MANHATTAN

MANHATTAN CORPORATION LIMITED

2018 September Quarter

Highlights

- ***Manhattan Corporation Limited ('Manhattan" or the 'Company") completed the share placement announced 8 June 2018 to raise $3 million ("Placement")***
- ***The Placement met the final pre-condition of an Option Agreement with Helix Resources Limited ("Helix") for Manhattan to earn up to 80% interest in the Joshua Porphyry Copper Project in Chile***
- ***Diamond drilling commenced on 6 September 2018, five weeks after completing the Placement ($3m).***
- ***Zones of high (+15mV/V) IP Chargeability are being drilled to test for new primary (hypogene) and secondary (supergene) copper sulphide mineralisation within the Joshua Porphyry System***
- ***The planned 3,000m diamond drilling program is progressing well and is now 41% complete (1,254m)***
- ***Hole 2 (JS18-002) finished at 704m (planned 700m) and intersected:-***
    - ***disseminated- and vein-style sulphides (incl. pyrite, chalcopyrite, molybdenite) in multiple porphyry events from 34m to 654m down-hole***
    - ***sulphide concentrations (incl. pyrite, chalcopyrite, molybdenite) ranging from trace (0.01%) to 5% of the rock mass (refer Note 1)***
    - ***strongly altered porphyritic rocks throughout the hole***
    - ***multiple events of characteristic, overprinting, porphyry-style alteration (variable epidote, silica, sericite, chlorite, albite, tourmaline)***
    - ***strong brecciation and quartz/sulphide stockwork development over a 24m intercept from 425m down-hole***
- ***Hole 3 (JS18-003) is located 1.3km ENE of Hole 2 and is currently at 125m (planned 600m). This hole is targeting a new zone of IP chargeability below copper soil anomalism***
- ***This drilling program has continued to expand the known extent of the sulphide-bearing porphyry system at the Joshua Project.***
- ***A high-resolution, drone-borne aeromagnetic survey has been completed and the data received and processed. This data, along with ground-based geological and satellite-based ASTER alteration mapping, have been used to define 3 distinct porphyry systems at Joshua (PS-1, PS-2, PS-3)***
- ***Only Porphyry System 1 (PS-1) has been drilled historically (16 holes: 2011, 2012, 2015). Manhattan's first three holes (hole 1 completed, hole 2 completed, hole 3 in progress) are testing new zones within PS-1***
- ***Manhattan will also drill the first holes in Porphyry System 2 (PS-2) - holes 4 and 5 in the current 3000m program.***
- ***The drilling is expected to be completed and the majority of assay results received and assessed before the end of 2018.***

REVIEW OF OPERATIONS

Key Terms of the Option Agreement

The Option Agreement provides an avenue for Manhattan to earn up to an 80% interest in the Joshua Porphyry Copper Project in Chile. Key terms of the Option Agreement:

- **Stage 1**: Helix has granted an option to Manhattan whereby Manhattan can exercise that option by sole funding expenditure of $1 million on the Joshua Project within 9 months of the Commencement Date, such expenditure to be expended on 3,000m of diamond drilling (Option)

- If Manhattan exercises the Option by funding the requisite expenditure it shall have the right to earn up to an 80% interest in the Joshua Project on the following basis:
  - **Stage 2:** Manhattan may earn a 51% Joint Venture Interest in the Joshua Project by sole funding the expenditure necessary to complete a further 5,000m of drilling within 18 months of the Commencement Date
  - **Stage 3:** If Stage 2 is completed, Manhattan may elect to earn a further 29% (giving it a total 80%) Joint Venture Interest by sole funding expenditure up to the completion of a BFS in respect of the Joshua Project

- In the event that Helix chooses not to contribute to the Joint Venture after the completion of the BFS (Stage 3), it will dilute its Joint Venture Interest in exchange for an uncapped 1.0% Net Smelter Return royalty over the Joshua Project

- Helix will be the Manager of the Joshua Project during Stage 1. Manhattan will be the Manager of Stages 2 and 3, unless Helix and Manhattan mutually agree that Helix is to be retained as Manager.

