

# Regional Gold Drilling Update – Broad Anomalous Zones Identified Over Interpreted Targets

Advanced copper and gold explorer, Helix Resources Limited (ASX:HLX) (**Helix** or the **Company**) reports preliminary reconnaissance gold results from its first pass drill assessment of several new gold targets completed in late 2020.

#### **HIGHLIGHTS**

- Preliminary 4 metre composite sample assays received for 15 RC drillholes, totalling 1,768 metres testing 7 new target zones.
- Anomalous gold assays were returned from several prospects including:
  - ✓ Wide anomalous interval in the 'link-zone' between the Sunrise and Good Friday deposits
  - ✓ Several anomalous 'bottom-of-hole' assays highlighting the need for further work
- Of the 15 holes drilled in this program, 10 have returned anomalous gold of greater than 4 metres @ 0.1g/t Au. A thorough review of all results from the recent gold exploration work will be undertaken in the current quarter to determine future exploration work.

## **OVERVIEW**

A reverse circulation (RC) drilling program at Helix's 100% owned Cobar Gold Project was completed in the second half of 2020. The program was implemented in 2 phases as presented in Table 1. This phase of the program was "scout-style" drilling, the first undertaken at the 7 new prospects within the area known as the Battery Tank Goldfield (refer figure 1).

The objective of the second phase of this program, which is the subject of this report, was to test for evidence of bedrock gold mineralisation beneath previously untested geochemical and structural gold targets that included numerous old workings. (refer Table 1). Gold assays for preliminary, 4 metre composite samples, were received recently and for several of the targets confirm the potential for gold mineralised systems;

- In the link-zone, between the Sunrise and Good Friday deposits two intercepts have defined a broad gold anomalous zone of 27 metres at 0.1 g/t to the bottom of the hole and 12 metres at 0.5 g/t comprising a possible vector to a mineralised structure connecting these two shallow gold deposits;
- New anomalous zones identified in 'bottom-of hole' samples grading greater than 4 metres at 0.1 g/t Au in several regional prospects and broad zones of anomalous gold are positive signals that nearby high-grade structures may be present.

Exploration is targeting high-grade gold deposits such as the Peak deposit located 30 km to the northwest, with an overall gold endowment of approximately 4 million ounces (owned and operated by Aurelia Resources Ltd). This deposit style has a short horizontal (strike) extent, but a large vertical dimension – which makes surface detection challenging, and reliant on defining the host structures within anomalous gold halos. Follow-up work on the past 6 months data needs to be completed to determine whether these and previous results are supportive for the discovery of this style of deposit.



Helix's Managing Director, Mike Rosenstreich commented *"Helix is exploring for gold in a known gold province with numerous gold occurrences outlining a broad anomalous gold system – creating a lot of 'smoke'. The team's continued focus is to narrow-in on possible gold haloes and structures to identify potential deposits. There has been a tremendous amount of data generated in the past 6 months and I am looking forward to working with Helix's exploration team to systematically assess it to refine our geological models and targets prior to any further gold drilling activity, if this is warranted".* 



Figure 1 – Cobar Gold Project Regional Location Plan

Phase 1*		Phase 2	
Prospect	Holes Drilled	Prospect	Holes Drilled
Amitys	5	Linkage Zone	1
Reward	3	Homeward Bound	2
Battery Tank	4	Reward East	1
Linkage Zone	1	Girl-in-Blue	2
		Lone Hand	3
		Republic Extensions	5
		Fenceline	1
Total	13		15

Table 1: Cobar Gold Project Drill Program Phases and Prospects Tested

\* Reported 27 October 2020



## COBAR GOLD DRILL PROGRAM

A drill program at the Cobar Gold Project completed in late 2020 drilled seven previously untested targets, comprising 15 RC drillholes for 1,768 metres. The targets tested are listed in Table 1 and presented in Figure 2. Drill hole collar locations and preliminary composite sample assay results are presented in Table 2 and 3 respectively. Full sampling methodology is provided in JORC Table 1 – Attachment 1.

## Of note:

*Linkage Zone* - significantly, two holes drilled in the 260-metre gap between the Sunrise and Good Friday deposits both intersected anomalous gold mineralisation from shallow depths;

- ✓ CORC146 returned anomalous gold in 4 metre composite samples from 172 metres (27m @ 0.1g/t Au) to the end of hole. At 130 metres below surface this intercept is in primary mineralisation and may be an indication of a second lithological gold mineralised position below drilling to date.
- ✓ CORC147 returned 12 metres @ 0.5g/t Au from 68 metres, which will be subject to 1 metre riffle split sampling.

