

Corporate Details

Ordinary Shares 424.47m

Market Cap

8.5m

ASX Code

HLX

Board of Directors

Mr Peter Lester

Non-Executive Chairman

Mr Michael Wilson *Managing Director*

Mr Timothy Kennedy
Non-Executive Director

Mr Jason Macdonald
Non-Executive Director

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Quarterly Activities Report - Period Ending 30 June 2019

Highlights

Collerina Copper Project - NSW

- ☐ Interim Indicated and Inferred resource estimate for the Collerina Deposit of 2.02 million tonnes grading 2.03% Copper, 0.1g/t Au containing 40,400 tonnes of copper, 9,400 ounces of gold. Includes an indicated and inferred massive sulphide component from the Central Zone plunge of 1.4 million tonnes grading 2.6% Copper, 0.2g/t Au. (refer Table A for full breakdown).
- Initial resource defined for less than \$4m, from 57 holes (11,500m). Collerina Deposit remains open along strike, down dip and down plunge.
- ☐ High confidence in geological model derived from the initial resource modelling.
- Plans underway to expand the resource base from the broader Collerina Deposit Exploration Target, consisting of an additional 2- 5Mt at similar grades (1.5-3% Cu)* to a depth of 450m from surface.
- 2H19 exploration programs expected to include Collerina infill and extensional drilling, and further regional auger soil sampling and regional drilling.

Regional Prospects - NSW

- ☐ A new Cobar-style, structurally modified VMS target, identified 7.5km SE of Canbelego Copper Deposit on Helix's 100% owned Rochford tenement (EL8633).
- Portable XRF readings of sub-cropping brecciated ironstone have returned Cu (up to 0.17%), Pb (up to 0.18%), Zn (up to 0.08%) and Bi (up to 0.12%) from first-pass sampling.
- Sub-cropping brecciated ironstone was mapped over several zones of up to 250m of strike, along a 1.7km long subtle ridgeline in a broader NW structural trend. No known previously reported exploration. First-pass auger soil sampling over this area has commenced.

Samuel Project - Chile

- JOGMEC is funding the Stage 2 exploration drilling phase, with an approved budget of **US\$800,000 (A\$1.15m)** by end of September 2019.
- The Stage 2 program comprises a minimum **3,000m (at least 10 holes)** testing targets derived from the Stage 1 geophysics and mapping activities.
- The initial holes, targeting IP anomalism and geological targets, have intersected various highly altered and hydrothermally brecciated volcanics and intrusives.
- First-pass 2m sampling has been undertaken on the first 4 holes (SA19-01 to SA19-04) with anomalous 2m intervals returning copper (up to 0.52% Cu), gold (up to 0.26g/t Au), Molybdenum (up to 107ppm Mo) and Zinc (>1% Zn) in individual samples.
- Drilling so far at Samuel shows the system to be both fertile and prospective for porphyry and manto style of mineralisation.
- ☐ The Stage 2 drilling campaign is ongoing with further results expected throughout 3Q19.

Joshua Project - Chile

- Manhattan Corporation (MHC) has recently provided Notice to Helix that it will not proceed past the Option stage of the Joshua earn-in agreement.
- MHC's Option commitment funded an additional 3,000m of DDH drilling at Joshua, identifying new zones of porphyry mineralisation, with increasing Cu grades intersected at depth, and identified a new large untested porphyry target in the west of the Project.
- ☐ Helix retains 100% ownership of the Joshua Project and is seeking new funding partners



Quarterly Activities

Collerina Copper Project - NSW, Resource Update

An interim Indicated and Inferred resource estimate for the Collerina Deposit was reported 11 June 2019:

2.02 million tonnes grading 2.03% Copper, 0.1g/t Au containing 40,400 tonnes of copper, 9,400 ounces of gold. (refer Table A for full breakdown).

The interim Maiden Resource includes an indicated and inferred massive sulphide component from the Central Zone plunge of:

□ 1.4 million tonnes grading 2.6% Copper, 0.2g/t Au.

The Collerina Copper Deposit remains open in multiple directions (along strike NW and SE and down dip). There is now a high confidence in geological and structural model, derived from the modelling in the drilled portion of the Central Zone.

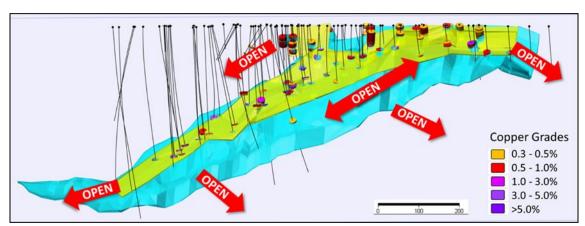


Figure 1: Collerina Deposit: Drilling to date and interim resource shape (yellow), surrounded by geological and structurally defined exploration target shape (blue) looking south.