Diamond Drilling

The planned 3,000m diamond drilling program is progressing well and is now 41% complete (1,254m), with five holes in total planned. Also significantly, Manhattan will drill the first holes in Porphyry System 2 (PS-2) - holes 4 and 5 in the current 3000m program.

Hole 3 (DDH JS18-003), which is located 1.3km ENE of hole 2, is currently at 125m (planned to 600m). The hole is testing an Induced Polarisation (IP) anomaly (high chargeability/moderate-low resistivity) within the porphyry system that lies beneath a robust copper soil anomaly (150 to 829ppm Cu).

Hole 2 (DDH JS18-002) finished at 704m (planned to 700m) and intersected disseminated- and vein-style sulphide (including pyrite, chalcopyrite, molybdenite) in altered andesite and diorite porphyry from 34m to 654m down-hole. Concentrations of sulphide (variable pyrite, chalcopyrite, molybdenite) range from 0.01% (trace) to 5%. The rocks are strongly altered (variable silica, sericite, chlorite, albite, tourmaline) throughout the hole and there is strong hydrothermal brecciation and quartz vein stockwork developed from 425m to 449m (Figure 2).

Hole 1 (DDH JS18-001) was terminated early at 425m after intersecting a number of post-mineralisation diorite dykes in strongly altered (quartz-sericite-pyrite) andesite porphyry.

Diamond Drill Hole (DDH) Summary - 2018 (JS18 series, completed or in progress)

Hole ID (DDH)	East (WGS-84 19S)	North (WGS-84 19S)	RL (metres)	Depth (meters)	Angle (degrees)	Direction (magnetic)
JS18-001	320125	6613695	1571	425m EOH	-60	230
JS18-002	320360	6613400	1470	704m EHO	-70	180
JS18-003	321680	6613675	1154	125m (in progress)	-70	235