*Regionally* - CORC151 has returned 8 metres @ 0.1g/t Au from 112 metres to the end of the hole at the Girl in Blue prospect and CORC157 has multiple zones including 40 metres @ 0.1g/t Au from 8 metres and 4 metres @ 0.1gt Au from 144 metres to the end of the hole at the Republic East Prospect.



Figure 2: Battery Tank Goldfield; Location of new RC drilling and targets.



Of the 15 holes drilled in phase 2 of the program, 10 have returned anomalous gold of greater than 4 metres @ 0.1g/t Au. On average 2 holes were drilled at each prospect, with prospective host lithologies, alteration and evidence for mineralising structures identified in the drill cuttings. All holes with anomalous gold intercepts will be considered for re-sampling at 1 metre intervals for fire assay.

Helix has generated and compiled a large volume of technical data focused on delineating additional gold targets on the goldfield. It is planned to now complete a thorough review of all the results and the targets generated. Field work over the coming months will include re-sampling of the new anomalous zones and further target generation work on the northern portion of the project area. The northern area covers a prospective structural position – a fold closure which is over 50km2 and has had no methodical field assessment. Helix has gained access to the area for the first time since the early 2000's and plans to follow-up several higher priority targets identified by an external review in early 2020. This will culminate in an overall ranking of all the Cobar Gold project targets and finalisation of updated work programs where warranted.

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Site_ID	Northing	Easting	DIP	Azimuth	TotalDepth	Prospect
HRRC146*	6485966	427238	-60	260	199	Linkage Zone
HRRC147	6485969	427190	-60	260	148	Linkage Zone
HRRC148	6486826	425989	-60	270	120	Homeward Bound
HRRC149	6486759	426004	-60	265	118	Homeward Bound
HRRC150	6486982	424688	-60	260	150	Reward East
HRRC151	6485414	424825	-60	270	118	Girl-in-Blue
HRRC152	6485437	424491	-60	203	118	Girl-in-Blue
HRRC153	6486304	424373	-60	270	100	Lone Hand
HRRC154	6486349	424303	-60	275	100	Lone Hand
HRRC155	6486388	424274	-60	215	100	Lone Hand
HRRC156	6488524	424235	-60	270	148	Republic East
HRRC157	6488428	424235	-60	270	148	Republic East
HRRC158	6488174	424237	-60	270	100	<b>Republic South</b>
HRRC159	6488256	424142	-60	270	100	<b>Republic South</b>
HRRC160	6488989	424232	-60	275	100	<b>Republic North</b>
HRRC161	6487715	424567	-60	275	100	Fenceline

 Table 2: Drill Collars from recent phase of RC drilling on the Battery Tank Goldfield



#### Table 3: Preliminary gold results from RC drilling (4m speared composite samples)

Site_ID	Prospect	Drilling Phase	From	Intercept
HRRC146*	Linkage Zone	1/2	10m	21m @ 0.4g/t Au
incl.			25m	5m @ 1.3g/t Au
and			172m	27m @ 0.1g/t Au to EOH
HRRC147	Linkage Zone	2	4m	8m @ 0.1g/t Au
and			68m	12m @ 0.5g/t Au
and			116m	4m @ 0.1 g/t Au
HRRC148	Homeward Bound	2		NSR
HRRC149	Homeward Bound	2	44m	4m @ 0.3g/t Au
			104m	4m @ 0.1g/t Au
HRRC150	Reward East	2		NSR
HRRC151	Girl-in-Blue	2	112m	8m @ 0.1g/t Au to EOH
HRRC152	Girl-in-Blue	2	64m	4m @ 0.1g/t Au
HRRC153	Lone Hand	2	12m	4m @ 0.1g/t Au
HRRC154	Lone Hand	2	32m	20m @ 0.1g/t Au
HRRC155	Lone Hand	2		NSR
HRRC156	Republic East	2	28m	4m @ 0.1g/t Au
and			88m	4m @ 0.1g/t Au
HRRC157	Republic East	2	8m	40m @ 0.1g/t Au
and			80m	4m @ 0.1g/t Au
and			144m	4m @ 0.1g/t Au to EOH
HRRC158	<b>Republic South</b>	2		NSR
HRRC159	Republic South	2	52m	4m @ 0.1g/t Au
HRRC160	Republic North	2	72m	4m @ 0.1g/t Au
HRRC161	Fenceline	2		NSR

All samples reported as 4m composite spear samples (except end of hole where composites may be less than 4m) and assayed using an aqua regia digest with up to 4m of internal dilution.

EOH = end of hole

\*The First 43m of HRRC146 was sampled at 1m intervals and assayed in the first phase of drilling <sup>(refer ASX announcement 8/10/2020)</sup>

## **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.

#### **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.



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, 6 November 2019, 25 May 2020, 23 July 2020, 6 August 2020, 21 September 2020, 8 October 2020 and 27 October 2020. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

#### This ASX release was authorised on behalf of the Helix Board by: Mike Rosenstreich



#### **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 north-westerly 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, gold assays are pending.



