

ASX Announcement
16 April 2024

NEW GEOPHYSICS HIGHLIGHTS COPPER POTENTIAL AT BIJOUX ALONG 2KM ZONE

Highlights

- **New geophysics results have delineated multiple features considered prospective for copper mineralisation at the Bijoux copper prospect.**
- **A prospective 2 km long zone has been identified from new geophysical surveys which highlight several gradient array induced polarisation (GAIP) conductive units and is coincident with both surface copper geochemical anomalism and recent significant copper drill assay results (refer to Figure 1).**
- **Bijoux scout drilling¹ which intersected both oxide and sulphide copper mineralisation lies directly over the northern end of one conductive unit:**
 - **36 metres (m) at 0.99% copper (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).**
 - **11m at 0.94% Cu from 140m including 4m at 1.90% Cu from 144m in BJRC013 (sulphide).**
- **The GAIP survey delineated multiple conductive units which can be traced for a strike length of over 4km and are open to the north and south.**
- **The effectiveness of the Bijoux geophysics survey to constrain prospective copper zones follows on from successful application of geophysics 9km to the north at Canbelego and Caballero².**
- **Priority areas have been selected for follow up geophysics to refine drill targets for the May drill campaign.**

Helix Resources Ltd (ASX:HLX, Helix or the Company) is pleased to announce the continued success of its Induced Polarisation (IP) geophysical survey techniques to rapidly delineate potential copper targets that correlate with known copper anomalism at the Bijoux copper prospect located in the regionally significant Rochford Trend.

A GAIP survey has identified a highly prospective 2km zone of conductive units coincident with surface copper geochemical anomalism at Bijoux. Previous drill testing at Bijoux which intersected high-grade copper oxide and sulphides tested only a minor, 200m portion of the 2 km coincident geophysics-geochemical anomaly, with the majority of the anomaly remaining undrilled.

Helix's Executive Technical Director, Kylie Prendergast commented:

"In the Rochford Trend we are exploring for Cobar-style, high-grade, copper deposits. The direct analogue is the large-scale CSA copper deposit³ located 50km away which contains a series of rich, stacked copper lodes, some of which are hidden but can be identified with IP geophysics.

¹ Refer ASX Report 15 January 2024

² Refer ASX Report 9 April 2024

³ CSA Copper Deposit; refer to <https://www.metalsacquisition.com/operations/csa-mine-at-cobar/>

BOARD & MANAGEMENT

Chair
Mike Rosenstreich
Executive Technical Director
Kylie Prendergast
Non-Executive Director
Emmanuel Correia

CAPITAL STRUCTURE

Share
2,323M
Market Cap.
\$8.1M
Share Price
\$0.004

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In February 2024, we reported we were successful in using IP geophysics to identify two new “look-alike” anomalies⁴ to the west of the Canbelego Main Lode copper resource⁵.

At Bijoux, we have high confidence that the geophysical surveys are an effective tool to focus in on the mineralised structures that contain the copper. Now we will move to pole dipole induced polarization (PDIP) geophysics to identify chargeability zones that could represent new sulphide copper lodes to drill test.

Helix is actively testing three separate compelling copper targets at Canbelego, Cabellero and now Bijoux with IP geophysics to detect new potential lodes of copper sulphide mineralisation. The momentum and results to date underpin Helix’s efforts to expand its copper inventory beyond the known copper resource at the Canbelego Main Lode.

The programs are progressing at a rapid pace, and we expect to have delineated drill targets by late April / early May for the proposed May drill program. Helix has a large pipeline of quality copper and gold targets across our Western and Eastern tenement groups that we are systematically advancing.”

