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8 June 2018

### **Company Announcements Platform**

#### **MANHATTAN CORPORATION LIMITED**

#### MANHATTAN EXECUTES BINDING AGREEMENT ON THE JOSHUA COPPER PROJECT, CHILE

Manhattan ASX Announcement 8 June 2018

JOSHUA COPPER PROJECT CHILE JORC CODE TABLE 1

For full details of exploration results refer to the ASX announcements by Helix Resources dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

## Joshua Drilling Program Background

The Joshua Project drilling occurred in three phases in 2011, 2012 by Helix and subsequently by IMG Contractors in 2015. The drilling has been supervised by Helix staff in its entirety. Representative samples from RC material have been retained in trays at Helix's storage facility in the nearby town of Ovalle, along with all DDH core completed to date. The following table provides the collar information for drilling to date at the Joshua Project.

Table 1: RC and DDH Collars at the Joshua Project in Region IV Chile

Hole ID	Type	East (WGS-84)	North (WGS-84)	Elevation	Azimuth	Inclination	Depth
ARJS11-001	RC	320756	6613442	1501	55	-85	156
ARJS11-002	RC	320756	6613442	1501	0	-65	182
ARJS11-003	RC	320278	6613618	1575	70	-65	400
ARJS11-004	RC	320360	6613411	1462	70	-65	234
ARJS11-005	RC	320703	6613247	1403	20	-65	242.5
JS12-001	DDH	320859	6613257	1385	260	-50	302.10
JS12-002	DDH	320767	6613450	1346	55	-80	400
JS12-003	DDH	320530	6613266	1420	280	-50	242.1
JS12-004	DDH	320703	6613247	1403	270	-65	147.6
JO15-01	DDH	320749	6613441	1502	290	-70	698.25
JO15-02	DDH	320811	6613347	1453	280	-75	41.30
JO15-03	DDH	320811	6613347	1453	280	-75	683.15
JO15-04	DDH	321290	6613730	1167	240	-65	352.40
JO15-05	DDH	321044	6613375	1331	290	-80	815.05
JO15-06	DDH	320814	6613558	1439	350	-65	637.85
JO15-07	DDH	320396	6613659	1544	80	-65	242.00
ARJO15-01	RC	320432	6613484	1514	120	-65	30.00

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Manhattan Corporation is not aware of any new information on the drilling and sampling results for the Joshua Copper Project.

Joshua Copper project JORC Code Table 1 attached.

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## 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>Joshua drilling used a commercial contractor for RC and DDH drilling. 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°.</li> <li>The drill hole locations were located by handheld GPS no down hole surveys were conducted during drilling.</li> <li>RC Drilling was used to obtain 1m samples. Sampling was completed as 2m composites as a first pass, collected by Contractors or Helix staff and transported to the laboratory for assay. DDH Drilling was used to obtain core. Sampling was completed as 2m half or quarter core as a first pass, collected by Contractors or Helix staff and transported to the laboratory for 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-	<ul> <li>RC and DDH were the methods chosen for the holes drilled and RC were drilled with a 150mm face sampling hammer using industry practice drilling methods, HQ and NQ core was collected using double tube methods.</li> </ul>

