

ASX Announcement

1 December 2016

## Collerina: Mineralisation Defined to 350m Depth – Large EM Survey to Commence.

- Results from drilling on the main mineralised zone have returned >1% Copper in 6 of the 8 holes drilled, extending the system to a vertical depth of 350m (refer Figure 1).
- The main mineralised zone is remarkably persistent and its position predictable along a shallow dip and plunge over at least 1,000 metres, and remains open.
- Intercept widths continue to vary within the mineralised zone. This is consistent with Tritton-style deposits (internal variation of 2m-30m thick).
- Downhole geophysics will be used to vector toward the thicker sulphide accumulations within the main mineralised zone for testing with further drilling, as well as defining further zones in the shallower extensions of the Collerina Copper-Zinc system.
- A comprehensive 600 line kilometre VTEM-Max helicopter-borne geophysics survey will be flown over the entire 25 kilometre Collerina trend in early December targeting additional VMS systems on the prospective trend.

Helix Resources (ASX:HLX) wishes to advise that exploration drilling at the Collerina Copper-Zinc Prospect has continued to intersect copper sulphide mineralisation on the down-plunge extension to the main mineralised zone. Remaining results have been received from the large step-out drilling that has tested a further 300m east of previous drilling and tested the system to a vertical depth of 350m.

Six of eight holes targeting the main mineralised zone position have intersected copper mineralisation over various widths.

The Company is very encouraged by the presence of copper mineralisation at predictable depths within the targeted corridor (Refer Figure 1). The geological controls on the main mineralised zone are now well understood with a foot-wall marker horizon consistently being intersected 10-20m below mineralisation, providing a good geological control within the Prospect.

Tritton-style copper deposits have significant variability in mineralisation thickness from 2m to 30m thick. At Collerina there is similar variability of sulphide accumulation in the drilling to date and therefore there is confidence that with further infill and extensional drilling, zones of greater thickness and grade tenor will continue to be identified within the system.

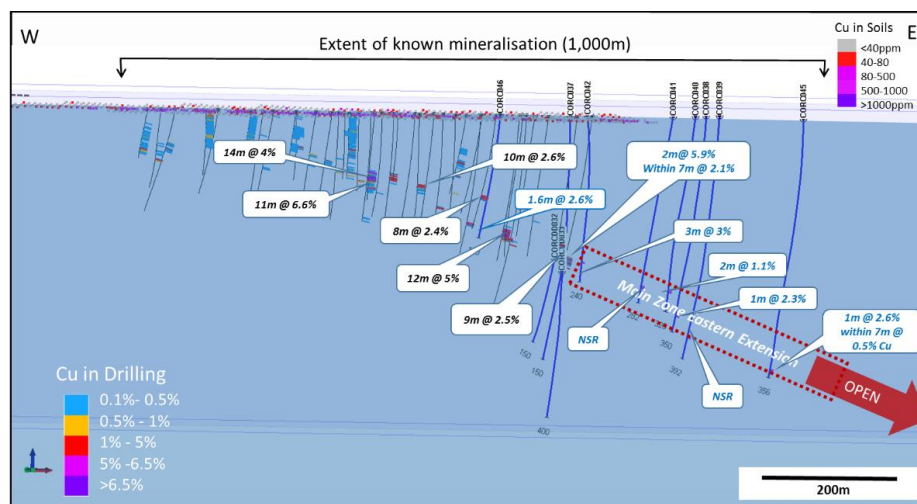


Figure 1: 3D schematic showing drill locations on eastern extension of main mineralised zone at Collerina

Table 1: Collierina Project Drill Collar details

Project	Site_ID	Easting	Northing	Dip	Azi	Total Depth	HoleType
EL6336	CORC037	505670.000	6454970.000	-90	000	400	RC
	CORC038	505909.698	6455093.942	-80	215	350	RC
	CORC039	505946.715	6455141.162	-80	215	392	RC
	CORC040	505875.284	6455044.793	-75	225	326	RC
	CORC041	505827.000	6455002.000	-75	235	282	RC
	CORC042	505710.000	6455010.000	-76	205	240	RC
	CORC043	505875.000	6455950.000	-60	035	191	RC
	CORC044	505500.000	6456300.000	-60	035	171	RC
	CORC045	506000.000	6454975.000	-90	000	356	RC
	CORCDD046	505585.000	6455005.000	-75	215	180	RC/DDT
	CORCDD032	505626.558	6454905.185	-50	226	370(150)	DDT
	CORCDD033	505653.368	6454946.847	-50	215	390(150)	DDT

RC = Reverse circulation, RC/DDT = RC pre-collar and diamond tail, DDT = Diamond Tail

Table 2: Collierina drilling results from recent program.