Coordinates: UTM WGS-84 19S

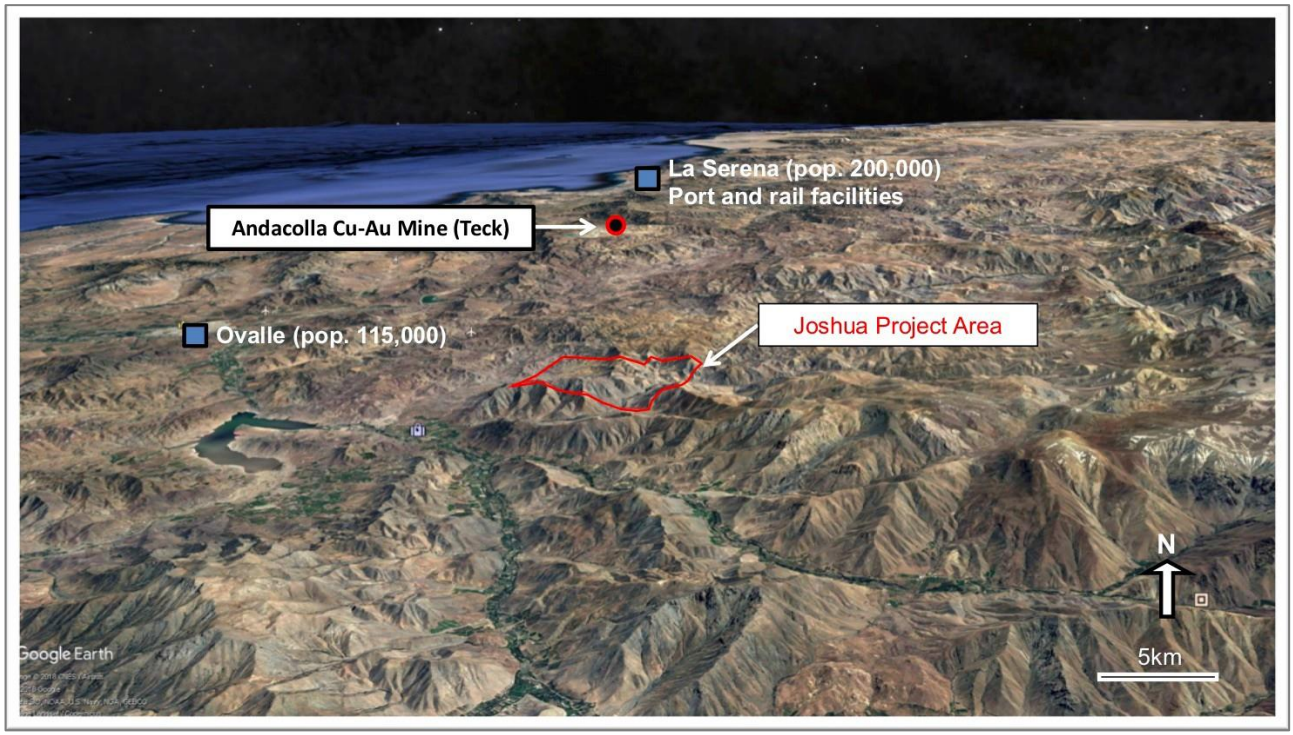


Figure 1 | Project Location, Region IV, Chile

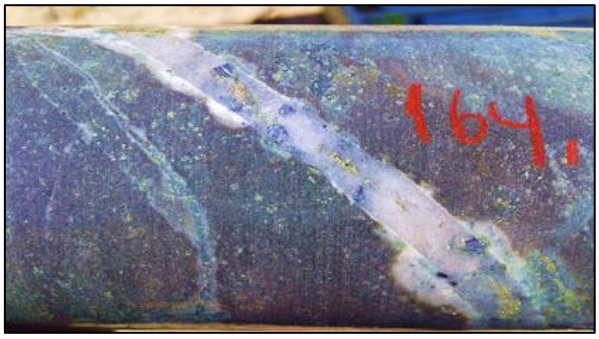
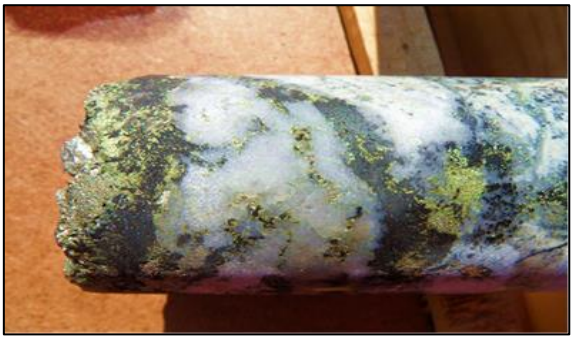


Figure 2 | Quartz-pyrite-chalcopyrite-molybdenite vein (1cm wide) in andesite porphyry (hole JS18-002, 164m).



Quartz-tourmaline-pyrite-chalcopyrite vein in strongly altered dacite porphyry (hole JS18-002, 278m).

Quartz vein stockwork in hydrothermally brecciated andesite porphyry (hole JS18-002, 446m).

Hydrothermal breccia with "cooling textures" - epithermal veins (hole JS18-002, 451m).

Quartz-sulphide veins and disseminated sulphide in hydrothermal breccia (hole JS18-002, 531m).

Hydrothermally brecciated porphyry with silica, tourmaline and biotite alteration (hole JS18-002, 618m).

Dacitic porphyry with disseminated sulphide blebs throughout rock matrix (hole JS18-002, 700m).

Aeromagnetic Survey

The high-resolution aeromagnetic survey data collected using drone technology has been received and processed (refer Table 1 for survey specifications). This data, along with ground-based geological and satellite-based ASTER alteration mapping have been used to define 3 porphyry systems associated with copper mineralisation at Joshua (Figure 3).

- **Porphyry System 1 (PS-1)** has been drilled in part by Helix (2011, 2012 and 2015), and Manhattan's first three holes are testing new zones within PS-1. Helix (2011, 2012, 2015) has previously reported a number of significant copper intercepts from PS-1, including 352m at 0.27% Cu, 240m at 0.22% Cu and 400m at 0.25% Cu
- **Porphyry System 2 (PS-2)** will be drilled by Manhattan in November 2018 for the first time. Helix soil geochemistry (robust copper anomaly peaking at 2569ppm Cu) and IP data, and the recently acquired aeromagnetic data, have all been used to plan holes 4 and 5 in the current Manhattan program
- **Porphyry System 3 (PS-3)** is a newly defined target located in the western part of the project area. An intensely veined porphyritic dacite is spatially associated with a copper working located immediately to the SW of the porphyry (Figure 3). Strong phyllic alteration (silica-sericite-pyrite), potassic alteration (biotite-magnetite) and zones brecciation have also identified.