Key Points - Scalable Copper System

- The Collerina Deposit has a surrounding Exploration Target consisting of an additional 2- 5Mt at similar grades (1.5-3% Cu) * to a depth of 450m from surface.
- Exploration Target has been defined from shallow drilling, mapping (above consistent footwall marker),
 EM and structural studies.
- Priority Drill test the Exploration Target* to expand the interim resource inventory to better reflect the known near surface strike (500m) and target thickening on plunge parallel structural repeats, consistent with other deposits in the region.
- This initial Mineral Resource estimate provides a strong foundation for the Collerina deposit. It illustrates strike continuity near-surface and high grade copper continuity in the plunge. The surrounding Exploration Target illustrates the potential for the larger scale within the Collerina mineral system.
- The Collerina deposit remains open at depth and along strike, with probable repeats both in the footwall and hanging wall. The modelling process and geological/structural interpretation have identified priority targets in the immediate vicinity of the deposit.
- Regional targets are also being advanced with soil auger sampling underway over priority areas, as part of a broader program to work-up regional prospects to drill-ready status.

*Cautionary Statement: Whilst the near-surface strike continuity of the Collerina mineralisation is well understood. The potential quantity and grade of the Exploration Target remains conceptual until drill tested. Geophysical and structural evidence is present to provide confidence in the geometry and dimensions, however, there has been insufficient drilling within these plunge extensions to estimate Mineral Resources in the broader shape to date. Therefore it should be considered uncertain if further exploration drilling will result in defining additional Mineral Resources within the broader Collerina Deposit extensions.



High grade copper from near surface at Collerina provides scope for a number of potentially development options and the Project is well located in a region with increasing development and exploration activity.

The mineral resource has been reported by an independent resource specialist, PayneGeo following a substantial re- interpretation of the mineral systems localised geometry, particularly in the deeper parts of the system

The resource modelling seen at **Collerina is consistent with early interpretations of nearby deposits**, such as the Tritton Deposit owned by Aeris Resources (prior to the decision to mine). The Tritton Deposit, **after 77,000m of drilling, was interpreted to be a multiple lens deposit offset by faults and shears**. This interpretation was **later revised to an intensely folded single sheet-like body** as drill density increased and continuity was confirmed (result of short-sharp 10-20m scale roll overs in cross-cutting structural zones) during mine development.

Exploration Target

Central Zone mineralisation 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) consisting of an additional 2-5 Mt, where similar grades of (1.5-3% Cu) may be possible with additional drilling (additional 30,000-150,000t Cu)*.

The refined geological and structural interpretation is expected to enable more accurate targeting in both infill and extensions of the mineralisation, particularly where copper appears to be present in the structural zones (thickened), and where the sulphide system extends below known oxide copper intercepts.

The immediate priority to advance the Project is to finalise planning and complete sufficient drilling within the Exploration Target envelope, with the aim of defining additional zones of copper mineralisation to include within a deposit scale revised Resource Estimate*.

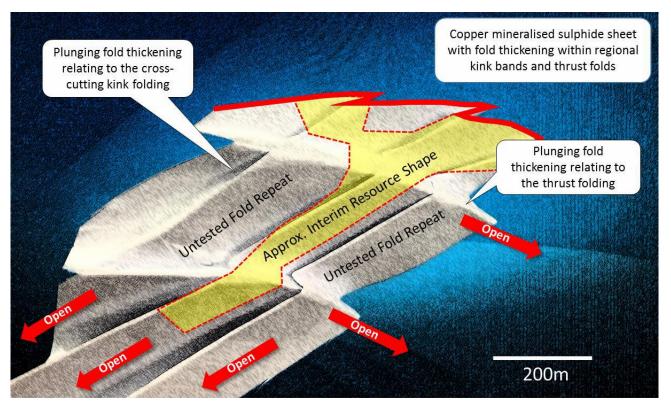


Figure 3. A 3D Schematic representation of the broader Collerina mineralised envelope - illustrates how the sheet-like mineralised sulphide body interacts with cross-cutting kink folds, and bedding parallel thrust folds. This structural interpretation is consistent with the geology and mineralisation intercepts in the drilling so far, modelling of EM conductivity (Surface and Downhole), and the broader geological/structural interpretation of the Collerina Deposit.



Significance

The maiden Collerina Mineral Resource has been defined from an internally generated greenfield discovery. The project is located in a highly fertile copper-rich trend, nearby to operating mines and infrastructure.

