ASX MEDIA RELEASE

Havilah Resources
A New Mining Force in South Australia

29 September 2022

MUTOOROO COPPER-COBALT-GOLD DEPOSIT DRILLING RESULTS

HIGHLIGHTS

- Confirmation of continuity of copper-cobalt-gold sulphide lode (**sulphide lode**) at shallow depth in recent Mutooroo pre-feasibility study (**PFS**) open pit resource expansion drilling.
- Significant intervals of copper-cobalt-gold mineralisation intersected in several holes, including: **4 metres of 1.31% copper, 0.11% cobalt and 0.16 g/t gold** and **5 metres of 0.77% copper, 0.09% cobalt and 0.22 g/t gold**.
- Multiple sulphide lodes on several sections is encouraging for depth continuity and resource expansion potential.
- Mutooroo and the surrounding highly prospective Mutooroo Project Area (**MPA**) are a high priority for drilling over the next few months.
- Heritage surveys have cleared planned drilling sites on several key copper-cobalt-gold prospects.

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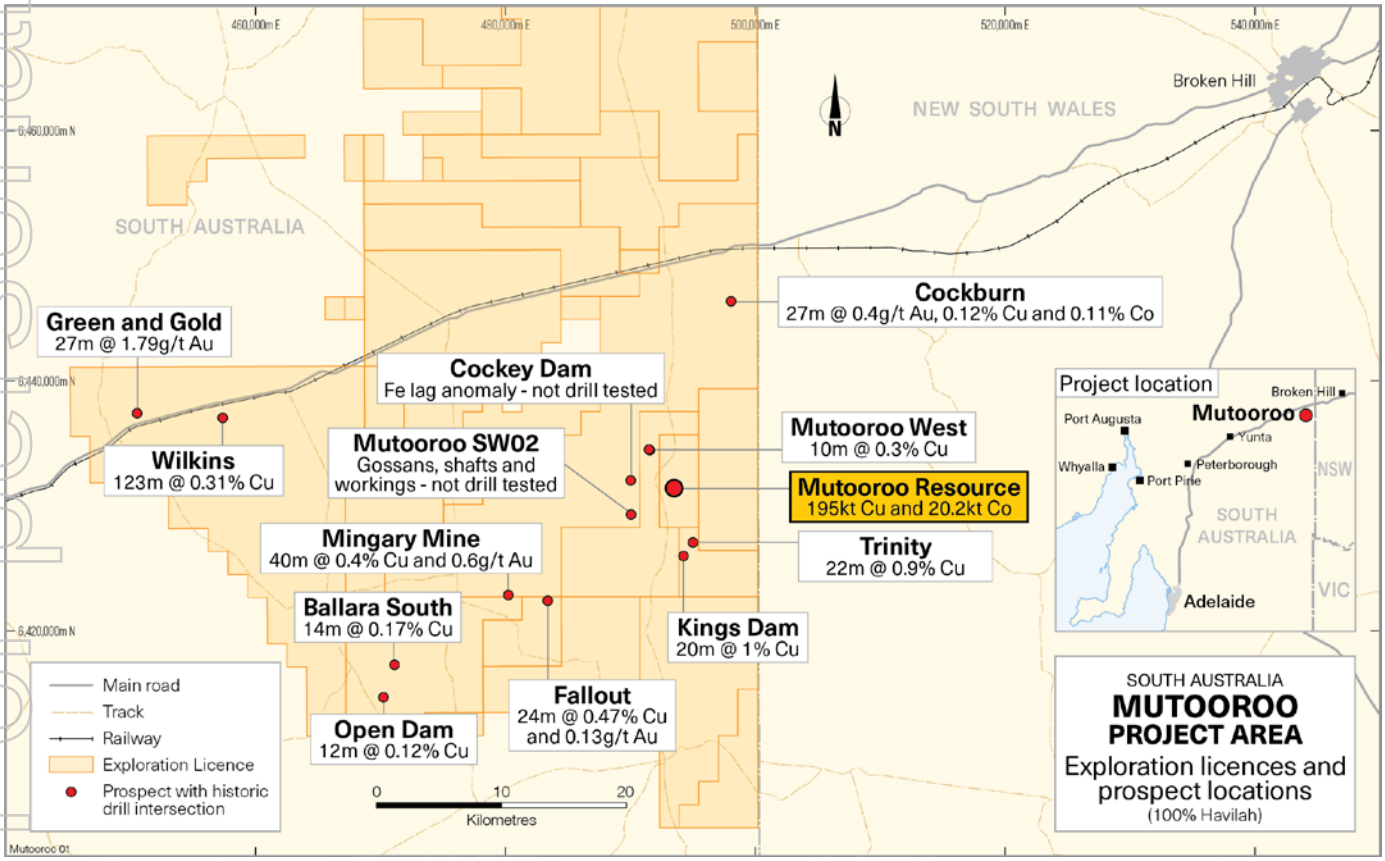

Figure 1 *Location of the Mutooroo copper-cobalt deposit within the highly prospective Mutooroo Project Area.*

Havilah's Technical Director, Dr Chris Giles, said:

"These drillholes specifically targeted the copper-cobalt-gold sulphide lode at depths accessible to a conceptual open pit, with the objective of expanding potential open pit copper-cobalt-gold resources along strike from the established Mutooroo JORC Mineral Resource.

"The aggregate 8-10 metre widths of sulphide lodes intersected in some holes and the relatively high cobalt grades of up to 0.23% plus associated gold credits are positive indicators.

