

ASX ANNOUNCEMENT

11 July 2019

MAIDEN DRILL CAMPAIGN TO COMMENCE AT CUE COPPER PROJECT

Highlights

- Cyprium Metals (formerly ARC Exploration) has submitted its initial Programme of Work to the WA Department of Mines for drilling at the Cue Copper Project with approval expected in early July 2019
- Hollandaire resource¹ extension drilling to commence in July 2019 with a Phase 1 Programme of over 4,000 metres of Reverse Circulation drilling
- Hollandaire metallurgical drilling to commence in July 2019 with a 330 metre Diamond Drilling Programme
- ARC Exploration name changed to Cyprium Metals

Cyprium Metals Limited ("**CYM**" or "**the Company**") is pleased to advise that it has approved the commencement of resource¹ extension and metallurgical drilling at the Cue Copper Project, immediately adjacent to the current mineral resource¹ at Hollandaire. This programme is the first in a series of programmes designed to extend the resource¹ at Hollandaire and Hollandaire West.

A Programme of Work (PoW) has been submitted to the WA Department of Mines, Industry Regulation and Safety, for the drilling of these holes and approval is expected by early July 2019. A drilling contractor will be mobilised to site shortly after approval has been received.

The Phase 1 resource¹ extension programme is intended to test for extensions of both the Hollandaire and Hollandaire West resource¹. Figure 1 shows the locations of the drill hole collars around the current Hollandaire and Hollandaire West resource¹. The targeted potential extensions are those that are closer to surface and the majority of which will be drilled into the Hollandaire West area. The holes planned for this phase are for over 4,000 metres of reverse circulation drilling. Following the completion of Phase 1, drilling programmes will continue for a further 8,000 metres of reverse circulation drilling, targeted at the deeper extensions of the current resource¹.

^{1.}2004 JORC Code Compliant Mineral Resource see Table 1 & Appendix 1. Information pertaining to the Hollandaire Resource was prepared and first disclosed under JORC Code 2004 by Silver Lake Resources on 31 July 2013. It has not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.



The metallurgical drilling will be used for initial column test-work to determine the suitability for alternative extraction methods. The drill holes are targeting specific areas of the resource¹ as shown in Figure 2. It is anticipated that following the success of this initial test-work that further samples will be required to continue to optimise the processing methodology.

A number of drill holes in these initial programs will be prepared for down hole geophysics programmes, which will assist in the planning of the subsequent phases of extensional drilling as the Company continues to expand the resource¹.

When the drill programs are complete **CYM** will evaluate the results and release a JORC Code 2012 Compliant Resource.