Whilst a high-level mining study assessment is yet to be conducted, the near surface nature of the mineralisation suggests the deposit may be amenable to initial open cut mining methods. There remains significant potential for locating additional copper mineralisation within the Exploration Target envelope surrounding this maiden resource, as well as potential nearby repeats and associated with surface copper mineralisation at numerous copper prospects along the regional trend. The prospective trend that hosts Collerina, hosts numerous historic copper shafts and pits that are yet to be drill tested.

Helix has defined the maiden Collerina resource with capital efficiency at a discovery cost of US3c/lb of copper, less than half the recent industry average of US7c/lb of copper in 2017-18 (ref: S&P global market intelligence). The refined understanding of the geological and structural controls on copper distribution at Collerina emerging from the resource modelling process should see similar efficiencies as more of the surrounding exploration target is drill tested.

Collerina Deposit Extensions

A series of large Exploration Target zones immediately surrounding to the maiden resource have been identified during the modelling and estimation process. These, combined with a review of surface EM and recent DHEM surveys in the deep holes at Collerina provide immediate priority targets to significantly add to the resource inventory with further drilling.

Near deposit drill targets include:

- Hanging-wall and footwall extensions to the Central Zone plunge where the structural interpretation and DHEM suggests further massive sulphide is likely to have accumulated particularly at depths below 100m from surface.
- A possible plunging sub-parallel fold nose target immediately south of the Central Zone, where limited drilling has confirmed the presence of oxide copper near surface and presence an off-hole DHEM conductive body that requires drill testing.
- A series of potential northwest plunging thickening zones within the sulphide body, where EM conductance in MLEM surveys highlights conductor positions that may represent fold thickening relating to the thrust folding present at Collerina.
- Direct depth extensions of the Central zone plunge position The Central Zone remains open down plunge/dip with DHEM confirming extension immediately beyond the last intercepts and the deeper FLEM position remains unresolved.

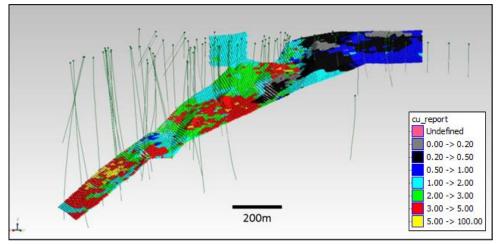


Figure 4: 3D 0.3% Copper Envelope (looking S) Note variation in copper grades in the Central Zone plunge can be directly correlated to drill density, with further upside expected in resource, as "gaps" in the drilling pattern are filled.



Mineral Resource Estimate

The Mineral Resources have been classified as Indicated and Inferred Mineral Resources in accordance with the JORC Code, 2012 Edition and are shown in Table A. This table represents the total deposit and is reported using a cut-off grade of 0.5% Cu. (For full details refer ASX ann. 11 June 2019)

Classification	Туре	Tonnes	Cu	Au	Cu	Au
		Mt	%	ppm	t	Oz
Indicated	Ox/Tr	0.17	1.1	0.0	1,900	200
Inferred	Ox/Tr	0.46	0.6	0.0	2,700	100
Total	Ox/Tr	0.63	0.7	0.0	4,600	300
Indicated	Fresh	0.83	2.6	0.2	21,800	6,600
Inferred	Fresh	0.57	2.5	0.1	14,100	2,500
Total	Fresh	1.4	2.6	0.2	35,800	9,100
Indicated	Ox/Tr	0.17	1.1	0.0	1,900	200
	Fresh	0.83	2.6	0.2	21,800	6,600
Inferred	Ox/Tr	0.46	0.6	0.0	2,700	100
	Fresh	0.57	2.5	0.1	14,100	2,500
Total		2.02	2.03	0.1	40,400	9,400

Table A: Collerina Deposit Interim 2019 Mineral Resource Estimate (0.5% Cu Cut-off)

Regional Copper Projects - NSW

During the Quarter, a new Cobar-style, structurally modified VMS target was identified approximately 7.5km SE of Helix's 70% owned Canbelego Copper Deposit. The new target area was identified on Helix's 100% owned Rochford tenement (EL8633), Refer Figure 5.

Helix's Technical team were assessing the extensions of the Canbelego/Caballero copper-in-soil trend to the Southeast on the Company's 100% owned EL8633. The area is coincident with a northwest trending structural corridor, which manifests as variably magnetic and de-magnetised zones within a broader sequence of interpreted basinal sediments and volcanoclastics.