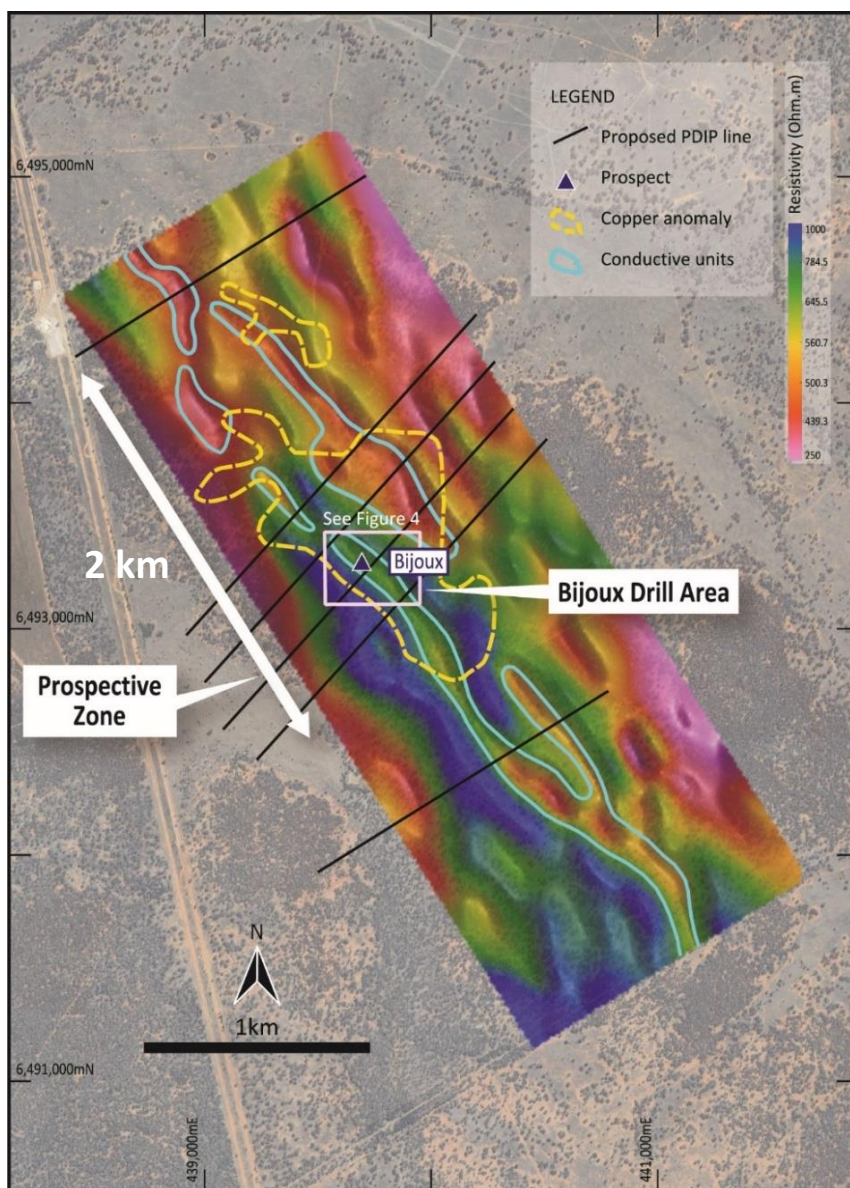


Figure 1 – Bijoux GAIP survey showing resistivity results, copper anomalies, conductive units (open to the north and south) and the prospective zone that contains coincident conductive units and copper anomalism. Location of drilling at Bijoux shown in Figure 4.

⁴ Refer ASX Report 29 February 2024.

⁵ Refer Appendix A for further details on Mineral Resource estimate.



TECHNICAL REPORT

Introduction

A 5km² gradient array induced polarisation (GAIP) survey has been completed over the Bijoux copper prospect (**Figure 1**) which is located in the regionally significant Rochford Trend approximately 9km southeast of the Canbelego copper deposit⁶ (**Figure 2**).

The objective of the GAIP survey is to identify conductivity anomalies, which may be directly associated with copper sulphide, or with conductive rocks that may host copper sulphide.

The Bijoux GAIP survey consisted of 20 survey lines, each 1.4km long and spaced 200m apart covering the Bijoux copper anomaly and along strike to the northwest and southeast (**Figures 2 to 1**). Further details on the IP survey specifications and data processing are provided in **Attachment 1** (JORC Table 1).

Bijoux GAIP results

The GAIP chargeability and resistivity results are displayed in **Figure 3**. The Bijoux copper prospect is situated on the flank of a broad northwest-trending chargeable zone and a discrete linear conductive anomaly defined by resistivity low (**Figures 3 and 1**).

The GAIP resistivity is mapping conductive rocks with lower overall resistivity, which are expressed as the warmer colours in Figure 1. These conductive units are also associated with anomalous copper geochemistry where initial RC drilling by the Company intersected significant oxide and sulphide copper mineralisation⁷, including the following intercepts (Figure 4):

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

The copper intercepts outline a 200m NNW-trending mineralised zone, comprising copper sulphide in veins, stringers and disseminations hosted in deformed and strongly chlorite altered psammite and pelite (**Figure 4**). This mineralisation is located at the northern end of a linear 2.4km long conductive unit, which is open to the south (**Figures 1 and 4**). There are additional linear conductive units, extending a further 2 km to the north-west, some of which overlap with the copper anomaly. Several units will be followed up with pole-dipole IP (PDIP) surveys to define drill targets.

