ASX MEDIA RELEASE

Havilah Resources
Strategic Minerals in South Australia

31 July 2023

HAVILAH-BHP KALKAROO WORK PROGRAM UPDATE

HIGHLIGHTS

- BHP's recently completed interim assessment of the Kalkaroo copper-gold-cobalt project (**Kalkaroo** or **the Project**) has largely substantiated Havilah's previous pre-feasibility study (**PFS**) conclusions.
- First phase works are complete including a 31 hole diamond drilling program on the Kalkaroo mining lease.
- Multiple technical workstreams are being consolidated by the BHP Think & Act Differently (**TAD**) Study team to de-risk the Project and increase confidence in the key value drivers of metal recovery, operating costs and capital costs.
- Analysis of intersections for twinned drillholes indicated no systematic bias in the data for copper, but gold was roughly 20% higher in the BHP diamond drillholes as compared to the Havilah aircore and reverse circulation drillholes.

Havilah Resources Limited (**Havilah** or the **Company**) (**ASX**: **HAV**) is pleased to report that BHP Group Limited's (**ASX: BHP**) interim assessment of Kalkaroo has recently been completed without identifying any fatal flaws in the Project. The first phase of the Kalkaroo work plan has now concluded, including an 8,159 metre diamond drilling program. Using Havilah's verified technical data as the basis, BHP's TAD team is now undertaking detailed studies of specific new technologies that could potentially add significant value to Kalkaroo, including non-conventional open pit mining, ore-sorting pre-concentration and advanced grinding and flotation technologies informed by new metallurgy testwork. The overriding objective is to apply innovative new technologies that can offer significant efficiencies and improve the Project operating margins. Some of the key work completed to date is summarised below.

1. Diamond Drilling

Two diamond drilling rigs operating on 2 shifts within mining lease (**ML**) 6498 have successfully completed 31 holes for 8,159 metres as part of the phase 1 drilling program. This included 7 geotechnical holes and 24 holes that twinned earlier Havilah reverse circulation (**RC**) drillholes, some of which provided samples for metallurgical test work (Figure 1).

Analysis of the results for the first 16 twinned diamond drillholes showed that in comparison to Havilah's adjacent holes, there was no systematic bias in the data for copper. Gold results are roughly 20% higher in the recent diamond core compared to Havilah RC and aircore drillholes, which if systematic across the Kalkaroo deposit could result in an uplift in gold grades. This comparative analysis will continue as new assay data becomes available for the remaining diamond drill core samples.

Most drillholes returned long intersections of combined copper-gold mineralisation with cobalt, typical of Kalkaroo as follows:

KOZ23D002: 141 metres of 0.68% Cu and 1.18 g/t Au from 101 metres and
57 metres of 253 ppm Co from 124 metres.

KOZ23D004: 115.8 metres of 0.55% Cu and 0.48 g/t Au from 64.2 metres and
57 metres of 279 ppm Co from 102 metres.

KOZ23D006: 142 metres of 0.87% Cu and 0.64 g/t Au from 106 metres and
48 metres of 221 ppm Co from 118 metres and 18 metres of 405 ppm Co from 230 metres.

Several twinned diamond drillholes returned potentially ore grade intersections beneath the Havilah RC drilling and also largely external to Havilah's Kalkaroo 2019 PFS open pit design* (Figure 2), including:

KOZ23D010: 41 metres of 0.65% Cu and 0.21 g/t Au from 127 metres (within PFS open pit design) and **31 metres of 1.11% Cu and 1.44 g/t Au** from 235 metres (beneath PFS open pit design).

KOZ23D012: 67 metres of 0.55% Cu and 0.36 g/t Au from 116 metres (within PFS open pit design) and **45 metres of 1.03% Cu and 0.90 g/t Au** from 274 metres (beneath PFS open pit design) and
30.7 metres of 486 ppm Co from 104 metres (within PFS open pit design).