Hole ID	From	Result
CORC037	From 193m	<b>2m @ 5.9% Cu, 3.0% Zn, 0.5g/t Au &amp; 15g/t Ag</b> within <b>7m @ 2.1% Cu, 1.0% Zn, 0.2g/t Au &amp; 5g/t Ag.</b>
CORC038	From 320m	<b>1m @ 2.3% Cu, 0.3% Zn, 0.1g/t Au</b> within 4m @ 0.7% Cu, 0.1% Zn
CORC039	NSR target not intersected	
CORC040	From 285m	<b>2m @ 1.1 % Cu</b>
CORC041	NSR target not intersected	
CORC042	From 209m	<b>3m @ 3% Cu, 0.3% Zn, 0.1 g/t Au</b>
CORC045	From 344m	<b>1m @ 2.6% Cu</b>
		within: 7m @ 0.5% Cu
CORC046	From 158.2m	<b>1.6m @ 2.6% Cu, 1.2 Zn, 0.6g/t Au</b> within: 4.8m @ 0.8% Cu, 0.3% Zn, 0.2g/t Au

*Reported Intercepts are based on 1m split samples assayed for base metals via a mixed acid digest and MS finish, Gold via fire assay. Intercepts are calculated on a 0.1% Cu cut-off with no internal dilution.*

## Downhole EM Surveys

The recent drilling at Collierina provides a suitable platform for further downhole EM surveys (DHEM). Additional DHEM will be undertaken to vector toward zones of thicker sulphide accumulation within the known portions of the main mineralised zone. DHEM will also assist in identifying stronger EM conductors down plunge, east of the drilling to date. This will assist in planning future step-out drilling at depth.

Closer to surface, the Eastern and Western extensions of the surface gossan and associated soil anomaly remain poorly tested by drilling. DHEM targeting primary zones down dip of the oxide copper results in the limited shallow holes in these areas is also being assessed. DHEM will be targeting repeats or parallel “shoots” similar to the main mineralised zone targeted to date for further drill testing (Refer Figure 2).

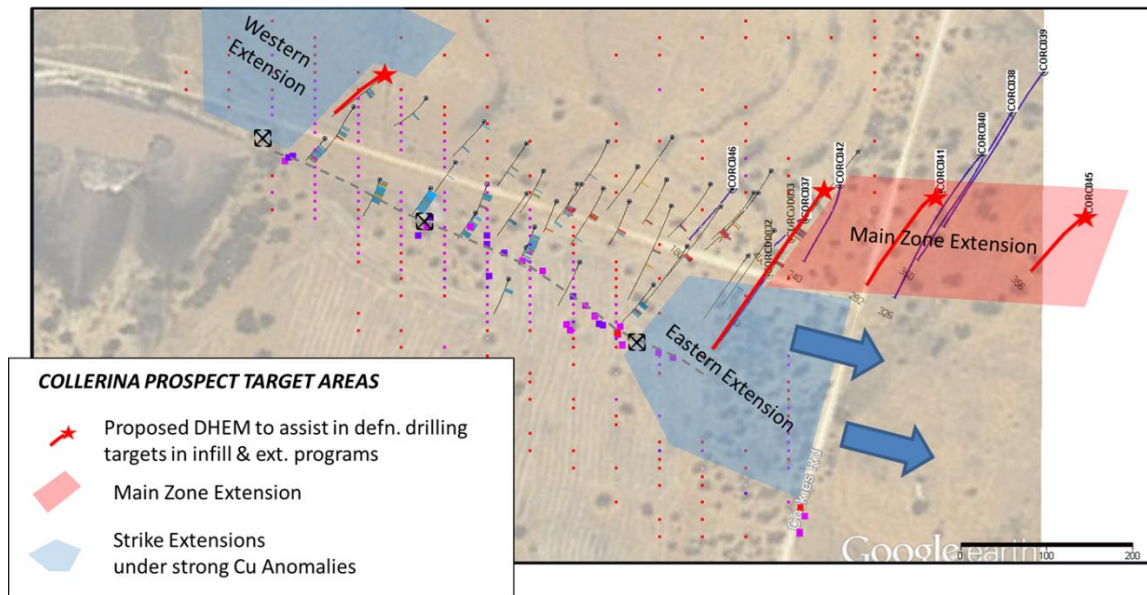


Figure 2: Collerina Copper-Zinc Prospect: areas to be targeted with further DHEM to assess and prioritise zones for future drilling programs.