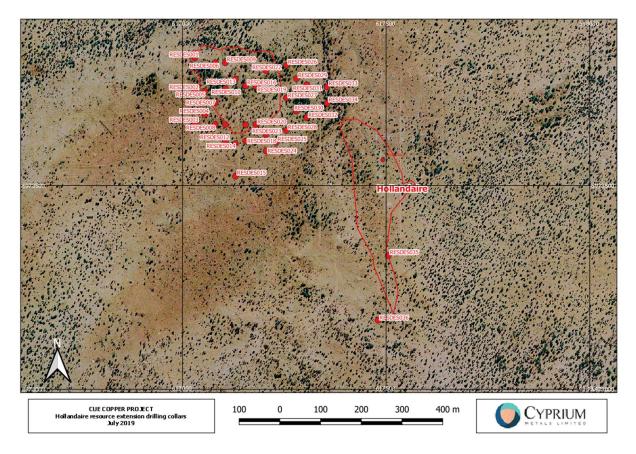


Figure 1 | Hollandaire Phase 1 Extensional Drill Hole Locations



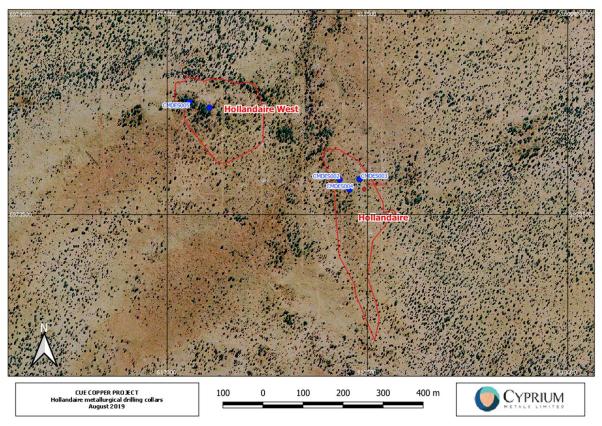


Figure 2 | Hollandaire Metallurgical Drill Hole Locations

The Cue Copper Project

The Project is located in the Murchison region of Western Australia which is host to a number of Volcanic Massive Sulphide ("**VMS**") deposits. VMS deposits usually occur in clusters when in favourable geological settings such as those in the Project area. The Exploration leases and Mining Licenses currently held by Musgrave Minerals Limited (MGV) are located approximately 20km to the east of Cue in Western Australia as detailed in Figure 3 below.

The Hollandaire VMS copper resource¹ mineralisation is open to the south west and at depth. The preliminary exploration data has identified a number of high priority targets and drilling will be conducted at Hollandaire and Hollandaire West to determine the extent of the open mineralisation. In conjunction with the resource¹ extension drilling, the Company will prioritise its other exploration drill targets.



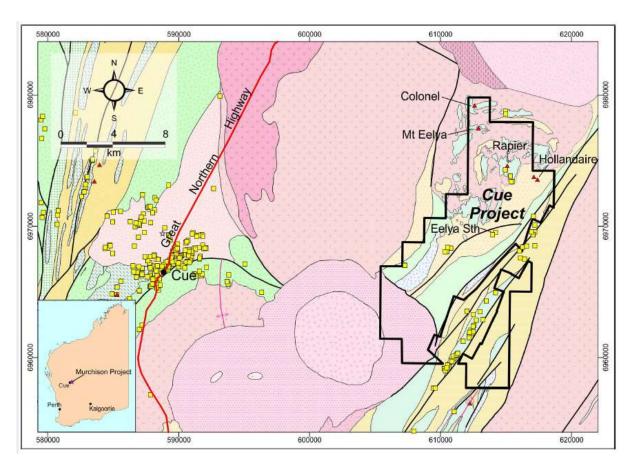


Figure 3 | Hollandaire Copper Resource¹ and location of the Cue Copper Project tenements

Technical Overview

The Hollandaire copper resource¹ was discovered in 2011 by Silver Lake Resources Limited (ASX: SLR) and a maiden Mineral Resource¹ estimate (JORC Code 2004) was estimated in 2013. CYM believes there is potential to upgrade the remaining inferred material to indicated and to identify further mineralisation as the sulphide lodes are open down dip/plunge.

A 2004 JORC compliant Mineral Resource¹ estimate using a 0.5% copper cut-off was completed by Silver Lake Resources Ltd in 2013. The Hollandaire Mineral Resource¹ as reported by Silver Lake Resources on 31 July 2013 is included in Table 1 below and Appendix 1.

30 June 2013	Indicated Resources		Inferred Resources			Total Resources			
JORC 2004	Ore Tonnes '000s	Grade %	Total Tonnes Cu 000s	Ore Tonnes '000s	Grade %	Total Tonnes Cu 000s	Ore Tonnes '000s	Grade %	Total Tonnes Cu 000s
Hollandaire									
Copper	1,891.3	2.0	37.1	122.4	1.4	1.6	2,013.7	1.9	38.7

Table 1 | Hollandaire Copper Mineral Resource¹ Estimate at 0.5% copper cut-off reported by Silver Lake Resources on 31 July 2013



Hollandaire is a VMS deposit which is a style of base metal mineralisation associated with submarine volcanic hydrothermal systems. These frequently occur as clusters along favourable geological horizons as both modern and ancient polymetallic deposits. The Cue region has such favourable seafloor geological horizons consisting of felsic/mafic and metasedimentary sequences with the potential to host further VMS deposits related to or contemporaneous with the Hollandaire system.