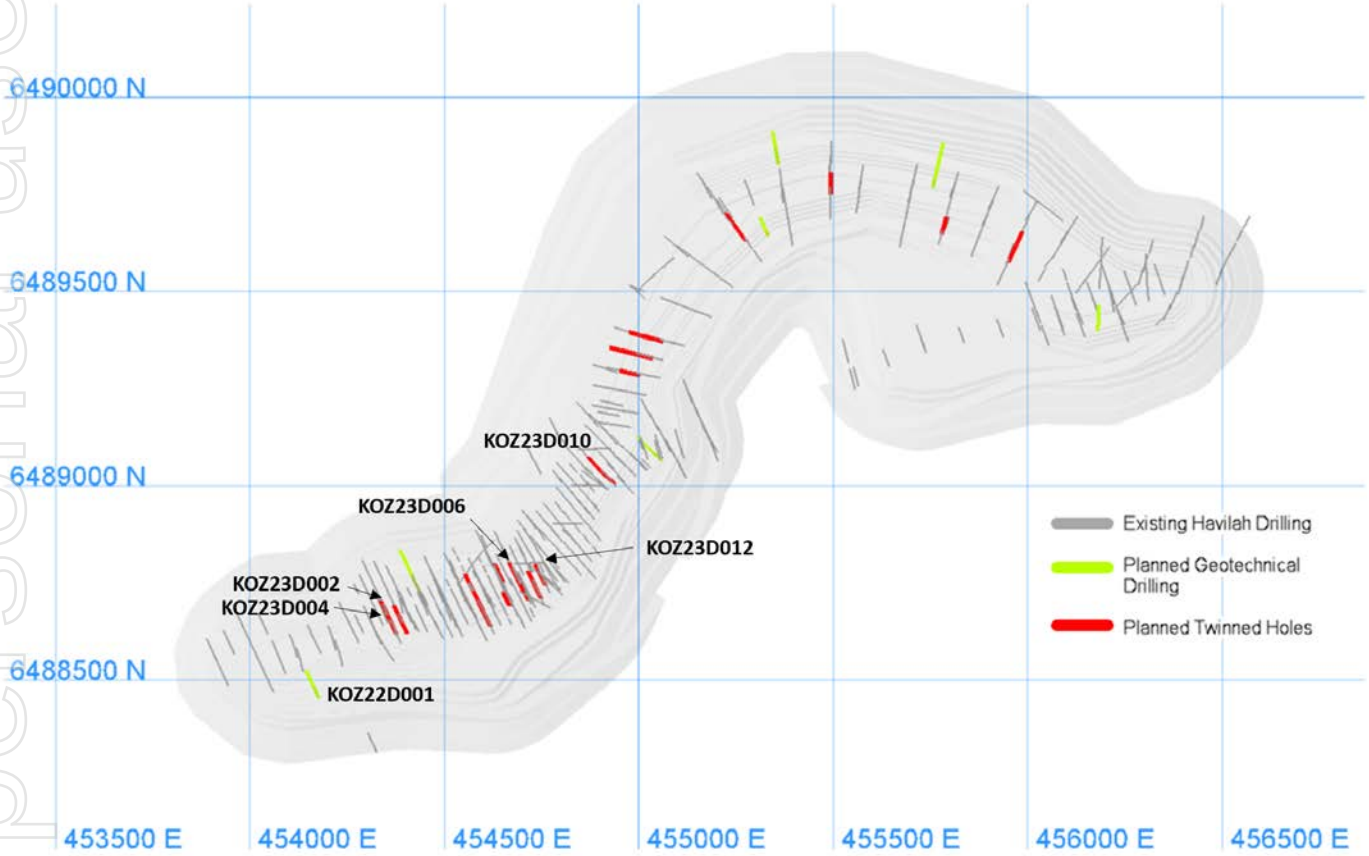

Figure 1 *Phase 1 completed diamond drillholes on the Kalkaroo resource within ML 6498 showing the locations of drillholes for which intersections are cited in the text.*

One geotechnical drillhole that lay roughly 40 metres south of the Kalkaroo 2019 PFS open pit design in an area that had not been targeted before also returned a noteworthy intersection, namely:

KOZ22D001: 35 metres of 0.29% Cu and 0.25 g/t Au from 214 metres, including
10 metres of 0.47% Cu and 0.46 g/t Au from 214 metres (external to PFS open pit design) and
41 metres of 280 ppm Co from 181 metres.

The cobalt intersections are of interest because the cobalt is hosted by pyrite, which could potentially be recovered as a cobalt-rich concentrate during the flotation processing of the sulphide ore.