## Large Regional Geophysics Survey to Commence

Helix has signed a services agreement with a contractor for a comprehensive VTEM-Max helicopter-borne geophysical survey to cover the entire 25km Collerina Project VMS prospective trend. The survey is expected to commence in early December and take 4-5 days to complete.

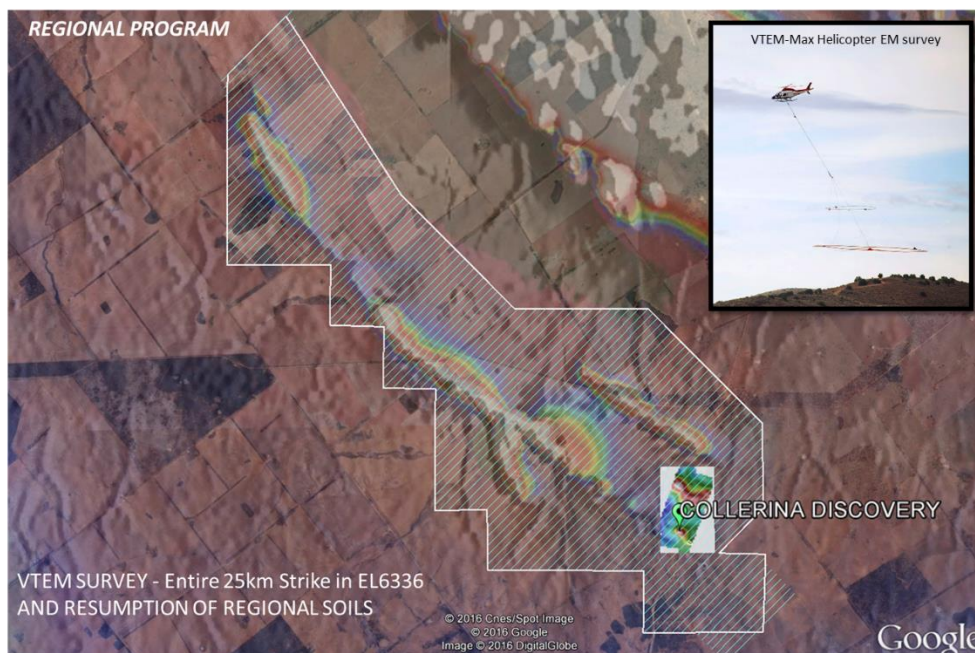


Figure 3: Extent of helicopter-borne VTEM-Max survey to be completed in December 2016 testing Entire 25km of prospective trend within EL6336.

Copper-rich deposits in this region are known to form in clusters. Previous detailed aeromagnetics and mapping by Helix has identified a series of priority regional targets along the trend, however the high rainfall over the winter period in 2016 delayed proposed regional soil programs aimed at assessing those targets.

The VTEM-Max survey will fast-track the regional program identifying late-time EM conductors which will be followed-up with detailed close-spaced surface geochemistry sampling. Where coincident EM and geochemical anomalies are identified, first-pass drilling will test for associated copper mineralisation.

The cost for this survey has been kept to a minimum by joining with several other Companies in the region to give the overall survey an economy of scale that has reduced both the mobilisation cost and line kilometre rate for each Company.

If the VTEM-Max system proves successful in defining prospects with potentially economic copper mineralization within this survey, the Company will consider expanding the coverage. Future surveys may include some or all of the remaining 60km of prospective VMS trend within Helix's tenement portfolio in this region.

