

23 April 2020

## WEST KALKAROO GOLD & REE DRILLING RESULTS

### HIGHLIGHTS

- Drilling at West Kalkaroo continues to intersect economic gold grades in the oxidised upper part of the deposit, including 23 metres of 2.45 g/t gold.
- Elevated rare earth element (**REE**) levels were confirmed in a twinned hole with total rare earth oxides (**TREO**)\* of 6,746 ppm over a 10 metre interval. The REE are closely associated with ore-grade copper and gold mineralisation in the same interval.
- Over 30 aircore (**AC**) drillholes have been completed this year at West Kalkaroo, the results of which will be incorporated in a revised gold resource estimate for a conceptual pilot open pit.
- Drilling will continue at Kalkaroo for the foreseeable future in strict adherence to COVID-19 health directives issued by the South Australian Government.

**Havilah Resources Limited (Havilah or Company)** is pleased to report further gold assay results for its shallow gold resource drilling within the confines of a conceptual starter open pit at West Kalkaroo (Figure 1) ([refer to ASX announcement of 24 March 2020](#)).

Significant new gold results include:

**KKAC0491:** 18 metres of 2.64 g/t gold from 71-89 metres downhole (entirely in native copper zone and ended in mineralisation, Figure 2).

**KKAC0492:** 23 metres of 2.45 g/t gold from 60-83 metres downhole (entirely in gold saprolite zone and ended in mineralisation, Figure 2).

Drillhole KKAC0492 did not intersect significant gold mineralisation in the base of Tertiary age Namba Formation clay, which it was primarily designed to test. The drillhole was continued into the underlying saprolite gold zone until AC bit refusal, with the gold intersection as reported above. Drillhole KKAC0492 lies near to a previous metallurgical diamond drillhole, namely KKDD0486, that returned intersections of **85 metres of 2.73 g/t gold** and **73 metres of 1.17% copper** ([refer to ASX announcement of 11 September 2018](#)).

Drillhole KKAC0491 was drilled within 3 metres of the previous drillhole KKAC0421, to validate the previously reported elevated REE ([refer to ASX announcement of 7 January 2020](#)) and to obtain samples for REE metallurgical recovery test work as foreshadowed in that announcement. The drillhole was successful on both counts. While the entire prospective zone was assayed for gold, with the best result as reported above, only a selected 20 metre interval was assayed for REE and other elements at this time. This interval returned potentially economic levels of REE plus ore-grade copper and gold intercepts, as summarised below:

**KKAC0491:** 20 metres of 4,152 ppm TREO\*, 1.57 g/t gold and 0.58% copper from 62-82 metres.

This included 10 metres of 6,746 ppm TREO from 62 to 72 metres, with the higher value REE, namely Dysprosium (**Dy**) + Neodymium (**Nd**) + Praseodymium (**Pr**) + Terbium (**Tb**), comprising 29% of the TREO.

\*Total rare earth oxides (TREO) is the industry standard and accepted norm for reporting REE and is based on the sum of the estimated grades for the following 15 rare earth oxides:  $La_2O_3$ ,  $CeO_2$ ,  $Pr_6O_{11}$ ,  $Nd_2O_3$ ,  $Sm_2O_3$ ,  $Eu_2O_3$ ,  $Gd_2O_3$ ,  $Tb_4O_7$ ,  $Dy_2O_3$ ,  $Ho_2O_3$ ,  $Er_2O_3$ ,  $Tm_2O_3$ ,  $Yb_2O_3$ ,  $Lu_2O_3$  and  $Y_2O_3$ . Refer to Appendix 1 below for further details.

It is evident from these results that there is general correlation of the highly elevated REE with copper and gold mineralisation. The AC drill samples collected will allow mineralogical and metallurgical studies to be undertaken to determine the recoverability of a REE mineral concentrate.

The value upside for Havilah is that if REE can be economically recovered in a mineral concentrate as a by-product of the standard copper and gold recovery processes it potentially provides a further revenue stream for the Kalkaroo copper-gold project. This would potentially happen at an early stage in the project because of the comparatively shallow depths of the combined REE mineralisation.