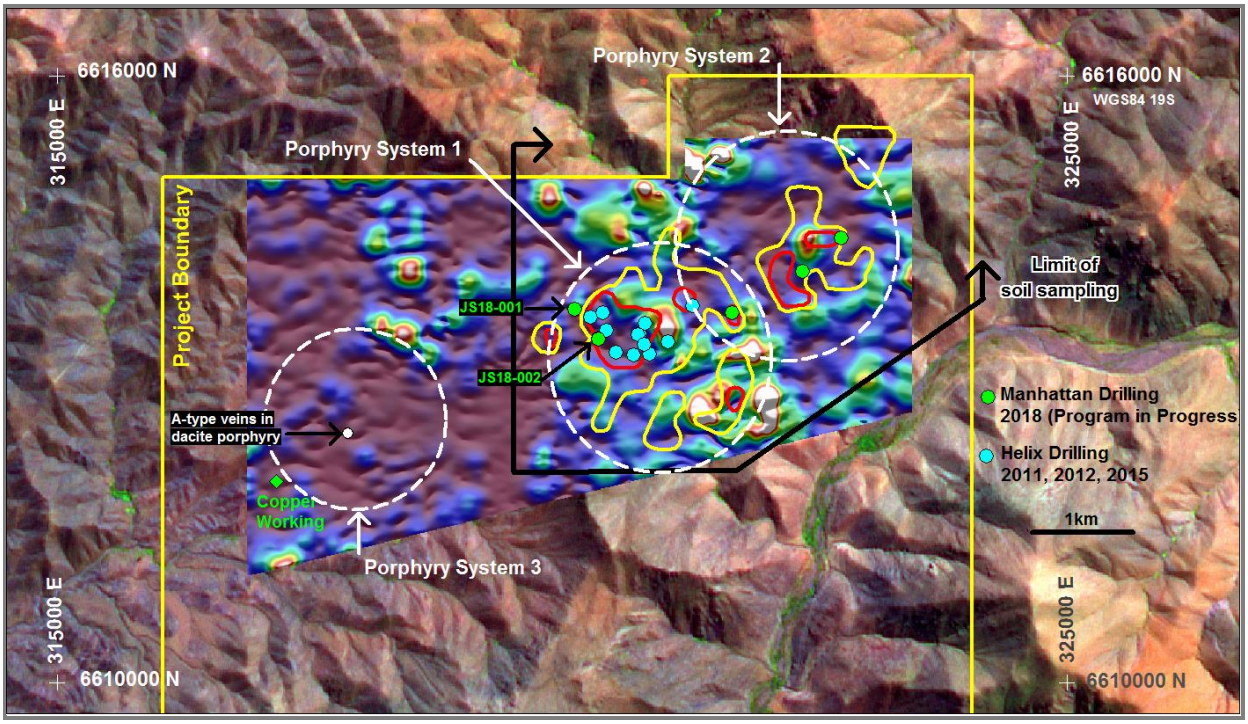


Figure 3 | Imaged aeromagnetic data (analytic signal) showing Helix copper soil anomalies (yellow: +150ppm Cu, red: +500ppm Cu, refer Table 1 for survey details), location of historical drill holes (pale blue dots) and Manhattan drill holes (green dots) and the location of the interpreted three porphyry systems within the Joshua Project Area.

Planned Work

Manhattan's current focus is to complete the 3000m of diamond drilling and to have the core sampled and submitted to the laboratory in Santiago for assay within 7 days of completing each hole. Final assay results for all holes are anticipated to be received before the end of 2018. Results will be received sequentially in batches.

Holes 1 and 2 have been completed west of the silica cap (and previous Helix drilling) into new zones, with the remaining holes, including the current hole 3, planned to test zones in the valley east of previous drilling (Figure 4).