Next Steps

Follow-up PDIP lines are currently in progress in the Canbelego-Caballero corridor and are expected to be completed in late-April. The follow-up PDIP survey at Bijoux will commence after that. Drilling of existing and new PDIP chargeable anomalies is planned to commence in mid-May.

⁶ Refer Appendix A for further details.

⁷ Refer ASX report 15 January 2024

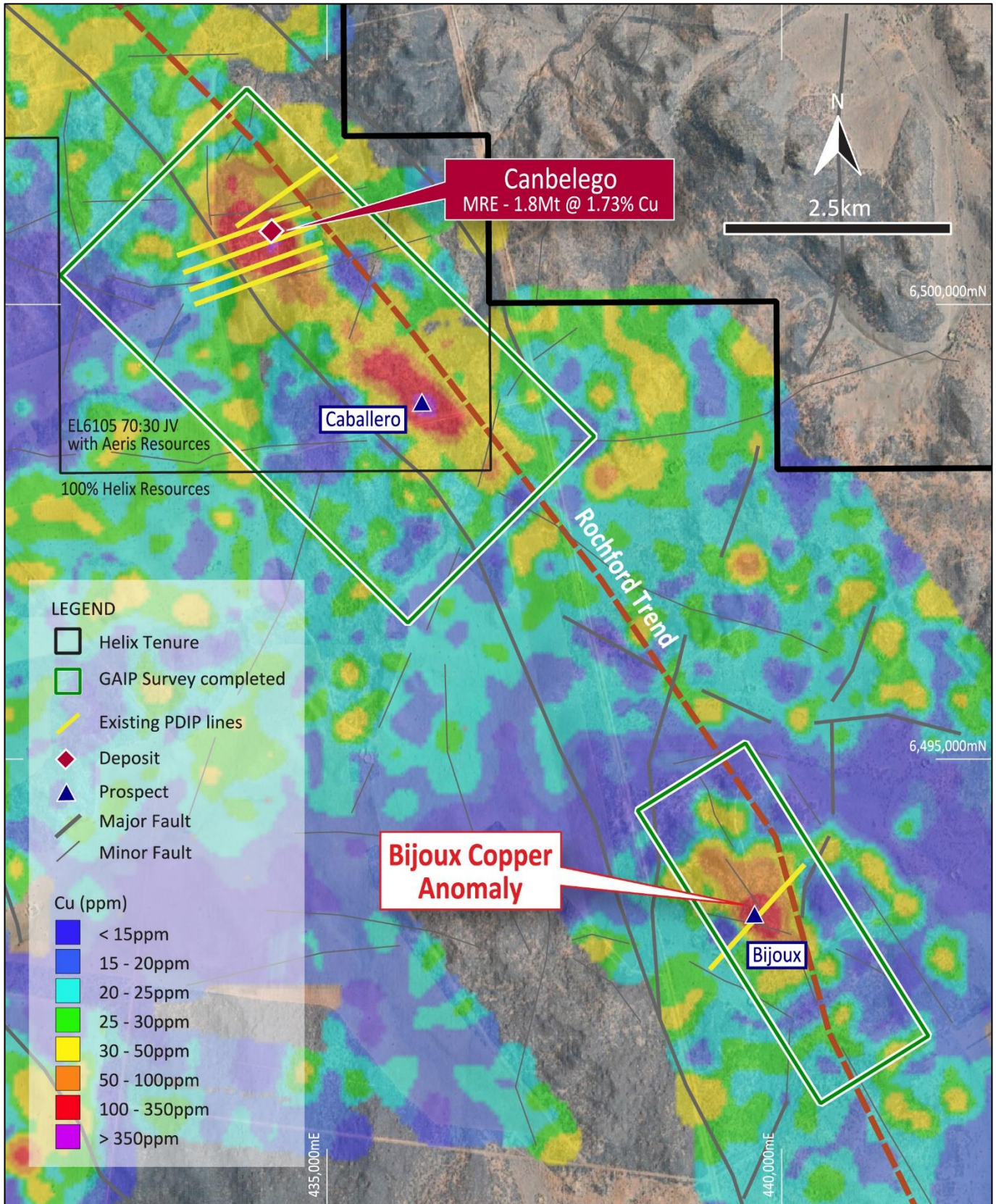


Figure 2 – Rochford Trend, Canbelego to Bijoux area showing copper geochemistry, main structures and IP survey areas (refer Appendix A for Canbelego Main Lode MRE).