**Commenting on these new gold and REE assay results Havilah’s Technical Director, Dr Chris Giles, said:**

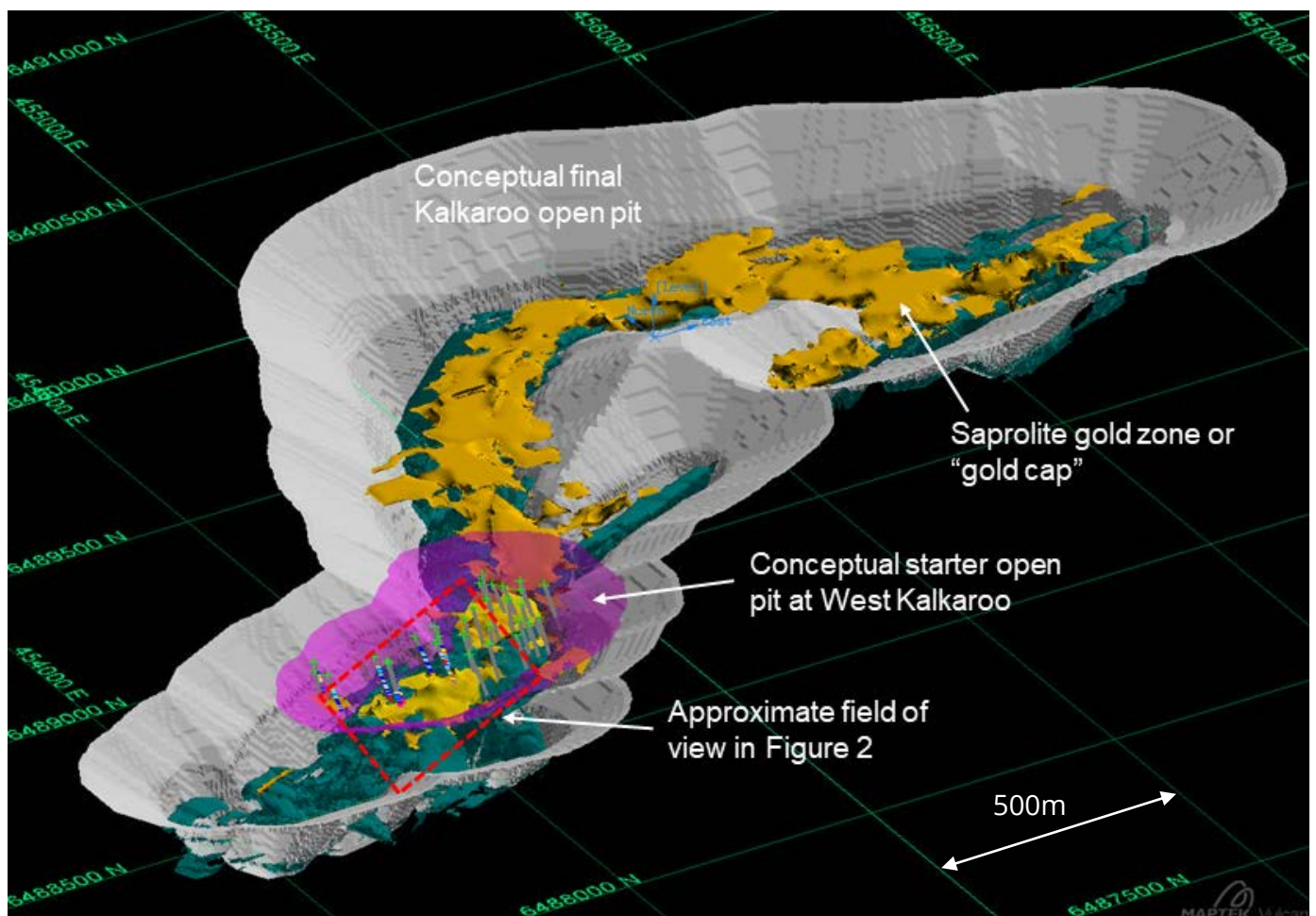
“West Kalkaroo drilling continues to produce higher than expected gold grades in the saprolite gold and native copper zones.

“We are compiling these results for updated resource estimates and mine planning purposes.

