics, access and undertake reconnaissance mapping over the targets.

Helix's Managing Director, Kylie Prendergast commented: "We are very excited to be resuming drilling at Bijoux. The new copper auger results clearly show the extension to the known drilled copper zone, providing an obvious pathway for the follow up drilling to extend zones of higher-grade oxide and sulphide copper mineralisation. Helix is treating this area as a copper camp that contains a series of robust surface copper geochemistry targets, and the strategy is to discover new CSA-style copper lodes within these anomalous outlines. CSA-style copper lodes are high-grade, vertically extensive bodies of copper that can be continuous to depths of 2 kilometres (such as the nearby CSA copper mine operated by ASX:MAC). Helix has proven that viable CSA-style copper lodes occur on our tenements such as the copper Mineral Resources in the Canbelego Main Lode².

The objective of the current exploration programs is to identify additional copper mineralisation in a near surface setting (<400m depth) to grow the existing Mineral Resources. Helix considers active exploration of high-quality targets for new copper, gold and base metal deposits will create value for shareholders."

View this announcement on our Investor Hub: <u>https://investorhub.helixresources.com.au/link/KyzqXP</u>

² Refer to Helix ASX report 14 June 2023 & Appendix A for details on Canbelego Main Lode Mineral Resource



JOIN THE HELIX RESOURCES INTERACTIVE INVESTOR HUB

Visit <u>https://investorhub.helixresources.com.au/welcome</u> for Helix's interactive Investor Hub Helix Resources Ltd ABN 27 009 138 738 | Level 4 225 St Georges Terrace, Perth WA 6000 | +61 8 93212644 ASX: HLX & HLXO

¹ Refer to ASX report dated 15 January 2024

Helix Resources Ltd (**ASX:HLX**, Helix or the Company) is pleased to announce that drill testing of recently defined high tenor copper zones within the larger Bijoux auger copper anomaly will commence in late September 2024. The Bijoux prospect is located in Helix's western tenements. This program is part of Helix's ongoing target generation and testing program aimed at making new copper (and gold) discoveries in the Cobar-Nyngan area of central NSW.

Technical Report

Introduction

The Rochford Copper Trend is a 30km trend with historical mines and copper prospects (**Figure 1**). The Company has undertaken an extensive geochemical sampling program over the Rochford Trend which generated significant copper (Cu) geochemical anomalies³. One of these is the Bijoux Prospect, where a 1.6km x 0.6km copper anomaly was defined by extensional auger sampling and where follow-up reverse-circulation (RC) drilling was undertaken in November 2023.



Figure 1 – Location of the Bijoux copper target, 9km south of the Canbelego project.

Scout Reverse Circulation (RC) drilling at Bijoux in the southern Rochford Trend was completed in late 2023. A total of nine RC holes (BJRC006 to BJRC014) for 1,716m were completed (**Figure 2**)⁴. Copper mineralisation was reported from all nine RC holes. The following significant copper intercepts in both the oxide and sulphide zone at the prospect include:

- 36m at 0.99% Cu from 41m including 6m at 1.99% Cu from 62m in BJRC012 (oxide).
- 10m at 1.48% Cu from 182m including 2m at 5.76% Cu from 184m in BJRC010 (sulphide).

³ Refer ASX report 22 November 2023

⁴ Refer to ASX report dated 15 January 2024

• 11m at 0.94% Cu from 140m including 4m at 1.90% Cu from 144m in BJRC013 (sulphide).

The copper intercepts outlined a 200m NNW-trending mineralised zone within Ordovician aged Girilambone Group rocks that dip steeply to the NNE and is open to the NNW and SSE (**Figure 2**). To date, only 200m of the strike extent of the 1.6km long Bijoux copper anomaly has been tested by RC drilling.



Figure 2 – Bijoux RC drilling plan showing interpreted geology and copper intercepts.

Infill Auger Drilling

The objective of the infill auger program was to define further drill targets by delineating higher-tenor copper zones within the broad Bijoux copper anomaly. The infill program closed the sample spacing over most of the anomaly to a nominal 50m x 50m from the initial spacing of approximately 200m x 200m. Assay results have been received for 230 infill auger samples, and a high tenor NW-trending +500ppm copper zone has been delineated over 480m x 120m within the Bijoux copper anomaly (**Figure 3**). The high-tenor zone is defined by 13 samples, 12 of which are infill, with a maximum copper assay of 1773ppm (**Figure 4**). The NW half of the high tenor copper zone has the highest copper assays in an area that has not been drilled previously, and which is immediately along strike of the previously drill defined copper oxide and sulphide mineralisation. This area will be a focus for the upcoming RC drill program.



Figure 3 – Bijoux copper anomaly showing initial and infill auger sampling and the high tenor +500ppm copper zone



Figure 4 – Bijoux high tenor +500ppm copper zone showing previous RC copper intercepts and areas untested by previous drilling. Auger samples with >500ppm copper are labelled.