# JORC Code – Table 1

# Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The Cobar Gold Project drilling used a commercial contractor for RC drilling. A total of 15 holes were reported (refer Table 2 and 3 in body of announcement). Holes were orientated as listed in Table 2, and were drilled at an initial dip of -60°-70°</li> <li>The drill hole locations were located by handheld GPS with down hole surveys conducted during drilling, using an in-rod down-hole system.</li> <li>RC Drilling was used to obtain 1m split samples, however sampling was initially undertaken as 4m composite spear samples to determine areas of interest. RC was collected at the rig as a split sample from each metre with selected metres to be collected by Helix staff for fire assay.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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> <li>RC was the method chosen for the holes drilled and RC were drilled with a 150mm face sampling hammer using industry practice drilling methods.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Sample weight and recoveries are observed during the drilling and any sample under-sized or over-sized was noted the geological logs.</li> <li>Samples were checked by the geologist for volume, moisture content, possible contamination and recoveries. Any issues are discussed with the drilling contractor.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All RC samples have a representative sieved amount of drill chips collected in trays for future reference.</li> <li>Logging of Drilling recorded lithology, alteration, degree of oxidation, fabric and colour.</li> <li>All holes were logged in full.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The preparation of RC follow industry practice. This involves oven drying, pulverization of total sample using LM5 mills until 85% passes 75 micron.</li> <li>Field QA_QC involved repeat sampling and the laboratories standard QA_QC procedures.</li> <li>The sample sizes are considered appropriate for first-pass sampling with 1m riffle split sampling to be undertaken in areas of interest</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>All assays were conducted at accredited assay laboratory. Gold was assayed via the aqua regia method.</li> <li>Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials), replicates as part of in-house procedures.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Results have been verified by Company management.</li> <li>Geological data was collected using handwritten log sheets which detailed geology (weathering, structure, alteration, mineralisation), sampling quality and intervals, sample numbers, QA/QC and survey data. This data, together with the assay data received from the laboratory and subsequent survey data were entered into a secure Access databases and verified.</li> </ul>
<i>Location of data points</i>	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The drill collar positions were picked-up using GPS.</li> <li>Grid system is GDA94 Zone 55.</li> <li>Surface RL data collected using GPS. Topography around the drilled area is a slight slope grading from Grid North-East to drainage west of the main drilled area. Variation in topography is less than 5m across the drilled area.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill holes at the Cobar Gold Project were targeting gold bearing structural controls in new Prospects (refer to Figure 2)</li> <li>The drilling programs and sampling conducted by Helix remain insufficient to establish a JORC compliant resources on these new areas.</li> <li>Sampling involved 4m composite spear sampling for initial first-pass assay.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>No orientation based sampling bias has been identified in the data to date.</li> <li>High grade gold was intersected in the reported holes</li> </ul>
Sample security	• The measures taken to ensure sample security.	• Chain of Custody is managed by the Company. The samples were freighted directly to the laboratory with appropriate documentation listing sample numbers intervals and/or cut, with analytical methods requested.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No additional QA/QC has been conducted for the drilling to date.



# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>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.</li> <li>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.</li> </ul>	• The Cobar Gold Project is located on EL6140 and EL8608 (100% Helix). The tenements are in good standing. Beside recent COVID19 directives, there are no impediments to operating in this area.
Exploration done by otherparties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous modern exploration on the Cobar Gold Project was limited set-depth 20m open hammer holes drilled by CRA in the 1970's with follow-up work by Glencore in the mid 2000's. Historic shafts and pits are present throughout the area, which date back to small scale mining activities in the early1900's.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	• The prospect is considered to be sediment hosted mesothermal to epithermal style gold.
Drill hole Information	<ul> <li>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:</li> <li>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.</li> </ul>	<ul> <li>Refer to table 2 and table 3 in the body of the text</li> <li>No material information was excluded from the results listed</li> </ul>



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Results were reported from geological intervals, with max 4m of internal dilution.</li> <li>No weighting has been used</li> <li>No metal equivalent results were reported.</li> </ul>
<i>Relationship between mineralisatio n widths and intercept lengths</i>	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eq 'down hole length, true width not known').</li> </ul>	<ul> <li>The program was designed to intersect various targets of high grade gold mineralisation.</li> <li>Results are reported as down hole lengths</li> </ul>
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 figure 1 and 2
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.	Refer to Table 2 and 3



Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	• 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 results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Previously reported activities Refer to ASX announcements on <u>www.helix.net.au</u> for details</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Follow-up 1m sampling, a geological review of the new results and ongoing regional exploration (mapping and sampling) expected to continue in the March 2021 quarter.</li> </ul>

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