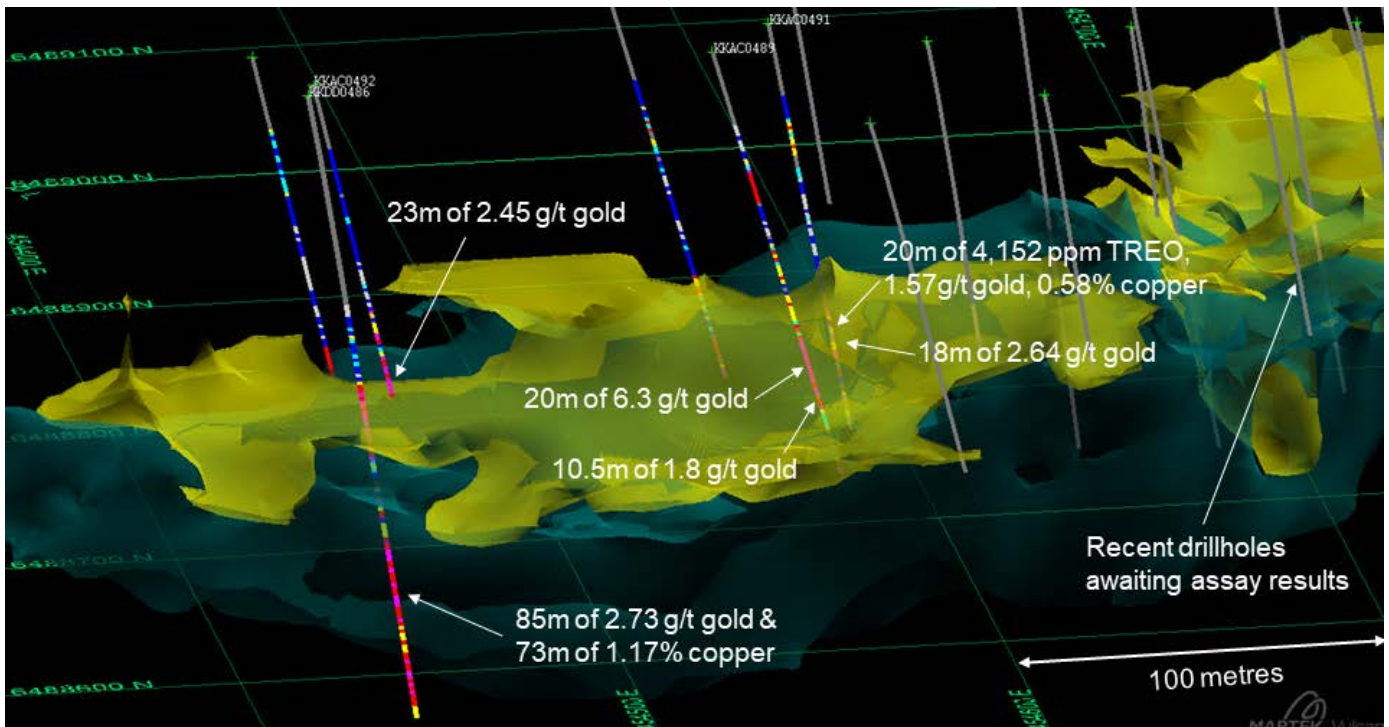
“The confirmation of significant REE mineralisation in association with copper and gold in a new drillhole is very positive and justifies follow-up REE mineral recovery studies using these new drill samples.

“Since commencement of this year’s drilling program Havilah has completed over 30 aircore drillholes at West Kalkaroo.

“Earlier this week we dropped off a further batch of more than 1,800 samples at the Adelaide assay lab and look forward to providing further updates as the results come to hand.” he said.



**Figure 1** Area of drilling at West Kalkaroo in relation to the greater Kalkaroo copper-gold deposit.



**Figure 2** Relative positions of drillholes reported from West Kalkaroo. Saprolite gold zone (yellow) and native copper zone (blue). Note: ppm equals parts per million. 1 ppm = 1 g/t (gram/tonne).

This release has been authorised on behalf of the Havilah Resources Limited Board by Mr Simon Gray.

**Cautionary Statement**

This announcement contains certain statements which may constitute ‘forward-looking statements’. Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

**Competent Person’s Statements**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on data and information compiled by geologist, Dr Chris Giles, a Competent Person who is a member of The Australian Institute of Geoscientists. Dr Giles is Technical Director of the Company, a full-time employee and is a substantial shareholder. Dr Giles has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of ‘*Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves*’. Dr Giles consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

For further information visit [www.havilah-resources.com.au](http://www.havilah-resources.com.au)

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## Appendix 1

Sections 1 and 2 below provide a description of the sampling and assaying techniques in accordance with Table 1 of The Australasian Code for the Reporting of Exploration Results. Havilah confirms that it is not aware of any new information or data and that all material assumptions and technical parameters underpinning results published in the earlier market announcements continue to apply and have not materially changed.