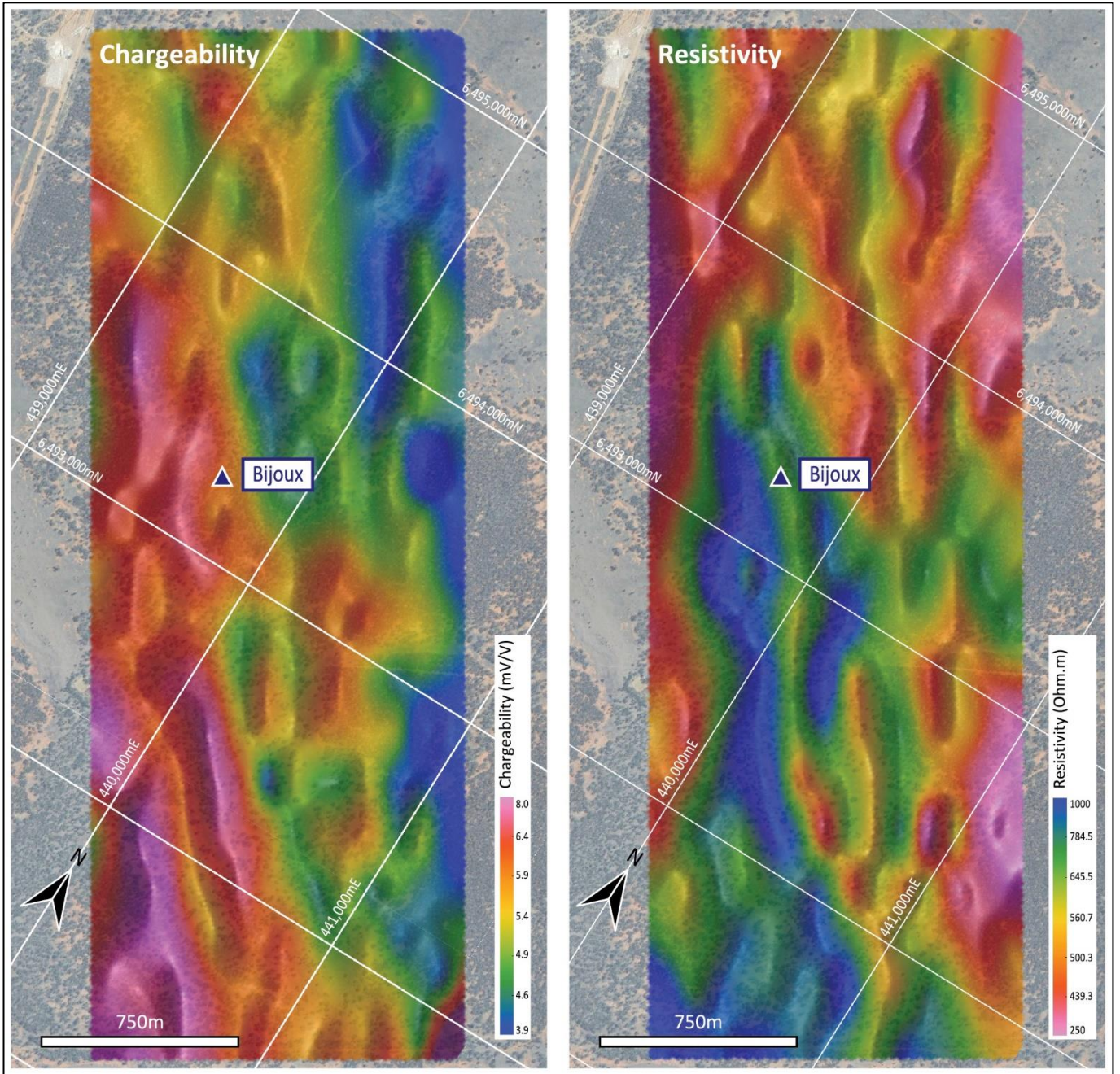


Figure 3 – Bijoux GAIP chargeability (left) and resistivity (right) results.