**- ENDS -**

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#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled 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 2012 Edition 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](http://www.helix.net.au)



## JORC Code – Table 1

### Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Collerina drilling used a commercial contractor for RC &amp; DDH drilling. A total of 12 holes are being drilled (refer Table 1 &amp; 2 in body of announcement). Holes were orientated to various grid directions, and were drilled at dips of 60°-90°.</li> <li>The drill hole locations were located by handheld GPS. Down hole surveys were conducted during drilling, using an in-rod down-hole system.</li> <li>RC Drilling was used to obtain 1m split samples from selected intervals. RC was collected at the rig as a split sample from each metre with selected metres collected by Helix staff for assay. DDH drilling was used to obtain 1m samples over selected intervals with 1m half core samples collected (~3kg). The 1m samples were cut and collected at a commercial laboratory, pulverized to produce a representative charge with gold assayed.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RC and DDH Drilling were the method chosen for the holes drilled. The core diameter was NQ size. The RC was drilled with a 140mm face sampling hammer using industry practice drilling methods.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support</li> </ul>	<ul style="list-style-type: none"> <li>All RC samples have a representative sieved amount of drill chips collected in trays for future reference Core is retained as full or a half</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>core representation of the metres drilled with the core held at the Companies storage facility..</p> <ul style="list-style-type: none"> <li>Logging of RC and Core was recorded lithology, alteration, degree of oxidation, fabric and colour.</li> <li>All holes were/are to be logged in full.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>The preparation of RC and core samples follow industry practice. This involves oven drying, coarse crushing (core-only), pulverization of total sample using LM5 mills until 85% passes 75 micron.</li> <li>Field QA_QC involved the laboratories standard QA_QC procedures.</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled. Repeatability of assays was good.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All assays were conducted at accredited assay laboratory. The analytical technique used for base metals is a mixed acid digest with a MS collection. Gold was assayed via the fire assay method.</li> <li>Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials), replicates as part of in-house procedures.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Results have been verified by Company management.</li> <li>Geological data was collected using handwritten log sheets which detailed geology (weathering, structure, alteration, mineralisation), sampling quality and intervals, sample numbers, QA/QC and survey data. This data, together with the assay data received from the laboratory and subsequent survey data were entered into a secure Access databases and verified.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The drill collar positions were picked-up using GPS.</li> <li>Grid system is GDA94 Zone 55.</li> <li>Surface RL data collected using GPS. Topography around the drilled area is a slight slope grading from Grid North-East to drainage west of the main drilled area. Variation in topography is less than 5m across the drilled area.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes at the Collerina Project were targeting various geological and geophysical targets.</li> <li>This was the 4th drilling program conducted by Helix for the Project and therefore the amount of drilling remains insufficient to establish a JORC compliant resource.</li> <li>Sampling involved 1m or less interval samples cut at the laboratory for assay.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Inclined RC drilling and two diamond holes have been previously completed within the mineralised zones with good correlation observed between data sets.</li> <li>No orientation based sampling bias has been identified in the data to date.</li> <li>High grade base metals and associated gold was intersected in several of the holes drilled.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of Custody is managed by the Company. The samples were freighted directly to the laboratory with appropriate documentation listing sample numbers intervals and/or cut, with analytical methods requested.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No additional QA/QC has been conducted for the drilling to date.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Collierina Project is on EL6336. Helix has secured the precious and base metal rights under a split commodity agreement with the owners Augur minerals Limited. The tenement is in good standing, with a renewal due in October 2018. There are no known impediments to operating in this area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous modern exploration on the Collierina was limited to 3 holes drilled by CRA in the 1980's all three holes intersected copper mineralisation. Historic shafts and pits are present in the area, which date back to small scale mining activities in the early 1900's.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The prospect is considered to be a hybrid VMS style system similar to the Tritton style systems in the region.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to table 2 in the body of the text</li> <li>No material information was excluded from the results listed</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Results were reported from 1m intervals on a 0.1% cut-off, with no internal dilution.</li> <li>No weighting has been used</li> <li>No metal equivalent results were reported.</li> </ul>
<b>Relationship between</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The program was designed to intersect various targets of base metal mineralisation .</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>From our understanding of the Prospect, drilling is designed to intersect target mineralisation as close to perpendicular as practical.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to figure 1</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Table 2, remaining results have not been received at the time of release and will be release as soon as they become available</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Previously reported activities Refer to ASX announcements on <a href="http://www.helix.net.au">www.helix.net.au</a> for details</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Additional geophysics, geochemistry and drilling will be undertaken to further assess the potential of the Collerina prospect and overall Collerina Project.</li> </ul>