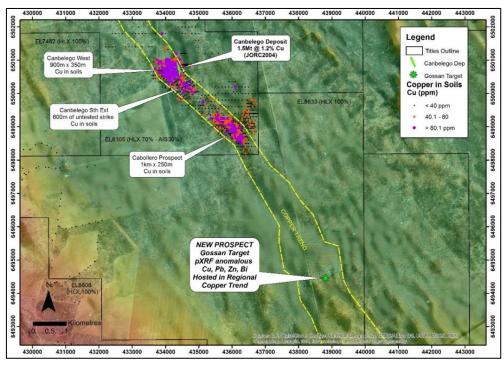


Figure 5: New Regional Prospect – Sub-copping gossan material, anomalous in Cu, Pb, Zn & Bi - located in extensions of a northwest copper trend, approximately 7.5km southeast of the Canbelego Copper Deposit.



Locally, the geology consists of highly altered sediments and a possible parallel chert horizon (highly siliceous fine grained sediments). Patches of sub-cropping ironstone breccia were mapped in several locations, with strikes up to 250m of iron-rich rock float. The pods of brecciated ironstone lie on the flanks of a subtle 1.7km long ridgeline, within the broader NW structural trend.

Initial portable XRF (pXRF) readings taken from the sub-cropping brecciated ironstone have returned Cu (up to 0.17%), Pb (up to 0.18%), Zn (up to 0.08%) and Bi (up to 0.12%) from first-pass sampling. Selected samples have been collected and sent to a laboratory for assay (results are pending).



Figure 6: photos of gossan from locations 438845mE 6494455mN and 438782mE 6494450mN flanking a subtle ridge line running NW, within a regional copper trend.

Significance

The initial pXRF readings of copper, lead, zinc and bismuth are considered positive for Cobar-style mineralisation. The target area lies on a parallel structural trend to the Rasp Fault (Cobar's well tested mineralised structure). Cobar-aged (Devonian) rocks are mapped on either side of the zone being targeted.

At the Canbelego Copper deposit (7.5km northwest), copper mineralisation is developed as structurally controlled, sub-vertically plunging, semi-massive to massive pyrite and chalcopyrite shoots. The material noted on surface at this new target zone, has a similar texture - brecciated iron-rich material surrounded by a matrix of iron dominated material (refer Figure 6). The iron-rich units identified at surface, may relate to similar massive sulphide accumulation in primary rock below.

Finally, there is no known previous exploration reported in the new target area. Outside Helix's work to the north, the nearest known exploration activities reported, occurred a further 9km southeast at the Pipeline Ridge and Glens Hill Copper Prospects.

First-pass auger soil sampling over this area has commenced, follow-up surface geophysics and drill testing are expected to follow this initial work.



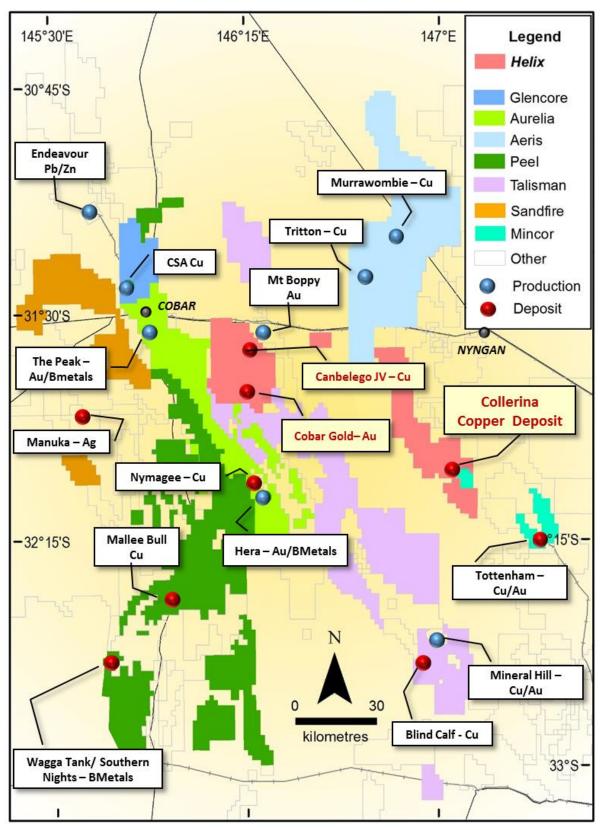


Figure 7: Location of Helix's Projects near mining operations in the Central West Region of NSW



Samuel Project – Chile

Japanese organisation and JV Partner JOGMEC is currently funding Stage 2, the initial exploration drilling phase of the Samuel Copper Project JV.

The US\$800,000 (~A\$1.15m) contribution from JOGMEC is sole-funding a minimum 3,000m of diamond drilling (approximately 10 holes), fulfilling their funding commitment to Stage 2 of the Samuel Joint Venture Agreement.