Next Steps

- Planning for RC drilling is currently underway and will commence in late September.
- Oriented diamond drilling is also being considered at Bijoux to provide structural information and samples for metallurgical test work.
- Infill and extensional auger drilling has commenced in the Canbelego to Caballero corridor at the Canbelego Cu project.
- Auger drilling is in progress at the Muriel Tank Au-Cu project.
- Geophysical contractors have been secured for the Cobar project to undertake surface electromagnetic surveys on multiple high priority targets. Helix geologists are now on site to confirm logistics, access and undertake reconnaissance mapping over the targets.

COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results and geological data for the Cobar projects is based on and fairly represents information and supporting documentation prepared by Mr. Gordon Barnes and Dr. Kylie Prendergast who are both employees and shareholders of the Company. Mr. Barnes and Dr. Prendergast are Members of the Australian Institute of Geoscientists. They both have sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to each qualify as Competent Person(s) as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Barnes and Dr. Prendergast have consented to the inclusion of this information in the form and context in which it appears in this report.

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

ABN: 27 009 138 738 ASX: HLX

Contact Details: Helix Resources Limited Level 4, 225 St Georges Terrace, Perth, WA, 6000

PO Box 7237 Cloisters Square PO Perth, WA 6850

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



Board of Directors:

Mike Rosenstreich - Chair Kylie Prendergast – Managing Director Emmanuel Correia – Non-executive Director

Company Secretary Ben Donovan



Investor Contact: Kylie Prendergast

Media Contact: David Tasker Chapter One Advisers Email: <u>dtasker@chapteroneadvisors.com.au</u> Tel: 0433 112 936

About Helix Resources

Helix Resources is an ASX-listed resources company which is exploring in the prolific copper producing region of Cobar, NSW. The Company possesses a sizable ground position (~3,300km²) which is largely untested despite being located proximal to significant copper and gold producing operations. The strategy is to generate new copper and gold targets and test them through drilling to make new discoveries.



Helix is the operator of the Helix-Legacy earn-in which is located 10 km west of the Cobar township. The area, which hosts several operating gold, copper and base metal mines, is prospective for Cobar-style copper-gold base metal deposits.

The Western Tenement has 30km of prospective strike and a pipeline of wholly owned copper opportunities, as well as the Canbelego JV Project (70% Helix as operator and 30% Aeris Resources) where a Mineral Resource of 32.8kt of contained copper has been estimated (refer Appendix A).

A 5 km by 1.5 km historical gold field is being evaluated on the Muriel Tank tenement. The Eastern Tenement Group encompasses more than 100km of prospective strike. The company has defined an extensive zone of new anomalies considered prospective for Trittonstyle copper-gold deposits.



Appendix A: Canbelego Main Lode Mineral Resource Estimate

2	he 2023 updated Mineral Resource Estimate for			
	2023 Canbelego Main I	ode Mineral Resource Estim	ate (MRE)	
	MRE Category	Tonnes	Grade (Cu%)	Cu-Metal
-	Total opencut MRE, ≥240mRL; 0.3 Cu% cut-off	grade & underground MRE, <	<240mRL; 0.8 Cu%	6 cut-off grad
5	Indicated	340,600	1.65	5,620
	Inferred	1,493,700	1.75	26,140
P	Total: Opencut & Underground	1,830,000	1.74	31,842
5	Comprising:			
T	MRE Category	Tonnes	Grade (Cu%)	Cu-Metal (
	Potential opencut MI	RE, ≥240mRL; 0.3 Cu% cut-off	grade	
Y	Indicated	99,700	1.28	1,276
T	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	
1	Indicated	240,900	1.81	4,360
	Inferred	1,211,400	1.88	22,774
P	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 * A top-cut grade of Cu 12% was applied to the I 			
\supset	* Stated MRE complies with Reasonable prospec	cts of eventual economic extr	action	

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of mineral resource estimate, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

ATTACHMENT 1: JORC Code Table 1

September 2024 – Bijoux infill auger geochemistry results

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 explanation may berequired, 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. 	 Auger Sampling Auger sample spacing ranges from 200m x 200m to 50m x 50m. Pre 2021 auger samples were collected by Helix staff. Contractors, Anomaly Exploration & Mining Services and Helix staff conducted the post 2021 auger drilling. Auger holes are 110mm diameter and are drilled vertically though the transported overburden. The base of the overburden is typically marked by a quartz-rich lag layer. The average hole depth for hand auger samples is 0.4m and 1.9m for mechanical auger holes. Soil, gravel and saprolite is recovered from the auger flites and deposited onto a rubber mat surrounding the hole collar. Material above the quartz lag layer is removed to avoid mixing with the target horizon. Pre 2021 auger samples were passed through 0.42mm sieve and 200g to 250g of material was placed into a numbered waterproof paper bag. Post 2021 auger samples were passed through a 3.1mm sieve and 0.5kg to 1kg sample is placed into a numbered calico bag. Coarse fragments of bedrock from auger drilling were placed into an RC chip tray for future reference. Sample Security All samples were supervised by Helix staff or appropriately inducted contractors.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple orstandard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 The auger holes are 110mm diameter and are drilled vertically. A battery powered hand auger was used in areas that were inaccessible to the mechanical auger rig. Other areas were sampled by a mechanical auger drill mounted on a 4WD Landcruiser utility vehicle.