Canadian Gold Tenements Update

The Manitou Gold Project tenements held by the Company in North-western Ontario Canada have been reduced from 245 km² to 5 km² during the quarter due to expenditure requirements not being achieved. Access to the project had prevented surface sampling and mapping work to be completed in time for tenement expenditure reporting. The Company is focused on progressing the Cue Copper Project following its acquisition as announced on 17 June 2019.

For further information:

Barry Cahill Executive Director

Wayne Apted Chief Financial Officer and Company Secretary

T +61 8 6169 3050 E <u>info@cypriummetals.com</u>

Competent Persons

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources and/or Mineral Reserves is an accurate representation of the available data and is based on information compiled by Mr Peter van Luyt who is a member of the Australian Institute of Geoscientists. Mr Peter van Luyt is the Chief Geologist of Cyprium Australia Pty Ltd, in which he is also a shareholder. Mr van Luyt 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 (CP). Mr van Luyt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



APPENDIX 1

Notes relating to the Hollandaire 2013 Mineral Resource Inventory (JORC 2004 Code)¹:

1. Geology

The Hollandaire deposit is hosted within a sedimentary and sitic turbidite sequence, now metamorphosed to a chlorite muscovite schist. The footwall consists of a dacite/rhyolite porphyry now metamorphosed to a chlorite muscovite schist. Copper, gold and silver are hosted within massive, to matrix and stringer sulphides consisting of dominantly pyrite and chalcopyrite with minor chalcocite.

2. Data Density

The majority of the deposit is drilled to a 25 x 25m drill spacing with only the lower 25% of the deposit drilled to a 50 x 50m spacing.

3. Geological Interpretation

Resource outlines are generated by creating wireframes of interpreted zones of grade continuity. The wireframes are snapped to drill holes and converted in to a mineralisation solid model. This interpretation was carried out by Silver Lake Resources personnel. Mineralised outlines were prepared using a 0.5% Cu; 0.5 g/t Au; and 2 g/t Ag outline with a minimum width of 2m unless constrained by geological boundaries. Constrained 'high' grade domains were constructed inside the main boundaries where the outline cut-off is 7.5% Cu and 20 g/t Ag. Mineralisation was extended 7.5m or half way between the spacing to the last mineralised cross section. Mineralisation was extended 10m down dip from the last mineralised intercept.

4. Drilling Technique

Only RC and Diamond holes were used in the current resource update.

5. Accuracy of Location of Sampling Points

West drill collars have been accurately located by either a licensed surveyor using a total station or DGPS. The Hollandaire deposit is drilled on the National Grid system, Hollandaire on a National Grid +10° from grid North. The majority of drill holes completed surveyed down hole using either an Eastman camera, electronic multi-shot or gyroscopic device.

6. Sampling Techniques

RC samples are collected every 1m. Diamond drill holes are subsampled down to geological intervals a minimum of 20cm. Details of the sampling techniques from the historic drilling are not known.

7. Drill Core Recovery

Drill core recovery was > 90% for 82% of drill hole samples.



8. Specific Gravity

Specific Gravity has been assigned to oxide and transitional sections of the resource using interpreted weathering surfaces determined from drill hole logging. The following values were used for the respective zones.

- Oxide 1.8t/m³
- Transitional 2.1t/m³
- Fresh (waste) 2.80 t/m³

Values for the fresh zone were based on calculated densities using the combined analysed percentage of Copper, Iron and Sulphur. Actual measured densities replaced calculated densities where applicable and then inverse distance estimation density calculated for each mineralised block.

9. Quality of Assay Data

Assay methods were 40g charge Fire Assay at Ultratrace laboratories, Perth with base metals analysed with a 4-acid digest and finished with ICPOES or ICPMS depending on specific elements. This this method has an Au detection limit of 0.01 ppm with an accuracy of +/- 10% for assays of greater than 0.5 ppm Au; Cu detection limit of 5 ppm; and Ag detection limit of 0.5 ppm.