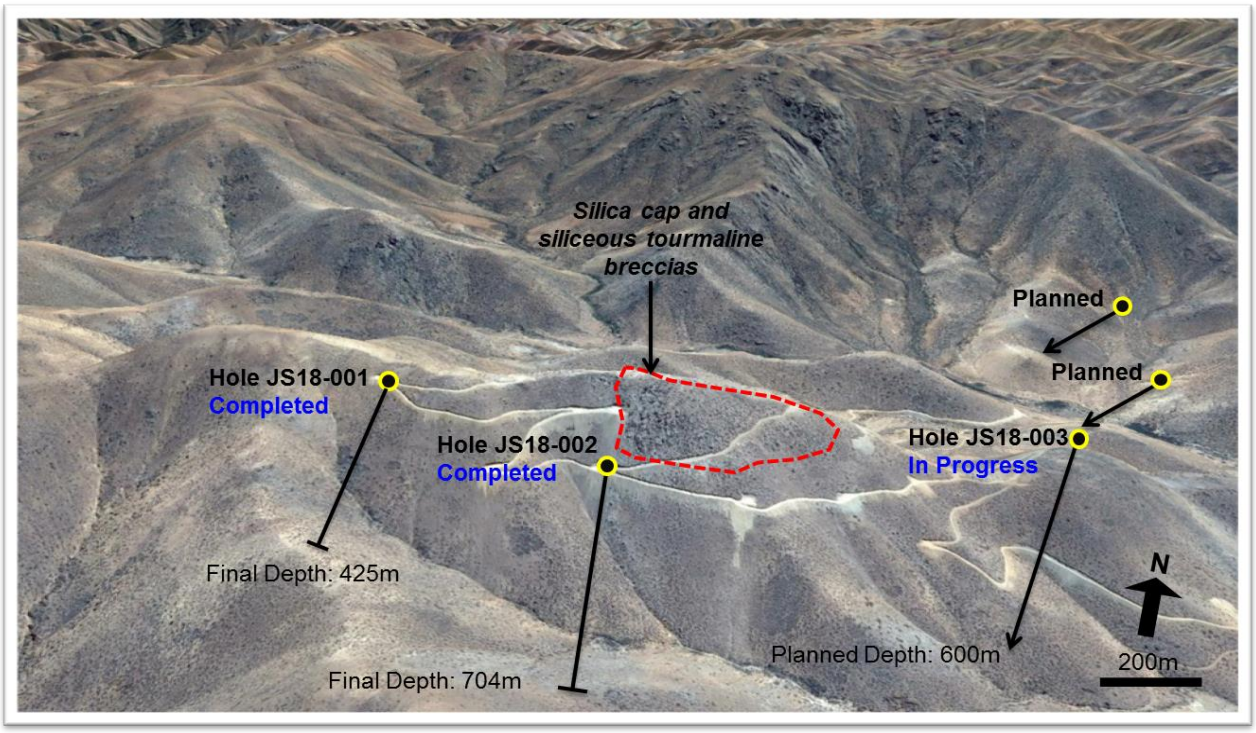


Figure 4 | Relative positions of Manhattan drill holes (completed, in progress and planned) at Joshua shown on north-looking Google image.

About the Joshua Copper Project

The Joshua Project is located 350km north of Santiago in Chile's coastal porphyry copper belt. The 50 sq.km project area has all-year-round access and is favourably situated at low altitude, and close to infrastructure including ports, rail, roads and possible power and water solutions for any future mining scenarios.

The Joshua porphyry copper system is characterised by a regionally significant alteration anomaly (6.5km by 2km), centred on a zone of surface copper mineralization, brecciation and silica-tourmaline alteration. The broad alteration response at Joshua is similar to that of the Andacollo Cu-Au porphyry deposit located 45km to the northwest of the Joshua Project and operated by North American mid-cap company Teck.

The Joshua system was discovered by Helix Resources Limited is 2011 and since then only 16 holes have been drilled (2011, 2012 by Helix and subsequently by IMG Contractors in 2015). This drilling returned a number of significant copper intercepts, including 352m at 0.27% Cu, 240m at 0.22% Cu and 400m at 0.25% Cu. For full details of exploration results, refer to the ASX announcements by Helix dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. Additional information can also be found in Manhattan announcements dated 8 June 2018, 26 June 2018, 1 August 2018, 3 September 2018 and 7 September 2018. Helix and Manhattan are not aware of any new information or data that materially effects the information in these earlier announcements.