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. 	 Sample is recovered from the auger flites and deposited onto a rubber mat surrounding the hole collar. Organic material and transported overburden are removed and not sampled. Recoveries are not recorded. Holes that fail to penetrate the transported overburden are not sampled.
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. 	 Auger sample characteristics (quartz lag presence, colour, depth sampled and final depth) are recorded in a digital log. Coarse fragments of bedrock from auger samples are stored in RC chip trays for future reference.
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 subsampling 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. 	 Auger Drilling Certified Reference Material (CRM) standards and blanks are inserted into the sample stream at approximately 1:50. Organic material and transported overburden is removed and is not sampled. Auger holes that fail to penetrate the transported overburden are not sampled. A 0.5kg to 1kg sample is considered appropriate and representative for the style of mineralisation being targeted.
		10

Criteria	JORC Code explanation	Commentary
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. 	 The laboratory techniques described below are considered appropriate for the style of mineralisation targeted. Auger Drilling SGS Australia Pty Ltd conducted the samples analysis: Samples are dried, weighed and pulverised to a nominal 85% passing 75um. 4 acid digest (GE_DIG40Q20) followed by ICP-MS (GE_IMS40Q20) and ICP-AES (GE_ICP40Q20) finish for a 59 element suite. The QA/QC data includes standards, duplicates and laboratory checks. QA/QC tests are conducted by the laboratory on each batch of samples with CRM standards.
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. 	 Assay results will be validated by standard database procedures and will be verified by Helix management and are not adjusted. Geological data is logged into laptop using Company logging templates that include validation procedures to ensure data integrity. Logged data includes detailed geology, sample quality and sample number. QA/QC inserts (standards, duplicates, blanks) are added to the sample stream. The auger assay data is statistically assessed, and if appropriate, the data are lognormal transformed and Z-Score levelling by sample type and analytical method is applied. The levelled data are then gridded to define anomalous trends. 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 Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 The auger positions were determined using a GPS (±5m). Grid system is MGA94 Zone 55. Surface RL data is collected using GPS and rectified by high-resolution publicly available digital elevation data (ELVIS 5m data).

	Criteria	JORC Code explanation	Commentary
	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. 	 Auger ample spacing ranges from 200m x 200m to 50m x 50m, which is sufficient to determine anomalous zones for further investigation.
5	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. 	 The surface sampling and analytical techniques are considered appropriate for the early exploration stage of the project. The structural trend of regional faults is determined by edge-detection algorithms applied to automatic gain control filters of reduced to pole airborne magnetic data with wavelengths of 100m to 800m.
$\hat{\mathbf{O}}$	Sample security	• The measures taken to ensure sample security.	• The chain of custody is managed by Helix staff and its contractors.
7	Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No additional audits or reviews have been conducted to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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 Company has 20 Exploration Licenses (EL's) in the Cobar-Nyngan region of NSW held by its 100% subsidiary company, Oxley Exploration Pty Ltd. 19 are held 100% by Oxley Exploration Pty Ltd, a wholly owned subsidiary of Helix Resources: EL6140, EL6501, EL6739, EL7438, EL7439, EL7482, EL8433, EL8608, EL8633, EL8703, EL9345, EL9385, EL9386, EL9387, EL9581. EL6105 is a joint venture with Aeris Resources Ltd (30% participating interest) and Oxley Resources Pty Ltd (70% participating interest and Manager). Native Title Claim NC2012/001 has been lodged by NTSCORP Ltd on behalf of the Ngemba, Ngiyampaa Wangaaypuwan and Wayilwan traditional owners i the Cobar-Nyngan region which covers the Oxley Exploration Pty Ltd tenement portfolio. All tenements are in good standing and there are n known impediments to operating in this area.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	 All tenements have been the subject of previous exploration by numerous companies. Previous exploration data has been compiled, reviewed and assessed for all tenements held by th Company.
Geology	Deposit type, geological setting and style of mineralisation.	• The tenements are prospective for structurally controlled base metal and gold deposits.
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 	 This report is focused on shallow auger drilling.
	13	

Criteria	JORC Code explanation	Commentary
	 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. 	
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. 	 No assay cut of high-grade material has been applie 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'). 	 No RC or diamond drilling is included in this report.
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 report.
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 pertaining to auger sampling is balanced, and all material information has been disclosed. The results for main geochemical elements of interest have been disclosed on the maps, noting that results are pending for some areas. All current relevant exploration data was used in formulating plans and discussion to provide a balanced report of the results and the possible implications for ongoing exploration activities and outcomes.
Other substantive	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test	 All relevant exploration results (auger sampling results and interpretation of alluvial cover) are disclosed within the report.

Criteria	JORC Code explanation	Commentary
data	results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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).	• Further auger sampling is in progress in the broader area.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Confirmed geochemical anomalies will be followed- up with surface geophysics and/or initial RC drilling.