10. Quality of Data Description

All drill holes were logged by onsite geologists. Features relating to lithology, alteration type, alteration intensity, vein type are captured and stored in an electronic database.

11. Estimation Techniques

A three-dimension block model was created by SLR and copper, gold and silver grade estimated into the interpreted mineralised outlines using Ordinary Kriging grade estimation. Only RC and Diamond drill data was used and sample lengths were all composited to even 1m lengths before estimation.

12. Cut-off Grades

Statistical analysis was used to determine high grade cuts to apply to the composite data. Top cuts varied from 4 to entirely uncut g/t for Au domains; 2% to 27% for Cu; and from 6 to 60 g/t for Ag depending on the geological features of the estimated domains.

The resource was reported at a 0.5g/t cut off for Au; 0.5% for Cu; and 1 g/t for Ag.

13. Metallurgical Considerations

Metallurgical testing of the Hollandaire core was undertaken in 2013. Recoveries of 95% for Cu; 66% for Au; and 91% for Ag were reported from test work primarily of flotation techniques.



JORC TABLE 1

Section 1 Sampling Techniques and Data¹

Criteria	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 sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals. Reverse circulation (RC) samples were collected at 1m intervals with samples riffle split to 3-5kg in weight.		
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Soil sample co-ordinates are in UTM grid (GDA94 Z50) and have been measured by hand-held GPS with an accuracy of ±5 metres.		
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).	A combination of aircore, RC and diamond drilling has been used.		
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Diamond core recoveries are logged and recorded in the database. RC bulk sample weights are observed and noted.		
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond core is reconstructed into continuous intervals on angle iron racks for orientation and reconciliation against core block markers. Rod and metre counts are routinely carried out by the driller.		
	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.	No significant sample loss or bias has been noted		
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.	All geological, structural and alteration related observations are stored in the database.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of lithology, structure, alteration, mineralisation, colour and other features of core or RC chips is undertaken on a routine 1m basis. Photography of diamond core is undertaken prior to cutting and sampling.		
	The total length and percentage of the relevant intersections logged.	All drill holes are logged in full on completion.		
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core is cut and sampled on geological intervals. A diamond core saw is used to cut the core and selected half core intervals are submitted for analysis.		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are routinely riffle split if dry.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill sample preparation and base metal and precious metal analysis is undertaken by a registered laboratory. Sample preparation by dry pulverisation to 90% passing 75 micron.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QC procedures involve the use of certified reference standards, duplicates and blanks at appropriate intervals.		
	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.	Sampling is carried out using standard protocols and QAQC procedures as per industry best practice. Duplicate samples are inserted and routinely checked against originals.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for grain size of sample material. Sample collected from full width of sample interval to ensure it is representative of samples lithology.		



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.	Drill sample analysis is undertaken by a registered laboratory, multi element analysis by acid digest and ICP-OES and ICP-MS to acceptable detection limits. Standard 40g Fire Assay analysis is undertaken for gold. Internal certified laboratory QAQC is undertaken including check samples, blanks and internal standards.		
	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.	No geophysical tools were used to estimate mineral or element percentages.		
	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.	Standards, duplicates, blanks, and repeats are utilised as a standard procedure. Certified reference materials that are relevant to the type and style of mineralisation targeted are inserted at regular intervals.		
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Samples are verified by the geologist before importing into the main database (Datashed). Few twin holes have been drilled.		
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is collected using a standard set of templates. Geological sample logging is undertaken on one metre intervals for all RC drilling and geological intervals for diamond drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to the database. Geological logging of all samples is undertaken.		
	Discuss any adjustment to assay data.	No adjustments or calibrations are made to any assay data reported.		
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.	All maps and locations are in UTM grid (GDA94 Z50) and have been measured by hand-held GPS with an accuracy of ±5 metres. Down hole surveys are undertaken at nominal 30m intervals using a digital down hole camera and spear.		
	Specification of the grid system used.	Drill hole co-ordinates are in UTM grid (GDA94 Z50) and commonly plotted using local grid reference.		
	Quality and adequacy of topographic control.	Drill hole collars and RL's are surveyed by qualified surveyors.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable drill hole spacings are used to adequately test targets.		
	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.	Existing drill hole spacings at Hollandaire is 20m x 20m. This spacing has sufficient continuity to support the definition of Mineral Resource and Reserves under the classification applied under the 2012 and 2014 JORC Code.		
	Whether sample compositing has been applied.	No sample compositing has been undertaken on diamond core or soil samples.		
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.	Drilling is designed to cross the mineralisation as close to perpendicular as possible. Most drill holes are designed at a dip of approximately 60 degrees, however the Hollandaire deposit dips at ~35 degrees.		
	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.	No orientation based sampling bias is known at this time.		
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by internal staff. Drill samples are stored on site and transported by a licenced reputable transport company to a registered laboratory in Perth. When at the laboratory samples are stored in a locked yard before being processed and tracked through preparation and analysis.		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews of modelling techniques and data have been undertaken.		