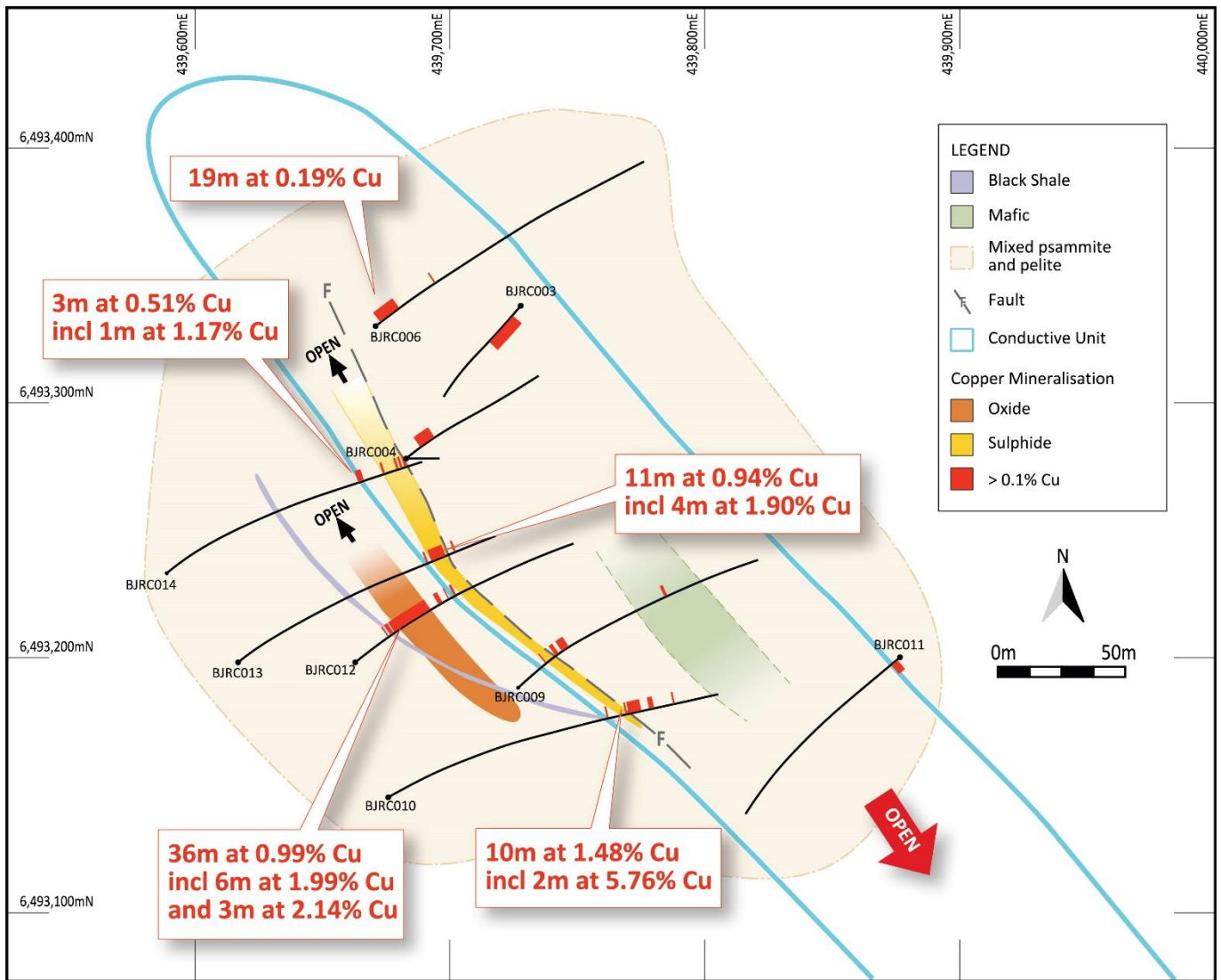


Figure 4 – Bijoux RC drill plan showing the conductive unit defined by the recently completed GAIP Survey.

COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results, Mineral Resource estimates and geological data for the Cobar projects is based on information generated and compiled by Mr. Gordon Barnes and 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



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About Helix Resources

Helix Resources is an ASX-listed resources company which is ‘all-in on copper’ exploration in the prolific copper producing region of Cobar, NSW.

The strategy is to generate new copper targets on its large, underexplored ground position and test them through drilling to make new discoveries.

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 consist of 30km of contiguous strike and the Company is advancing a pipeline of wholly owned copper opportunities, as well as the Canbelego JV Project (70% owned and operated by Helix and 30% owned by Aeris Resources) where a Mineral Resource of 32.8kt of contained copper has been estimated (refer Appendix A). The eastern tenement group encompasses more than 150km of prospective strike and includes the 100% owned high-grade CZ copper project.