On 1 August 2018, Manhattan Corporation Limited ("Manhattan" or the "Company") announced that it had completed the share placement announced 8 June 2018 to raise $3 million ("Placement"), and that the Placement met the final pre-condition of an option agreement with Helix Resources Limited for Manhattan to earn up to an 80% interest in the Joshua Porphyry Copper Project.

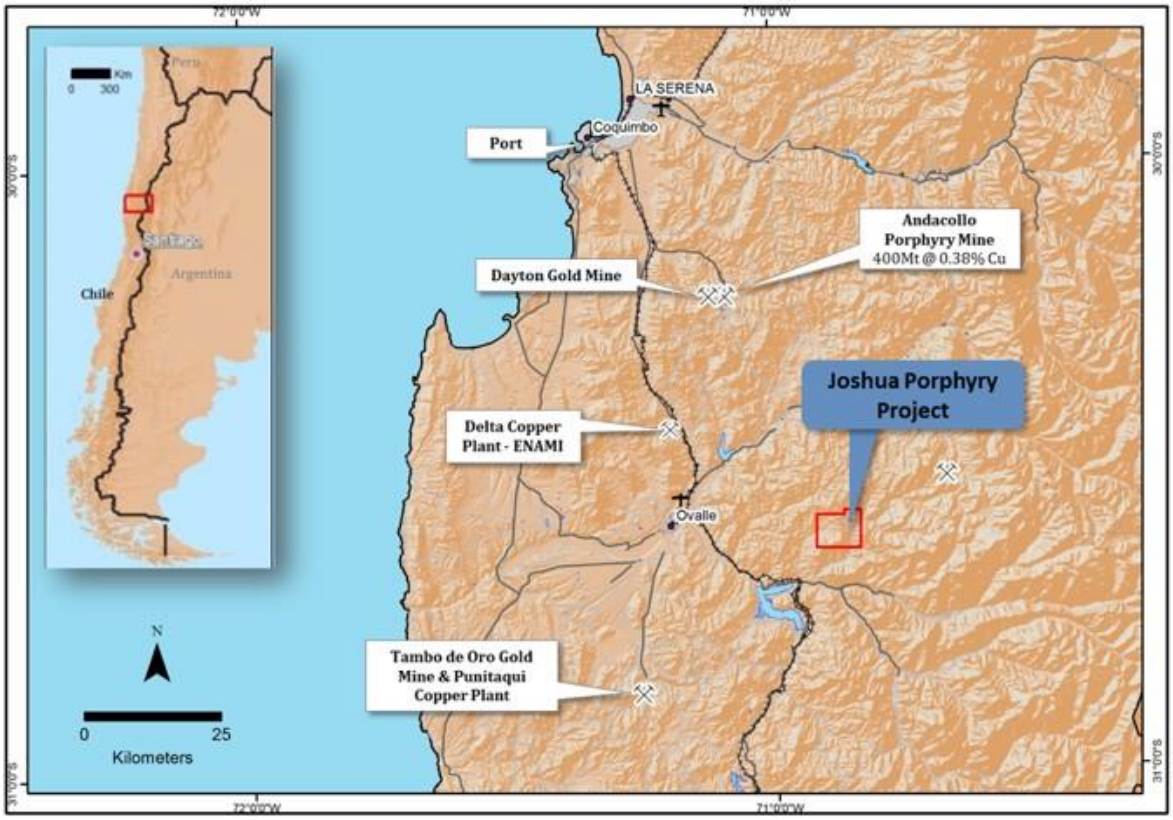


Figure 5 | Joshua Copper Project, Region IV Chile

Note 1 - Sulphide Estimations from Systematic Logging of NQ 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 not 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, sericite, epidote and tourmaline. 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 experience each in porphyry copper mineralisation.*

Competent Persons Statement

The information in this Report that relates to Exploration Results for the Joshua Project is based on information review by Mr Robert Perring who is a non-executive Director of, and technical adviser to Manhattan Corporation Limited and is a Member of the Australian Institute of Geoscientists. Mr R Perring has sufficient experience which is relevant to this style of mineralisation and type of deposit under consideration and to the overseeing activities 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, Minerals Resources and Ore Reserves'. Mr R Perring consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information