### Details for drillholes cited in the text

Hole Number	Easting m	Northing m	RL m	Grid azimuth	Dip degrees	EOH depth metres
KKDD0486	454437	6488713	120	154	-70	163.2
KKAC0421	454564	6488751	120	154	-70	122
KKAC0489	454543	6488729	120	154	-60	114.5
KKAC0491	454561	6488750	120	154	-70	107
KKAC0492	454442	6488722	120	154	-65	83
Datum: AGD66 Zone 54						

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>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 (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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample data for the new holes reported here (namely KKAC0491 and KKAC0492) was derived from aircore ('AC') drillholes as documented in the table above.</li> <li>AC assay samples averaging 2-3kg were riffle split at 1 metre intervals.</li> <li>All AC drill samples were collected into pre-numbered calico bags and packed into polyweave bags by Havilah staff for shipment to the assay lab in Adelaide.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li><i>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-</i></li> </ul>	<ul style="list-style-type: none"> <li>All AC holes were drilled using a 121mm blade bit. All samples were collected via riffle splitting directly from the cyclone.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<p><i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p> <ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Overall, AC sample recoveries were considered to be quite acceptable for interpretation and modelling purposes.</li> <li>• The sample yield and wetness of the AC samples was routinely recorded in drill logs. Very few samples were too wet to split. No evidence of sample bias due to preferential concentration of fine or coarse material was observed.</li> <li>• Sample recoveries were continuously monitored by the geologist on site and adjustments to drilling methodology were made to optimise sample recovery and quality where necessary.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <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>	<ul style="list-style-type: none"> <li>• All AC samples were logged by an experienced geologist directly into a digital logging system with data uploaded directly into an Excel spreadsheet and transferred to a laptop computer.</li> <li>• All AC chip sample trays and some back-up samples are stored on site at Kalkaroo.</li> <li>• Logging is semi-quantitative and 100% of reported intersections have been logged.</li> <li>• Logging is of a sufficiently high standard to support any subsequent interpretations, resource estimations and mining and metallurgical studies.</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>• AC drill chips were received directly from the drilling rig via a cyclone and were riffle split on 1 metre intervals to obtain 2-3 kg samples.</li> <li>• Sampling size is considered to be appropriate for the style of mineralisation observed. Assay repeatability for gold and other metals has not proven to be an issue in the past and is checked with regular duplicates.</li> <li>• All Havilah samples were collected in numbered calico bags that were sent to ALS assay lab in Adelaide.</li> <li>• At ALS assay lab the samples are crushed in a jaw crusher to a nominal 6mm (method CRU-21) from which a 3kg split is obtained using a riffle splitter. The split is pulverized in an LM5 to 85% passing 75 microns (method PUL-23). These pulps are stored in paper bags.</li> <li>• All samples were analysed for gold by 50g fire assay, with AAS finish using ALS method Au-AA26.</li> <li>• For the interval from 62-82 metres in KKAC0491 samples were analysed for REE by ALS method ME-MS81 and for other elements (including Cu) by ALS method ME-ICP61. Over range copper was analysed by ALS method</li> </ul>