Appendix A: Canbelego Main Lode Mineral Resource Estimate

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)
<i>Total opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade & underground MRE, <240mRL; 0.8 Cu% cut-off grade</i>			
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)
<i>Potential opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade</i>			
Indicated	99,700	1.28	1,276
Inferred	282,300	1.21	3,416
Total: potential opencut MRE	377,000	1.23	4,637
<i>Potential underground MRE, <240mRL; 0.8 Cu% cut-off grade</i>			
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			

Helix Resources is not aware of any new information or data that materially affects the Mineral Resource Estimate announced on 14 June 2023.



ATTACHMENT 1: JORC Code Table 1

April 2024 – Bijoux GAIP survey

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<p>Sampling techniques</p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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 be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i> 	<p>IP Equipment</p> <ul style="list-style-type: none"> • Equipment used included a GDD TxIV 9kVA Transmitter and a GDD Rx32 16 channel IP Receiver. • Receiving electrodes were standard non-polarising porous pots and transmitter electrodes were buried metal plates. <p>PDIP Survey</p> <ul style="list-style-type: none"> • In a pole-dipole IP (PDIP) survey, electrodes are arranged in a triangular configuration consisting of a current electrode (pole), a potential electrode (dipole), and a remote electrode (another dipole). • Measurements are taken by systematically moving the current and potential electrodes along a survey line while keeping the remote electrode fixed. • Pole-dipole surveys are designed to provide deeper penetration and are typically used to investigate larger-scale subsurface features and structures. • This method is suitable for identifying large chargeability and resistivity anomalies. • The Canbelego PDIP survey was completed by Fender Geophysics between 30 January and 8 February 2024. • Survey lines were 1.5km long. • A PDIP array was used for all lines, using 100m receiver dipoles. • Each line had 16 x 100m receiver channels laid out along the entire 1.5km long line. • The transmitter pole electrode was moved along the line at 100m stations. • All receiver channels were read for every transmitter station resulting in forward and backward-looking pole-dipole data. • The remote transmitter electrode was located several kilometres away from the survey lines. • The transmit frequency used was 0.125 Hz (2 seconds on-time, 2 seconds off-time). <p>GAIP Survey</p> <ul style="list-style-type: none"> • In a gradient array IP (GAIP) survey, multiple electrodes are placed in a linear array with equal spacing between them. • Measurements are typically taken by varying the separation between the source and receiver electrodes along the linear array. • The focus is on measuring the gradient of the IP signal, which refers to the rate of change of the signal with distance. This allows for better detection of subtle variations



Criteria	JORC Code explanation	Commentary
		<p>in the IP response.</p> <ul style="list-style-type: none"> Line spacing: 200m Line length: 28 lines x 2900m RX dipoles: 100m Tx dipoles: 4900m Frequency: 0.125Hz The Bijoux GAIP survey was conducted between 24 March and 4 April 2024
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	<ul style="list-style-type: none"> No new drilling in this report.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drilling in this report.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drilling in this report.



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in-situ material collected including for instance results for field, duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • No new drilling in this report.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Refer to Sampling Techniques above for survey specifications. • Field QAQC was completed by Fender Geophysics staff. Post-survey, further QAQC and data processing was undertaken by Mitre Geophysics.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • No new drilling in this report.



Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The transmitter and receiver sites were positioned using a Garmin GPS62 GPS (± 5m accuracy). • Grid system is MGA94 Zone 55. • Surface RL data for sites is collected using GPS and rectified by high-resolution publicly available digital elevation data (ELVIS 5m data).
Data spacing and distribution	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The survey spacing is considered adequate for an orientation IP. • No new drilling in this report.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The IP lines were oriented perpendicular to geological strike.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • No new samples reported.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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, EL8710, EL8768, EL8845, EL8948, 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 in the Cobar-Nyngan region which covers the Oxley Exploration Pty Ltd tenement portfolio. All tenements are in good standing and there are no known impediments to operating in this area.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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 the Company.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The tenements are prospective for structurally controlled base metal and gold deposits.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drilling in this report.



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> No new assay results in this report.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>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').</i> 	<ul style="list-style-type: none"> No new drilling in this report.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Refer to Figures in this report.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The reporting is balanced, and all material information has been disclosed.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> A follow-up PDIP survey is currently in progress in the Canbelego to Caballero corridor. Follow-up with PDIP surveys over defined GAIP anomalies will provide a depth constraint. Further auger sampling is in progress in the broader area. Confirmed geophysical and geochemical anomalies will be followed-up with initial RC drilling.