The Stage 2 Program is expected to be completed over a shortened 6 month period to the end of September 2019. Drill collar positions at priority targets have been approved by the JV Management Committee.

This aggressive timeframe and program commitment ensures early drill testing of up to 10 priority target areas derived from the Stage 1 field activities, and maximises copper exploration at the Samuel Project over the coming months. The Project area is prospective for both Manto- style and Porphyry-style copper (+gold) systems.

Helix is acting as manager during the early stages of the JV, earning a Management Fee, and are making our recommendations to the JV participants based on our extensive exploration experience and 8 years operational knowledge working in Chile. Helix is looking to maximise value for the JV participants by delivering an optimal outcome from the programs from funding made available by JOGMEC.





Photos 1 & 2: Diamond drill rig set up at Hole 1, Samuel Copper Project, the rig has now moved to hole 2.

Drilling Program Update

The JV Management Committee has prioritised drill hole locations at the target areas identified from the Stage 1 geophysics, mapping and surface sampling. At least 10 targets will be tested in this initial exploration drilling phase, with results determining where the Stage 3 exploration activity will be focussed.

Initial 2m samples from the first four holes drilled at the Samuel Copper Project have recently been received by the Chilean team. The results were reviewed and audited by JOGMEC geologists, during a site visit last week (23-25th July 2019).

The first four holes have intersected variably altered and hydrothermally brecciated volcanics and intrusives, including monzonitic and syenitic porphyry phases.

Anomalous 2m intervals have been returned in the first four holes, best individual results so far include:- copper (up to 0.52% Cu in SA19-02 116-118m), gold (up to 0.26g/t Au in SA19-04 158-160m), Molybdenum (up to 107ppm Mo in SA19-03 68-70m) and Zinc (>1% Zn in SA19-01 264-266m).



Drilling so far at Samuel shows the system to be both fertile and prospective for porphyry and manto-style. However, no intervals in the first batch of results for the first four holes were considered reportable for the styles of mineralisation being sort.

Samuel diamond drilling is ongoing. Recent holes SA19-06, SA19-07 and SA19-08 appear to be intersecting more favourable geology, with increased volumes of copper sulphides noted in drill logs. Assay results for these holes are pending.

Site ID	East	North	Depth	Azimuth	Dip	Elevation collar (masl)	Comment
SA19-01	300766	6598302	465.95	320	-70	512m	
SA19-02	298965	6598033	471.55	190	-50	516m	
SA19-03	298769	6598274	413.8	334	-60	508m	
SA19-04	298733	6597631	491.2	350	-50	534m	
SA19-05	301736	6599458	381.05	82	-60	523m	Results Pending
SA19-06	301375	6599870	500.09	300	-60	513m	Results Pending
SA19-07	300508	6597237	400	90	-70	573m	Results Pending
SA19-08	301085	6597810	TBA	270	-70	530m	Drilling underway
SA19-09	TBA	TBA	TBA	TBA	TBA	TBA	
SA19-10	TBA	TBA	TBA	TBA	TBA	TBA	
SA19-11	TBA	TBA	TBA	TBA	TBA	TBA	
SA19-12	TBA	TBA	TBA	TBA	TBA	TBA	

Table B: Diamond drillhole collar information at 30 July 2019

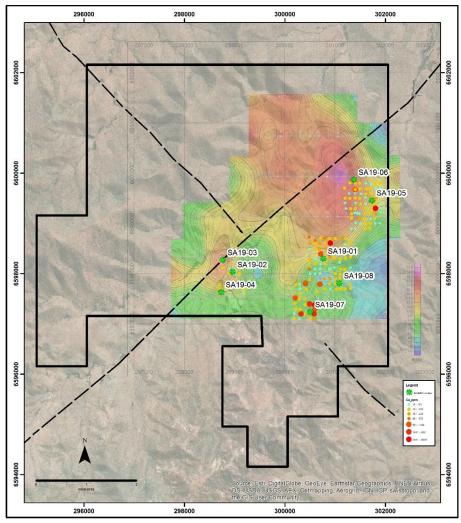


Figure 8: Samuel Project outline with stage 1 IP plan (Chargeability @-200m), surface sampling and drill collars to date



About the Samuel Copper Project JV

Helix executed a binding Interim Joint Venture Agreement (IJVA) with JOGMEC in relation to Helix's 100%-owned Samuel Copper Project in Chile, announced 5th September 2018.

The IJVA provides for the continued exploration of the copper prospective and large-scale Samuel Project from a conceptual target without financial contribution from Helix through the earn-in period. In addition, Helix will receive a management fee while Helix's Chilean team manages the JV through Stages 1- 3.