Criteria	JORC Code explanation	Commentary																																													
		<p>ME-OG62.</p> <ul style="list-style-type: none"> <li>Analytical method ME-MS81 is ICP-MS analysis of a lithium borate fused sample.</li> <li>Analytical method ME-ICP61 is multi-acid digestion followed by ICP-MS analysis.</li> <li>All sample pulps are retained by Havilah and other elements (such as copper and rare-earth elements) will be assayed using these pulps as required in the future.</li> </ul>																																													
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <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>	<ul style="list-style-type: none"> <li>Fire assay method Au-AA26 is a total gold analysis and similarly for ME-MS81 for REE.</li> <li>ME-ICP61 is a complete digestion, but over-range element grades are re-analysed by method ME-OG62, which is more appropriate to ore-grade samples.</li> <li>Assay data accuracy and precision was continuously checked through submission of field and laboratory standards, blanks and repeats which were inserted at a nominal rate of approximately 1 per 25 drill samples.</li> <li>Assay data for laboratory standards and repeats for Kalkaroo were previously statistically analysed and no material issues were noted.</li> </ul>																																													
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Checking of the new Au assays against Au assays from adjacent earlier drillholes indicated good overall correlation.</li> <li>Similarly, all other elements showed acceptable correlations between drillhole KKAC0491 and the adjacent earlier drillhole KKAC0421.</li> <li>Rigorous internal QC procedures are followed to check all assay results.</li> <li>All data entry is under control of the responsible geologist, who is responsible for data management, storage and security.</li> <li>Adjustments have been made to the original REE assay data to convert it to REE oxides, which is the accepted industry norm for reporting REE mineralisation. REE to REE oxide conversion factors are listed in the following table:</li> </ul> <table border="1" data-bbox="901 1691 1476 2056"> <thead> <tr> <th>REE</th> <th>REE Oxide</th> <th>Conversion Factor</th> </tr> </thead> <tbody> <tr><td>La</td><td>La<sub>2</sub>O<sub>3</sub></td><td>1.173</td></tr> <tr><td>Ce</td><td>CeO<sub>2</sub></td><td>1.228</td></tr> <tr><td>Pr</td><td>Pr<sub>6</sub>O<sub>11</sub></td><td>1.208</td></tr> <tr><td>Nd</td><td>Nd<sub>2</sub>O<sub>3</sub></td><td>1.166</td></tr> <tr><td>Sm</td><td>Sm<sub>2</sub>O<sub>3</sub></td><td>1.160</td></tr> <tr><td>Eu</td><td>Eu<sub>2</sub>O<sub>3</sub></td><td>1.158</td></tr> <tr><td>Gd</td><td>Gd<sub>2</sub>O<sub>3</sub></td><td>1.153</td></tr> <tr><td>Tb</td><td>Tb<sub>4</sub>O<sub>7</sub></td><td>1.176</td></tr> <tr><td>Dy</td><td>Dy<sub>2</sub>O<sub>3</sub></td><td>1.148</td></tr> <tr><td>Ho</td><td>Ho<sub>2</sub>O<sub>3</sub></td><td>1.146</td></tr> <tr><td>Er</td><td>Er<sub>2</sub>O<sub>3</sub></td><td>1.143</td></tr> <tr><td>Tm</td><td>Tm<sub>2</sub>O<sub>3</sub></td><td>1.142</td></tr> <tr><td>Yb</td><td>Yb<sub>2</sub>O<sub>3</sub></td><td>1.139</td></tr> <tr><td>Lu</td><td>Lu<sub>2</sub>O<sub>3</sub></td><td>1.137</td></tr> </tbody> </table>	REE	REE Oxide	Conversion Factor	La	La <sub>2</sub> O <sub>3</sub>	1.173	Ce	CeO <sub>2</sub>	1.228	Pr	Pr <sub>6</sub> O <sub>11</sub>	1.208	Nd	Nd <sub>2</sub> O <sub>3</sub>	1.166	Sm	Sm <sub>2</sub> O <sub>3</sub>	1.160	Eu	Eu <sub>2</sub> O <sub>3</sub>	1.158	Gd	Gd <sub>2</sub> O <sub>3</sub>	1.153	Tb	Tb <sub>4</sub> O <sub>7</sub>	1.176	Dy	Dy <sub>2</sub> O <sub>3</sub>	1.148	Ho	Ho <sub>2</sub> O <sub>3</sub>	1.146	Er	Er <sub>2</sub> O <sub>3</sub>	1.143	Tm	Tm <sub>2</sub> O <sub>3</sub>	1.142	Yb	Yb <sub>2</sub> O <sub>3</sub>	1.139	Lu	Lu <sub>2</sub> O <sub>3</sub>	1.137
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Criteria	JORC Code explanation	Commentary
		Y                      Y2O3                      1.270 <ul style="list-style-type: none"> <li>Total rare earth oxide (TREO) is the sum of the REE Oxide column calculated using the conversion factors listed.</li> </ul>
<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 holes were not surveyed owing to their short depth.</li> <li>Present drillhole collar coordinates were measured from nearby earlier differential GPS located drillhole collars by tape measure and should have an accuracy of under +/- 1 metre. After completion of the drilling program all holes will be surveyed in UTM coordinates using a differential GPS system with an x:y:z accuracy of 20cm:20cm:40cm and will be quoted in AGD66 Zone 54 datum.</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>Havilah drilling is aiming for a nominal 25m x 25m spacing of drillholes to define a resource in the base of Tertiary clays and to upgrade confidence levels in the saprolite gold zone. In general drillholes are angled perpendicular to the strike of the primary copper-gold mineralisation at West Kalkaroo.</li> <li>Sample compositing was not used.</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>The drillhole azimuth and dip was chosen to intersect the mineralised zones as nearly as possible to right angles and at the desired positions to maximise the value of the drilling data.</li> <li>At this stage, no material sampling bias is known to have been introduced by the drilling direction.</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>AC chip samples are directly collected from the riffle splitter in numbered calico bags.</li> <li>Several calico bags are placed in each polyweave bag which are then sealed with cable ties. The samples are transported to the assay lab by Havilah personnel at the end of each field stint.</li> <li>There is minimal opportunity for systematic tampering with the samples as they are not out of the control of Havilah personnel until they are delivered to the assay lab.</li> <li>This is considered to be a secure and reasonable procedure and no known instances of tampering with samples occurred during the drilling programs.</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>Ongoing internal auditing of sampling techniques and assay data has not revealed any material issues.</li> <li>Robert Dennis who was formerly employed by consulting firm RPM Global Asia Limited ("RPM") visited Kalkaroo during November 2016 and found field procedures to be of</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>acceptable industry standard.</p> <ul style="list-style-type: none"> <li>Wanbao Mining and RPM completed independent re-sampling and assaying for Kalkaroo and found results to be reliable.</li> </ul>