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JORC Code – Table 1

Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sounds, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may 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.*	**Drilling** • Chile-based commercial drilling contractors conducted the RC and DDH drilling (DV Drilling in 2011, 2012; TerraServices SA 2015) – a total of 16 holes for 5,504.2m Holes were orientated at various grid directions and were drilled at dips of between 60-90°. • DV Drilling is conducting the DDH drilling - September to December 2018. • Drill hole locations were determined using a hand-held GPS. No down-hole surveys were conducted. • RC drill cuttings were collected in a cyclone and split on-site. First-pass sampling was conducted using 2m composites, followed in a few cases with subsequently resampling on 1m intervals. • 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 either the Drilling Contractors (RC cuttings) and supervised at all times by Helix staff, or by Helix staff (diamond core). • The samples were under the direct control of Helix staff at all times and were transported to the laboratory by Helix staff. **Soils** • Soil samples (315) were collected in 2013 for Helix by experienced contract samplers under the direction of CSA Global staff. • Samples were collected at 200m intervals along lines 200m apart. • The samples were collected by digging and removing soil from shallow holes (~15cm deep). The soil from each sample pit was then sieved to minus 1mm and the recovered fraction analyzed by a licensed XFR Operator using a portable, hand-hand Olympus Delta XRF analyzer supplied from Australia by

Criteria	JORC Code explanation	Commentary
		CSA Global, specifically for the job. • The QA/QC data collected over the course of the program indicate no issues were encountered with the analytical method and assay results. • The data was collected and stored digitally in the field. **Rock Samples (including Rock Chip Samples)** • Rock samples were collected by Helix staff. • Each sample is a composite of approximately 5 pieces of rock collected within a 3m radius of the recorded sample point to give a total sample weight of approximately 2kg to 3kg. • The samples were secured in the company compound before being driven to the laboratory by Helix staff. • At the laboratory, the samples were crushed and pulverised using industry standards. • The laboratory's standard QA/QC procedures were carried out.
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.).*	• RC (2011) and DDH (2012, 2015, 2018 – in progress) were the drilling methods chosen. • The RC holes were drilled with a 150mm face-sampling hammer using industry practice drilling methods. • 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 under-sized or over-sized drill samples were recorded. • Samples were checked by the geologist for volume, moisture content, possible contamination and recoveries. Any issues were discussed with the drilling contractor.

Criteria	JORC Code explanation	Commentary
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.*	• A representative sample of the RC chips collected from each of the interval sampled were logged and then stored in chip trays for future reference. • The drill core was stored in core trays and comprehensively logged and sampled. • RC chips and drill core were logged for lithology, alteration, degree of oxidation, fabric, colour and occurrence and type of sulphide mineralisation. • All reference RC chips and drill core have been stored in the Helix secure compound in Ovalle, Chile. • Visual estimates of the proportion of sulphides: From systematic logging of 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 not 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, sericite, epidote and tourmaline. 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' experience each in porphyry copper mineralisation.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*	• The preparation of DDH and RC samples 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

Criteria	JORC Code explanation	Commentary
	• *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.*	being sampled. • Repeatability of assays was 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 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.*	• All assays were conducted at accredited assay laboratories in Santiago, Chile (2011, 2012, 2018 – planned): Andes Analytical Assay AAA; 2015 ALS Chemex). • 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 and Manhattan are not aware of any new information or data that materially affects the information in these announcements.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• Results have been verified by 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,

Criteria	JORC Code explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	blanks) into the numbering sequence. This data, together with the assay data received from the laboratory, and subsequent survey data was 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. • Variation in topography is approximately 400m within the drill zone. • All drill pads are also visible on 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, tourmaline, 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 Joshua Project prior to Helix commencing drilling operations in 2011. • Three phases of drilling have subsequently been conducted (#1: RC in 2011 #2: diamond drilling in 2012, #3: diamond drilling in 2015). • The drilling planned for Sept to Dec 2018 (in progress) and will be conducted in a manner consistent with the procedures set out in this JORC table. • Drilling phases 1 & 2 were conducted for Helix. Phase 3 was completed by IMG Contractors on behalf of EPG Partners as part of an Option Agreement to earn an interest in the Joshua Project (since expired). Helix supervised this drilling. • Phase 4 drilling (Sept to Dec 2018) is being supervised by Helix for Manhattan Corporation Limited as part of an Option Agreement.
Orientation of data in relation to geological	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Surface sampling and the position of the drill holes and sampling techniques and intervals are considered appropriate for the early-phase exploration of a large porphyry system with bulk-tonnage copper sulphide potential. • The distribution of copper is known to be variably enriched and depleted within