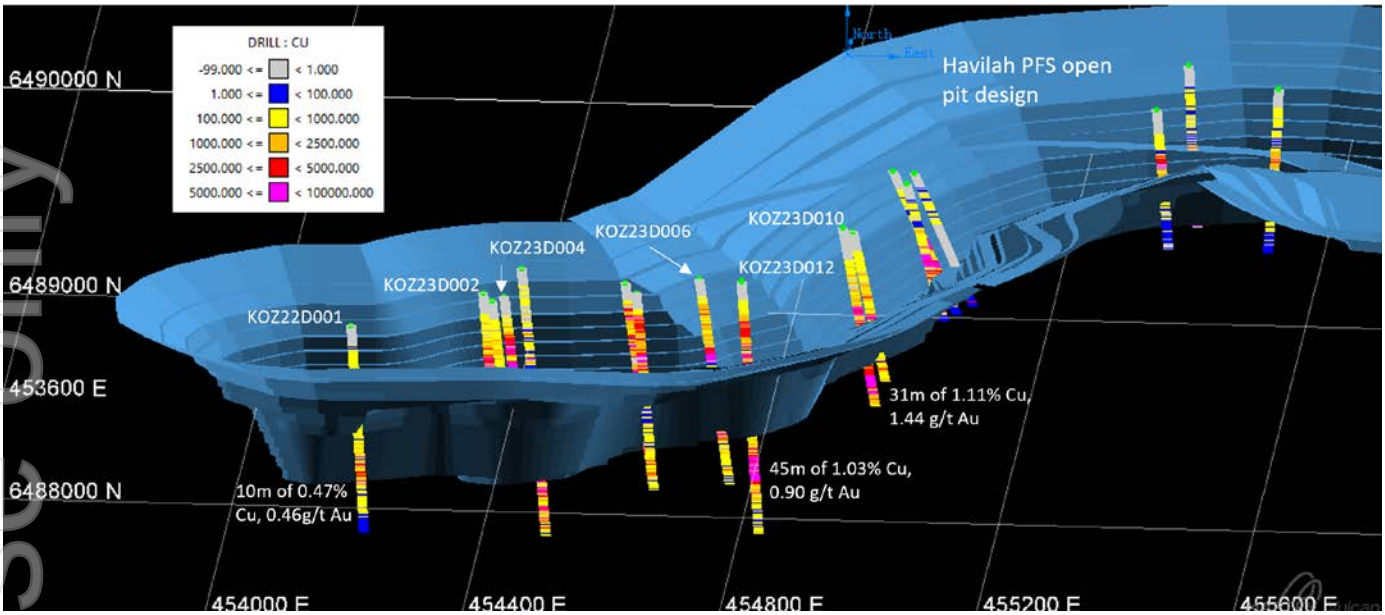

Figure 2 *Western portion of Havilah's Kalkaroo 2019 PFS open pit design showing locations of Phase 1 diamond drillholes referred to in the text and intersections outside of the PFS open pit. Drillhole traces are coloured by copper, with the grade legend (in ppm) shown.*

2. Orexplore Drillcore Scanning

Orexplore Technologies Limited (**Orexplore**) (**ASX: OXT**) conducted core scanning on site using its state-of-the-art GeoCore X10 hardware and its Insight software. The scanning was able to generate a high resolution 3D digital data set that records the physical properties, mineralogy and other attributes across the Kalkaroo orebody with the aim of complementing resource modelling and metallurgical studies. This process effectively resulted in a cloud-based virtual core farm that can be viewed digitally at any time and is being analysed as part of the consolidated technical program.

Orexplore has completed scanning of over 19,000 metres of historic and new drillcore. The core scanning data will be integrated with a new Kalkaroo geological model and resource block model that is being compiled by TAD ecosystem companies using Havilah's historic database.

3. TAD (Think & Act Differently) Incubator

BHP will consolidate the technical study and the TAD incubator program into a single work program for BHP's consideration once completed. The TAD team is developing an updated Kalkaroo resource model as the basis for application of various indicative and unrisked value levers that can highlight areas where value could potentially be unlocked in the Kalkaroo deposit. The TAD conclusions so far are positive in highlighting the potential to unlock value by the application of various innovative mining and processing technologies. This work is in progress and further opportunities for additional value adding are being investigated.

The metallurgical test work program is underway using new metallurgical samples derived from PQ size diamond drillcore generated by BHP's recent diamond drilling program.

Havilah Management Commentary

Commenting on progress to date, Havilah's Technical Director, Dr Chris Giles, said:

"BHP's commitment to continue with its detailed evaluation of Kalkaroo via the ongoing TAD studies is welcome news for Havilah shareholders.