Key terms of the IJVA

The IJVA provides an avenue for JOGMEC to earn up to a 60% interest in the Samuel Project by funding a 3 stage US\$2.4M program to 31 March 2021. The JV terms are:

- Stage 1: Contribute US\$0.4M (Minimum Commitment) by 31 March 2019 primarily for the purpose
 of undertaking of large-scale geophysical surveys and mapping of the Samuel porphyry and mantostyle copper systems.
- **Stage 2**: Contribute **US\$0.8M** by 31 March 2020 primarily for the purpose of undertaking initial exploration **diamond drilling** to drill test the identified priority targets for mineralised systems.
- **Stage 3**: Contribute **US\$1.2M** by 31 March 2021 primarily for the purpose of undertaking a second phase **diamond drilling** to establish scale and continuity of any identified mineralised systems.
- At completion of Stage 3 JOGMEC will earn an option to acquire 60% equity in the project and have the right to sell their joint venture interest by tender to a Japanese company.
- Helix's Chilean team will manage the project until the completion of Stage 3 with Helix receiving a Management Fee for these services.

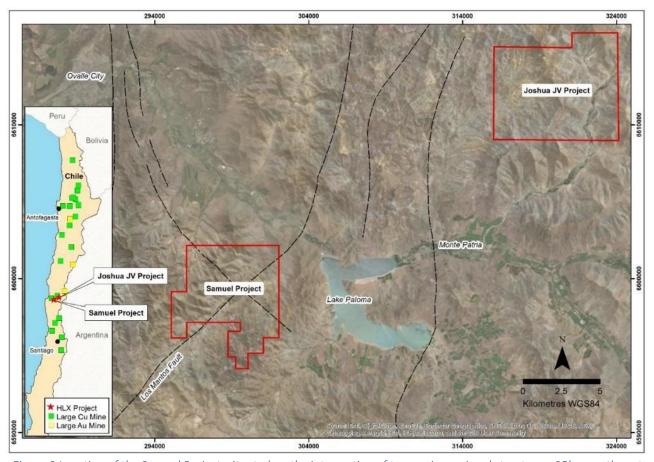


Figure 9 Location of the Samuel Project, situated on the intersection of two major regional structures, 25km southwest of Ovalle City – Region IV Chile



Joshua Copper Project - Chile

Manhattan Corporation (MHC) has recently provided written Notice to Helix that it has elected not to proceed past the Option stage of the Joshua earn-in agreement.

MHC had the right to earn up 80% of the Joshua Project by funding a A\$1M Option phase, followed by a 5,000m stage 2, to earn 51% and then free-carry Helix to a BFS for an additional 29% equity.

MHC's Option commitment funded an additional 3,000m of DDH drilling at Joshua for A\$1m. The additional drilling doubled the overall footprint of the drilled portion of Joshua (Joshua East), identifying new zones of porphyry mineralisation, with increasing Cu grades intersected at depth. Fieldwork carried out in early 2019 identified a new large untested porphyry target area, coincident with an Aster alteration anomaly, in the western portion of the Project.

With MHC's election to withdraw, Helix retains 100% ownership of the Joshua Project and is now seeking a new funding partner for this large copper porphyry project, close to infrastructure in Region IV, Chile.

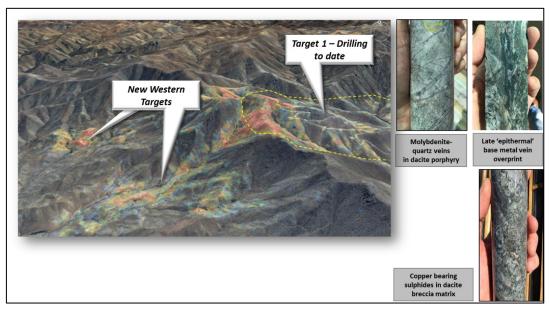


Figure 10: Aster alteration image draped on topography showing the overall 6.5km x 3km Joshua alteration anomaly. Drilling on the eastern portion of Joshua has identified increasing copper grades at depth associated with multiple porphyry events. The new western target zones are at lower altitudes, closer to depths intersected on the eastern side.

Competent Persons Statement

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information reviewed by Mr M Wilson who is a full time employee of Helix Resources Limited and a Member of The Australasian Institute of Mining and Metallurgy. Mr M Wilson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr M Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Details of the assumptions underlying any Resource estimations are contained in previous ASX releases or at www.helix.net.au

¹ For full details of exploration results refer to previous ASX announcements 11 June 2019 on Helix's website. Helix Resources is not aware of any new information or data that materially effects the information in this announcement

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.