Criteria	JORC Code explanation	Commentary
structure	• *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.*	an overall porphyry copper system. The relatively small area drilled to date (700m by 600m) is not sufficient to suggest a positive or negative bias, and the large hydrothermal system at Joshua, as defined by the ASTER alteration mapping (6.5km by 2km), 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. The samples were freighted directly to the laboratory with appropriate documentation listing sample numbers, sample batches, and required analytical methods and element determinations.
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
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Joshua Project is located on concessions Joshua 1-17. Helix owns the project 100%, with Manhattan having the right to earn an interest in the project of up to 80% by delivering a Bankable Feasibility Study. • The mineral concessions are in good standing and payment of statutory fees is managed for Helix and Manhattan by 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 (<1800m) and can be accessed all year round.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No previous modern exploration has occurred at Joshua prior to Helix's involvement commencing in 2010. • A number of small artisanal mines and working are present throughout the district.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project is considered to be prospective for copper (gold-molybdenum) 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 not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Helix's previous announcements dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. • Helix and Manhattan are 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. • The zone to be drilled under the auspices of the Manhattan Option Agreement will be 1) step-outs from earlier mineralised drill intercepts, and 2) the testing of new anomalous zones (IP anomalies, surface geochemical anomalies, alteration anomalies) within the much broader Joshua porphyry system.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly*	• Refer to Helix's previous announcements dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. • Helix and Manhattan are not aware of any new information or data that may materially affects the information in these announcements.

Criteria	JORC Code explanation	Commentary
	stated.	
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 was initially designed to 'prove concept' that a large, porphyry copper system is present at Joshua. • The geology (lithological associations, metal associations, alteration zonation patterns) has been determined to be consistent with that of a large porphyry system. • The initial three phases of drilling (2011, 2012, 2015) were also designed to investigate the potential for copper mineralisation beneath the outcropping copper exposed in the silica cap and hydrothermal breccias on surface. • Porphyry 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).
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 2, 3 and 4 in MHC ASX announcement titled: Manhattan Signs Landmark Agreement on Joshua Copper Project dated 8 June 2018. • Manhattan is not aware of any new information or data that materially affects the information in these announcements.
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 dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. • Helix and Manhattan are not aware of any new information or data that materially affects the information in these announcements.
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,*	• **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 extent of Iron Oxide, Hydroxyl, Kaolinite-

Criteria	JORC Code explanation	Commentary
	geotechnical and rock characteristics; potential deleterious or contaminating substances.	Alunite, Sericite and Silica alteration zones. • **Induced Polarisation (IP) Survey:** A pole-dipole IP survey was conducted for Helix by Quantec Geoscience in 2011. The data was collected on 100m centres along E-W lines spaced 200m 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 25sq. km. in August 2018 for Helix as part of the Manhattan Option work program. The drone was fitted with a fluxgate magnetometer. Flight lines: N-S and 50m apart. Tie-lines: E-W and 1000m apart. The survey was designed to cover the entire ASTER alteration anomaly. Elevation difference across the survey area: 850m. Total flight lines: approx. 500km. Average altitude: 1,200m. 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 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.*	• Manhattan is funding a minimum A$1m program to deliver 3,000m of DDH drilling at Joshua targeting new areas surrounding the previous work conducted by Helix. • The drilling program commenced in September 2018 and will take approximately 3 months to complete. • Drill core assay results will be received progressively during the drilling program and it is anticipated that all results will be received before the end of 2018. • Refer to Manhattan announcements dated 8 June 2018, 26 June 2018, 1 August 2018, 3 September 2018 and 7 September 2018 for additional information. Manhattan is not aware of any new information that materially changes the results and information reported in these announcements.