"The significant copper-gold-cobalt drilling intersections both within and external to the Kalkaroo PFS open pit supports our long-held belief that Kalkaroo is a much larger copper mineralised system than indicated by the present resource drilling limits.

"We eagerly await the results of the next phase of work that is focused on the integration of innovative technologies with conventional mining approaches that could potentially add significant value to Kalkaroo and so enhance its development attractiveness."

Figure 3 *General view of the Kalkaroo homestead, camp and core yard, June 2023.*

*Refer to Havilah's ASX announcement of 18 June 2019

This announcement has been authorised on behalf of the Havilah Board by Mr Simon Gray.

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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 Results 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.

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 Reporting of Exploration Results.

Details for Havilah drillholes cited in the text

Hole Number	Easting m	Northing m	RL m	Grid azimuth	Dip degrees	EOH depth metres
KOZ22D001	454144	6488525	122	160	-75	324.5
KOZ23D002	454336	6488703	121	156	-75	285.2
KOZ23D004	454370	6488692	120	155	-69	250
KOZ23D006	454667	6488802	120	153	-67	326.0
KOZ23D010	454869	6489073	119	135	-74	284.7
KOZ23D012	454733	6488798	119	153	-80	400.0
Datum: AGD66 Zone 54 Note: All azimuths and dips are rounded averages measured downhole						

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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.*	• Sample data was derived from BHP diamond drillholes (DDH) as documented in the table above. • The drillcore, which is PQ and HQ3 size was photographed, logged and halved or quartered by diamond saw. • All halved or quartered drillcore samples were collected into pre-numbered calico bags and packed in steel cages for transport to the BV assay lab in Adelaide. • At the assay lab the samples are crushed in a jaw crusher to a nominal 10mm (method PR102) from which a 3kg split is obtained using a riffle splitter. The split is pulverized in an LM5 to minimum 85% passing 75 microns (method PR303). These pulps are stored in paper bags. • All samples were analysed for gold by 40g fire assay, with AAS finish using BV method FA001 and a range of other metals by BV methods MA101 and 102.
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*	• Diamond drilling of PQ size (85mm diameter) and HQ3 size (61.1 mm). • Titeline Drilling were contracted to drill the

Criteria	JORC Code explanation	Commentary
	standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	holes, which were completed in a professional and timely manner. • Orientation marking was only partially successful in the soft saprolite material, but accurate where marks were obtained. It was generally very good in saprock and fresh rock.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Triple tube coring was employed to maximize core recoveries. • Sample recoveries were continuously monitored by the geologist on site to effect adjustments to drilling methodology to optimize sample recovery and quality if necessary. • In general, core recoveries were acceptable, given the clayey nature and very broken nature of some of the material being drilled. Overall core recoveries were >95% in the mineralised intervals, with some short intervals of reduced recovery in highly fractured zones. The sample yield and quality of the diamond drilling samples was routinely recorded in drill logs. • The site geologist and Competent Person consider that overall the results are acceptable for interpretation purposes. • No evidence of significant sample bias due to preferential concentration or depletion of fine or coarse material was observed.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The drill core was logged in detail by an experienced geologist directly into a digital logging system (Geobank Mobile) on a tablet computer. This data was uploaded into a Geobank database after being verified and approved. • Logging is semi-quantitative and 100% of reported intersections have been logged and photographed. • Logging is of a sufficiently high standard to support any subsequent interpretations, resource estimations and mining and metallurgical studies.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Half core was submitted for assay in to obtain results that would allow selection of representative half core samples for metallurgical studies. • Sample preparation and assaying methods are summarized above. • Quality control procedures include the insertion of standards, blanks and duplicates into the regular sample number sequence (approximately 1 in 20 samples). The blanks, standards and duplicates are subject to