JORC Code Table

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 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. 	 Chile-based commercial drilling contractors are conducting the DDH drilling (DV Drilling) – a total of 7 holes for 3123m have been completed to date. Holes were orientated at various grid directions and were drilled at dips of between 50-70°. Drill hole locations were determined using a hand-held GPS. No down-hole surveys were conducted. Diamond core was sampled on 2m intervals, taking half or quarter core as a first pass and then with follow-up sampling at various intervals (=/<1m) to better understand particular lithological metal associations. The samples were collected by and supervised at all times by Helix staff. The samples were under the direct control of Helix staff at all times and were transported to the laboratory by Helix staff. Surface pXRF Program Surface samples were collected in June 2019 by Helix staff. Samples were collected at locations of interest. The samples were collected in calico bags and analyzed by a qualified Helix pXRF Operator using a portable, hand-hand Olympus Delta XRF analyzer.

Criteria	JORC Code explanation	Commentary
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 or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 DDH was the drilling methods chosen. Diamond HQ and NQ drill core was collected using double tube and all other industry practice methods
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 weight and recoveries were observed during the drilling and any poor recovery was recorded. Samples were checked by the geologist. Any issues were discussed with the drilling contractor.
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. 	 The drill core is stored in core trays in Ovalle, and comprehensively logged and sampled. Visual estimates of the proportion of sulphides: From systematic logging of HC and NQ diamond drill core, the visual estimate of the total amount of sulphide (pyrite+chalcopyrite+molybdenite) in individual metre intervals ranges from 0.01% to 5%. The relative proportion of each sulphide species present in each metre interval is estimated to range from absent to 50% of the total amount of sulphide present. The amount of sulphide and the relative proportions of the sulphide species from metre to metre are highly variable and a detailed estimate of this variability is no possible within the limits of acceptable accuracy. The metal grades of the core shall be determined by assay. The sulphides occur as disseminations and randomly oriented, penetrative veins. The veins range from 0.1mm to 20cm thick. The sulphide is accompanied by one or more of the following gangue minerals in variable proportions: quartz, albite, chlorite,

Criteria	JORC Code explanation	Commentary
		sericite, epidote. The visual estimates are estimates only and fine sulphide may be under-estimated, if present. Identification of the sulphide species and visual estimates of the proportions of those sulphide species present have been made by two geologists with more than 25 years of experience each in porphyry copper mineralisation.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all coretaken. 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 sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 The preparation of DDH follow industry practice. This involves oven drying, pulverization of total sample using LM5 mills until 85% passes 75 micron. The laboratory's standard QA/QC procedures were carried out. The sample sizes are considered appropriate to the grain size of the material being sampled. Repeatability of assays were assessed and considered well with the tolerance limits for the style of mineralisation under investigation.
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 	 All assays were conducted at accredited assay laboratories in Santiago, Chile by Andes Analytical Assay. The analytical technique used for base metals was a mixed acid digest with an MS determination of metal concentrations. Gold was assayed by fire assay and aqua regia methods. Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials) and replicates as part of in-house procedures. Helix is not aware of any new information or data that materially effects the information in these announcements.

Criteria	JORC Code explanation	Commentary
	 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. 	
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. 	 Results have been verified by JOGMEC Geologists and Helix Company management. Geological data was collected using handwritten log sheets, which detailed geology (weathering, structure, alteration, mineralisation), sample quality, sample interval, sample number and QA/QC inserts (standards, duplicates, blanks) into the numbering sequence. This data, together with the assay data received from the laboratory, and subsequent survey data were entered into a secure Access databases 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 drill collar positions were determined using a GPS (±5m). Grid system is WGS-84 Zone 19S. Surface RL data collected using GPS and Google Earth. Variation in topography is approximately 400m within the drill zone. All drill pads will become visible on future Google Earth images.
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. 	 Drill holes were positioned to test specific parts of a porphyry copper system and designed to intersect rocks lying beneath either anomalous surface features such as rock alteration (silica, epidote, sericite, chlorite, magnetite, clay) and/or high metal concentrations (copper, molybdenum), or IP anomalies (zones of high resistivity and/or chargeability). No drilling had been conducted by anyone on the Samuel Project prior to Helix commencing drilling operations in 2019. One phase of drilling have subsequently been conducted