## Section 2 Reporting of Exploration Results

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 license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Security of tenure is via current mining leases over Kalkaroo, owned 100% by Havilah.</li> <li>Exploration drilling is currently being undertaken on Kalkaroo Mining Lease ML 6498.</li> <li>A Native Title Mining Agreement is in place for Kalkaroo. The agreement was executed between Havilah and the Ngadjuri Adnyamathanha Wilyakali Native Title Aboriginal Corporation.</li> <li>Havilah owns the Kalkaroo Station pastoral lease on which the drilling is being conducted.</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>Kalkaroo was explored by a number of major mining groups in the past including Placer Pacific Limited, Newcrest Mining Limited and MIM Exploration Pty Ltd, who completed more than 45,000m of drilling in the region.</li> <li>All previous exploration data has been integrated into Havilah's databases.</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>In general the mineralisation style is stratabound replacement and vein style copper-gold mineralisation within Willyama Supergroup rocks of the Curnamona Craton.</li> <li>At Kalkaroo, the stratabound mineralisation is uniformly distributed along more than 3 km of strike that follows an arc around the 35 degree dipping northern nose of the Kalkaroo south dome. It is hosted by an 80m-120m thick mineralised horizon that is sandwiched between psammitic footwall rocks and a thick pelitic hangingwall sequence.</li> <li>In part, the mineralisation is associated with near-vertical, mineralised quartz vein breccia fracture/fault fillings, which probably formed channel ways for the mineralising fluids. Interference folding resulted in dome structures which probably acted as structural traps for the rising mineralising fluids carried by these vertical structures.</li> <li>The mineralising events were associated with iron-rich and sodium-rich alteration fronts, which are manifest as widespread fine-grained magnetite in the lower sandy formations and as pervasive albite alteration, overprinted by later potassic veining and alteration.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Erosion in the Mesozoic and Tertiary period exposed the region to prolonged and deep weathering. Consequently, the original sulphide mineralisation shows typical supergene enrichment features in its upper part, caused by oxidation of the primary sulphides in the weathering zone, forming a soft clay rich rock called saprolite. This is manifest in a sub-horizontal stratification of the ore minerals from top to bottom:               <ol style="list-style-type: none"> <li>Supergene free gold in saprolite, with generally minor copper, recoverable by gravity and cyanide leaching methods.</li> <li>Native copper and gold in saprolite, largely recoverable by gravity methods.</li> <li>Chalcocite dominant with gold, recoverable by conventional flotation.</li> <li>Chalcopyrite dominant with gold and locally rich molybdenum, recoverable by conventional flotation.</li> </ol> </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:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> </ul> </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>This information is provided in the accompanying table for the relevant drillholes.</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 (e.g. 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>Not applicable as not reporting mineral resources.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <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 (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Downhole lengths are reported. Drillholes are typically oriented with the objective of intersecting mineralisation as near as possible to right angles, and hence downhole intersections in general are as near as possible to true width.</li> <li>• For the purposes of the geological interpretations and resource calculations the true widths are always used.</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>• Provided in Figures 1 and 2.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <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>• Not applicable as not reporting mineral resources.</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>• Relevant geological observations are reported.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. 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 drilling may be carried out in the future to explore strike and depth extensions and for resource delineation.</li> </ul>