Criteria	JORC Code explanation	Commentary
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	rigorous statistical checks and if any are out of spec, re-assay of retained samples is requested of the laboratory as a first step. For the present program the QAQC report did not identify any material deviations in either accuracy or precision of the lab analyses. • 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. • At BV assay lab the samples are crushed in a jaw crusher to a nominal 10mm (method PR102) from which a 3kg split is obtained using a riffle splitter. The split is pulverized in an LM5 to minimum 85% passing 75 microns (method PR303). These pulps are stored in paper bags. • All samples were analysed for gold by 40g fire assay, with AAS finish using BV method FA001 and a range of other metals by BV methods MA101 and 102. • All sample pulps are retained by Havilah so that check or other elements may be assayed using these pulps in the future.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All samples are prepared and assayed at BV laboratory in Adelaide. The total assay methods are standard BV procedure and are considered appropriate for resource reporting. • All gold was determined by fire assay method FA001 with AAS finish. • Other elements were analysed by multi-element digest methods with ICP finish. • Quality control procedures include the insertion of standards, blanks and duplicates into the regular sample number sequence (approximately 1 in 20 samples). The blanks, standards and duplicates are subject to rigorous statistical checks and if any are out of spec, re-assay of retained samples is requested of the laboratory as a first step. For the present program the QA/QC report did not identify any material deviations in either accuracy or precision of the lab analyses. • BV also insert their own QA/QC samples into the sample sequence.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Rigorous internal QC procedures are followed to check all assay results. • All data entry is under control of a specialist database geologist, who is responsible for data management, storage and security. • No adjustments to assay data are carried out.

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Down hole surveys were conducted routinely every 10 m, using an electronic survey camera. • Drillhole collars cited in the table were surveyed in UTM AGD66 datum coordinates using a normal GPS instrument that is accurate to within a few metres. A differential GPS system with an x:y:z accuracy of 20cm:20cm:40cm will be used to obtain the final drillhole locations used in the database.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The objective of the diamond coring program was to obtain representative samples for metallurgical test work, to carry out geotechnical studies and to twin earlier Havilah RC drillholes in order to check for any systematic bias inherent in the different drilling methods. • Hence placing of holes to achieve the above objectives was the main consideration rather than hole spacing. • Sample compositing was not used.
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.* • *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.*	• The drillhole azimuth and dip was chosen to intersect the interpreted mineralised zones as nearly as possible to right angles and at the desired positions but this was not always possible, where adjacent mineralised zones had different dips. • At this stage, no material sampling bias is known to have been introduced by the drilling direction.
Sample security	• *The measures taken to ensure sample security.*	• The quarter core samples were placed directly into pre-numbered calico bags by experienced OZ Minerals Limited and BHP personnel. • The calico bags were placed in steel cages that were collected from site and transported to the assay lab by a local haulage contractor at regular intervals. • There is minimal opportunity for systematic tampering with the samples as they are not out of the control of either Company personnel or the transport contractor until they are delivered to the assay lab. • This is considered to be a secure and reasonable procedure and no known instances of tampering with samples have occurred since drilling commenced.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Ongoing internal auditing of sampling techniques and assay data has not revealed any material issues.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• Security of tenure is via a granted Mining Lease (ML 6498) over the drilling area that is 100% by Havilah. • A Native Title Exploration Agreement is in place for ML 6498. The agreement was executed between Havilah and the combined Adnyamathanha - Wilyakali (NAWNTAC) prescribed body corporate.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Significant aircore, reverse circulation (RC) and diamond drilling has been carried out on the ML area between 1990 and 2003, by previous explorers, namely Placer, Newcrest and MIM. • Subsequently Havilah has carried out further aircore, RC and diamond drilling. • All previous exploration data has been integrated into Havilah's databases.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Structurally controlled, stratabound primary Cu-Au sulphide deposit, overlain by supergene enriched Cu-Au sulphide zone and oxidised Native Cu and Au cap in saprolite. Overlain by a cover sequence of 15 to 50m of Tertiary clay with minor sand layers, then by ~15m of Quaternary-Recent sands, clay and gravel.
Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length* • *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.*	• This information is provided in the accompanying table for the relevant drillholes reported in this release.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown*	• Intercepts are calculated using the length-weighted averages of individual samples, which do not necessarily correspond to whole metres. Minimum grade truncations are applied. Local geology is also used as an input. • Where much higher grades exist, a separate high grade sub-interval may be reported.

Criteria	JORC Code explanation	Commentary
	in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• 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. This was not always possible where adjacent mineralised zones had different dips. • For the purposes of the geological interpretations and resource calculations the true widths are always used.
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.*	• Not strictly applicable as not reporting a new mineral discovery. • A location map of the drillholes reported is included.
Balanced Reporting	• *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.* • *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.*	• Only meaningful potentially economic grade intervals are reported.
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.*	• Relevant geological observations are reported in this and previous announcements.
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.*	• Additional drilling may be carried out in the future to explore strike and depth extensions and for further resource delineation.