Criteria	JORC Code explanation	Commentary
		 The drilling has been conducted in a manner consistent with the procedures set out in this JORC table. Drilling phase were conducted for JOGMEC and Helix. Helix staff have supervised all drilling.
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 ifmaterial. 	 Surface sampling and the position of the drill holes and sampling techniques and intervals are considered appropriate for the early-phase exploration of the mineralisation styles sort. The distribution of copper is known to be variably enriched and depleted within weathering (VMS) and in an overall porphyry copper system. At Samuel, the limited areas drilled to date is not sufficient to suggest a positive or negative bias, and the large hydrothermal system at Samuel, as defined by the ASTER alteration mapping and IP surveys (19km²), has yet to be fully investigated on the ground because of the large areal extent of the system.
Sample security	The measures taken to ensure sample security.	 Chain of Custody is managed by Helix staff and its contractors. For Samuel, the samples were freighted directly to the laboratory with appropriate documentation listing sample numbers, sample batches, and required analytical methods and element determinations. For the Rochford, Samples were freight to head office for XRF and selected samples forwarded to the Laboratory for analytical assay (results pending).
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 or surface sampling 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 teneme	entand	
land tenure	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint	The Samuel Project is located on concessions Helix owns
status	 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 mineral concessions are in good standing and payment of statutory fees is managed for Helix a Land Management Consultant in Santiago, Chile. This is no statutory, minimum, annual expenditure commitment for exploration and mining titles in Chile. There are no known impediments to operating in this area. The drill area is situated at a relatively low altitude for Chile (<1000m) and can be accessed all year round.
Exploration	• Acknowledgment and appraisal of	 At Samuel and Rochford, no previous modern exploration has occurred at Samuel prior to Helix's involvement.
done by other parties	exploration by other parties.	 A number of small artisanal mines and working are present throughout the Samuel district.
Geology	Deposit type, geological setting and style of mineralisation.	 The Samuel project considered to be prospective for copper (gold-molybdenum) Rochford for Copper, Lead, Zice and Gold. porphyry-style mineralisation.
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: If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does no detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Refer to Helix's previous announcements Helix is not aware of any new information or data that materially effects the information in these announcements. A portion of the results have been included in this announcement as indicative of previous drilling results for information purposes only.
Data aggregation	• In reporting Exploration Results, weighting averaging techniques, maximum and/or	Refer to Helix's previous announcements .

Criteria	JORC Code explanation	Commentary
methods	 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Helix is not aware of any new information or data that may materially effects the information in these announcements.
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'). 	 The drilling is initially designed to 'prove concept' that a large, porphyry or manto copper system is present at Samuel. The geology (lithological associations, metal associations, alteration zonation patterns) has been determined to be consistent with the styles of mineralisation sort. Porphyry and Manto copper systems are generally broad in all dimensions and mineralised drill intercepts are generally treated as true-widths given the size of the system and the pervasive nature of the mineralisation (100's of metres wide and thick). To date the results do not reflect that the main porphyry/manto style system has been interested.
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.	Helix is not aware of any new information or data that materially effects the information in these announcements.

Criteria	JORC Code explanation	Commentary
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 Helix's previous announcements. Helix is not aware of any new information or data that materially effects the information in this announcement.
Other substantive exploration data	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.	 ASTER: PhotoSat Information Ltd conducted the remote-sensing mineral alteration study in March 2018. ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) is an imaging instrument flying on Terra, a satellite launched in December 1999 as part of NASA's Earth Observation System. Band widths in the Visible to Near-Infrared, Shortwave Infrared and Thermal Infrared are measured. Diagnostic combinations (ratios) of these bands are then used to characterize and map the areal extend of Iron Oxide, Hydroxyl, Kaolinite- Alunite, Sericite and Silica alteration zones. Induced Polarisation (IP) Survey: A pole-dipole IP survey was conducted for Helix by a Chilean Contractor in 2018. The data was collected on 100m centres along E-W lines spaced 200m-400m apart using Industry best practices for data collection and processing. Aeromagnetics: A drone-borne aeromagnetic survey was conducted by GFDas Geofisica UAV over an area of approximately 40sq. km. in Nov/Dec 2018 for Helix as part of the JOGMEC work program. The drone was fitted with a fluxgate magnetometer. Flight lines: E-W 50m apart. Tie-lines: N-S and 1000m apart. The survey was designed to cover the entire concession area. Elevation difference across the survey area: 500m. Total flight lines: approx. 900km. Average altitude: 550m. System Name: GeoMagDrone™. The data has been imaged by Southern Geoscience Consultants in Perth, Western Australia.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out	 Helix and JOGMEC is compiling, assessing and reviewing all data from their 2019 diamond drilling program and will decide on the 3rd Stage of drilling (Stage 3, minimum 5000m in 2019-20).

Criteria JOF	RC Code explanation	Com	nmentary
•	drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		Helix is has undertaken auger soil sampling at the Rochford project and has sent selected surface rock samples to a laboratory for assay. Helix is undertaking auger soil sampling along the copper trend at Rochford At Samuel, Helix, funded by JOGMEC continues to drill test geological and geophysical targets at the project