Criteria	JORC Code explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	
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 All 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> </ul>	<ul> <li>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.</li> <li>The laboratories standard QA_QC procedures were carried out.</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled. Repeatability of assays was good.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.</li> </ul>	
	<ul> <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> </ul>	
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>All assays were conducted at accredited assay laboratory in Santiago Chile. The analytical technique used for base metals is a mixed acid digest with a MS collection. Gold was assayed via the fire assay and aqua regia methods.</li> </ul>
tests	• 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.	<ul> <li>Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials), replicates as part of in-house procedures.</li> </ul>
	<ul> <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>	
Verification of sampling	• The verification of significant intersections by either independent or alternative company	• Results have been verified by Helix Company management.
and assaying	<ul> <li>personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	laboratory and subsequent survey data were entered into a secure Access databases and verified.
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations</li> </ul>	<ul><li>The drill collar positions were picked-up using GPS.</li><li>Grid system is WGS84 Zone 19S.</li></ul>
	<ul> <li>used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> </ul>	• Surface RL data collected using GPS. Topography around the drilled area is a large hill with drainage intersecting
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	northwest and southwest of the drilled area. Variation in topography is approximately 400m across the area.
Data spacing and	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul> <li>Drill holes at the Joshua Project were targeting a porphyry copper stockwork.</li> </ul>
distribution	• 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.	• This was a three phased drilling program conducted by Helix for the Phase 1 & 2 and the Third Phase completed by IMG Contractors on behalf of EPG Partners as part of their Option to earn an interest in the Joshua Project at the time.
	• Whether sample compositing has been applied.	<ul> <li>Sampling involved 2m interval composite samples.</li> </ul>
Orientation of data in relation to geological structure	<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</li> </ul>	<ul> <li>This covers a 3 phase drilling program, and the information available is consistent with large bulktonnage porphyry style coper mineralisation</li> <li>The distribution of copper is known to be variably enriched and depleted within an averall porphyry copper</li> </ul>
	orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	system. The limited area tested to date is not sufficient to suggest a positive or negative bias, with future work expected to assist in assessing these relationships.

Criteria	J	JORC Code explanation		Commentary	
Sample security		•	The measures taken to ensure sample security.	•	Chain of Custody is managed by the Company and contractors. The samples were freighted directly to the laboratory with appropriate documentation listing sample numbers intervals and/or cut, with analytical methods requested.
Audits reviews	or	•	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 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 up to 80% by delivering a BFS. The mineral concessions are in good standing, with next rent due in March 2019. There are no known impediments to operating in this area.
	• 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.	
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>No Previous modern exploration has occurred at Joshua prior to Helix's involvement, several artisanal mines and working are present throughout the area.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The project is considered to be prospective for copper and gold porphyry mineralisation styles
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> </ul>	• Refer to Helix's previous announcements dated Resources dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. Helix Resources is not aware of any new information or data

Criteria	JORC Code explanation	Commentary
	• If the exclusion of this information is justified on the basis that the information is not Materia and this exclusion does not detract from the understanding of the report, the Competer Person should clearly explain why this is the case.	<ul> <li>announcements.</li> <li>A portion of the results have been included in this announcement as indicative of previous drilling results</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/orminimum grade truncations (eg cutting of high grades) and cut-off grades are usually Materia and should be stated.</li> <li>Where aggregate intercepts incorporate should lengths of high grade results and longer length 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 the stated and some typical examples.</li> </ul>	Resources dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.
	metal equivalent values should be clear stated.	
Relationship between mineralisatio	• These relationships are particularly important in the reporting of Exploration Results.	• The programs were designed to prove concept that a large, porphyry copper system is present at Joshua.
n widths and intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, it nature should be reported.	copper in a central stockwork system at Joshua. These systems are broad and results are generally considered
<b>6</b>	• If it is not known and only the down how lengths are reported, there should be a clear statement to this effect (eg 'down hole length true width not known').	$\frac{1}{2}$ body (100 s of metres wide and thick).

Criteria	JORC Code explanation	Commentary
Diagrams	<ul> <li>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.</li> </ul>	Refer to figure 2,3 and 4
Balanced reporting	<ul> <li>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.</li> </ul>	• Refer to Helix's previous announcements dated Resources dated 10 August 2011, 28 March 2012, 8 June 2012, 17 December 2015 and 6 February 2016. Helix Resources is not aware of any new information or data that materially effects 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, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Previously reported activities Refer to ASX announcements on <a href="https://www.helix.net.au">www.helix.net.au</a> for details
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>	Manhattan is funding a minimum A\$1m program and budget to deliver 3,000m of DDH drilling at Joshua targeting new areas surrounding the previous work by Helix.