Section 2 Reporting of Exploration Results¹

Criteria	Explanation	Commentary		
Mineral tenement and land tenure	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,	All drilling and soil sampling is within the project tenement (Hollandaire E20/699). The primary tenement holder is Musgrave Minerals Ltd. The tenements are subject to standard Native Title		
status	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.	heritage agreements and state royalties. The tenements are in good standing and no known impediments exist.		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Some historical drilling has been undertaken in different areas on the tenements by third parties. Some previous soil sampling and geophysical surveys have been undertaken by historical explorers.		
Geology	Deposit type, geological setting and style of mineralisation.	Geology comprises typical Archaean Yilgarn greenstone belt lithologies and granitic intrusives. The main style of mineralisation present is volcanigenic massive sulphide (VMS) base metal and gold 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	All drill hole information has previously been reported.		
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.	No new exploration data is reported in this release.		
	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.	No new exploration data is reported in this release.		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No new exploration data is reported in this release.		
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').	No new exploration data is reported in this release.		
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.	No new exploration data is reported in this release. Some diagrams referencing historical data can be found in the body of this report.		
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.	No new exploration data is reported in this release.		
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.	No new exploration data is reported in this release. All material results from geochemical and geophysical surveys and drilling related to these prospects has been reported or discussed previously.		
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.	A range of exploration techniques will be considered to progress exploration including additional drilling. Refer to figures in the body of this announcement.		



Section 3 Reporting of Mineral Resource Estimates¹

The information in this report that relates to the Hollandaire mineral resource estimate (JORC Code 2004) is extracted from the report created by Silver Lake Resources Limited entitled "Mineral Resources and Ore Reserves Update", 31 July 2013 and is available to view on Silver Lake's website (www.silverlakeresources.com.au) and the ASX (www.asx.com.au). The Hollandaire mineral resource estimate was completed by Silver Lake Resources in 2013 and reported in a manner compliant to the requirements of the JORC 2004 code for the reporting of mineral resources and has not been reported in accordance with the JORC Code 2012. Peter van Luyt, Cyprium Metals competent person, has reviewed the ore resource and believes it has been estimated and reported to those standards required by JORC 2004 code for the reporting of mineral resources. The Competent Person has not done sufficient work to classify the estimates of mineral resources in accordance with the JORC Code 2012.

The Company confirms that it is not aware of any new information or data that materially effects the information included in the original market announcement and in the case of estimates of mineral resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply. The Company confirms that the form and context in which the Competent Person's findings are presented, have not been modified in any way from the original market announcement. There is nothing that has come to the attention of the Company that causes it to question the accuracy or reliability of the former owner's estimates. The Company has not independently validated the former owner's estimates and therefore is not to be regarded as reporting, adopting or endorsing those estimates.

Drilling programmes planned at Hollandaire are designed to extend and further define the resource with the intent of re-estimating the mineral resource to a standard compliant with the JORC 2012 code for reporting mineral resources. Following the completion of the planned drilling programmes, the currently reported JORC Code 2004 Hollandaire mineral resource estimates may materially change hence will need to be reported afresh under and in accordance with the JORC Code 2012.