"With a heritage survey of key prospects recently completed, drilling will resume shortly to explore some of the more promising surrounding regional prospects."

Mutooroo Resource Expansion Drilling

Havilah Resources Limited (**Havilah** or the **Company)** (**ASX**: **HAV**) is pleased to report assay results for the reverse circulation (**RC**) drillholes from the current ongoing PFS open pit resource expansion drilling program at the Mutooroo copper-cobalt deposit (**Mutooroo**), 60 km southwest of Broken Hill (Figure 1). Recent drilling has confirmed multiple massive sulphide lodes up to 7 metre thickness, generally where expected from previous drilling and surface outcrops (Figures 2 and 3), with significant results of:

MTRC241 4 metres of 1.31% copper, 0.11% cobalt and 0.16 g/t gold from 82 metres downhole.
MTRC242 7 metres of 0.43% copper, 0.04% cobalt and 0.03 g/t gold from 38 metres downhole and
3 metres of 1.03% copper, 0.09% cobalt and 0.44 g/t gold from 84 metres downhole.
MTRC243 3 metres of 1.71% copper, 0.14% cobalt and 0.32 g/t gold from 79 metres downhole and
5 metres of 0.72% copper, 0.09% cobalt and 0.13 g/t gold from 94 metres downhole (Figure 4).
MTRC244 5 metres of 0.77% copper, 0.09% cobalt and 0.22 g/t gold from 118 metres downhole and
3 metres of 1.20% copper, 0.16% cobalt and 0.37 g/t gold from 129 metres downhole (Figure 4).

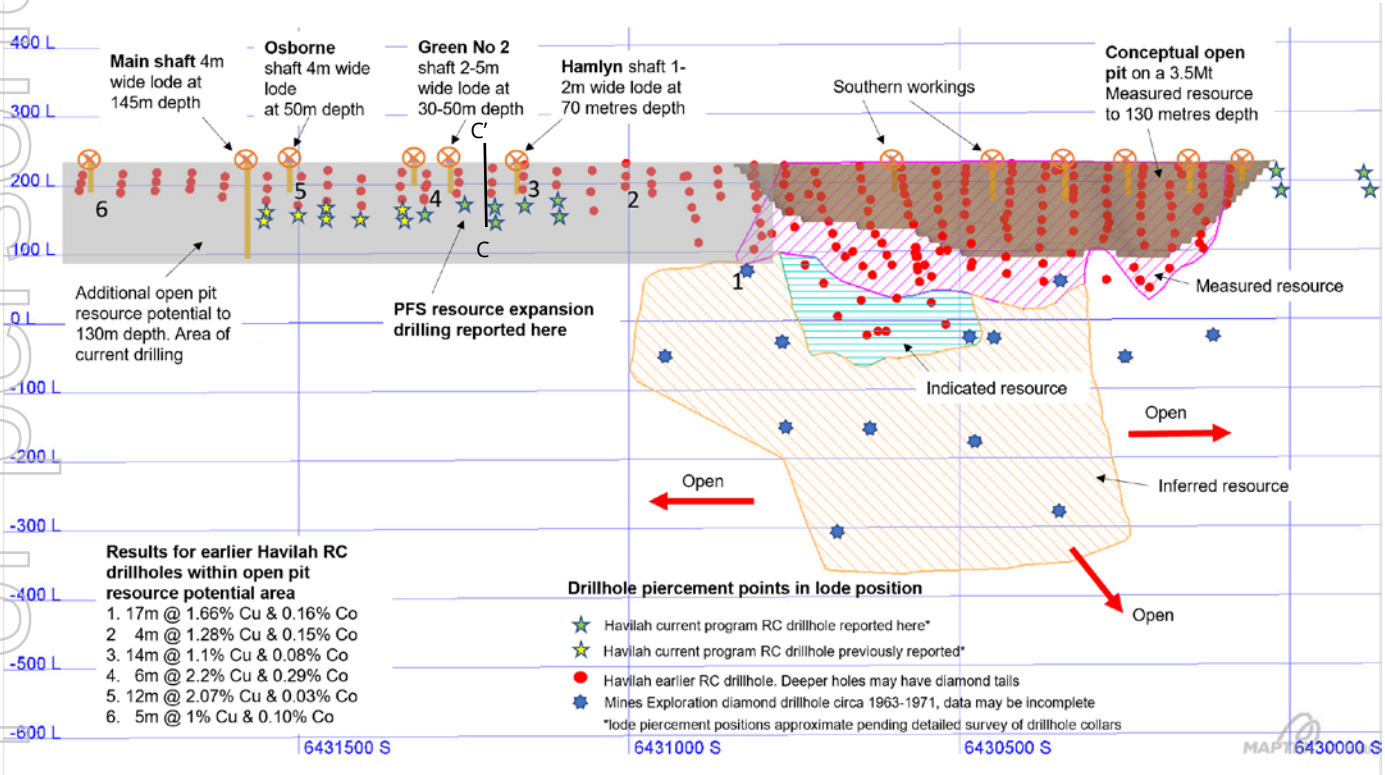

Figure 2 *Long section of the Mutooroo sulphide lode zone, showing the Mutooroo resource and conceptual open pit (brown colour) in the south. The area with open pit resource expansion potential, which is the subject of the current PFS open pit expansion drilling, is shown in grey. Sulphide lode intersection positions for the recent drillholes are identified by green stars. Drilling section C-C' as shown in Figures 3 and 4 is marked.*

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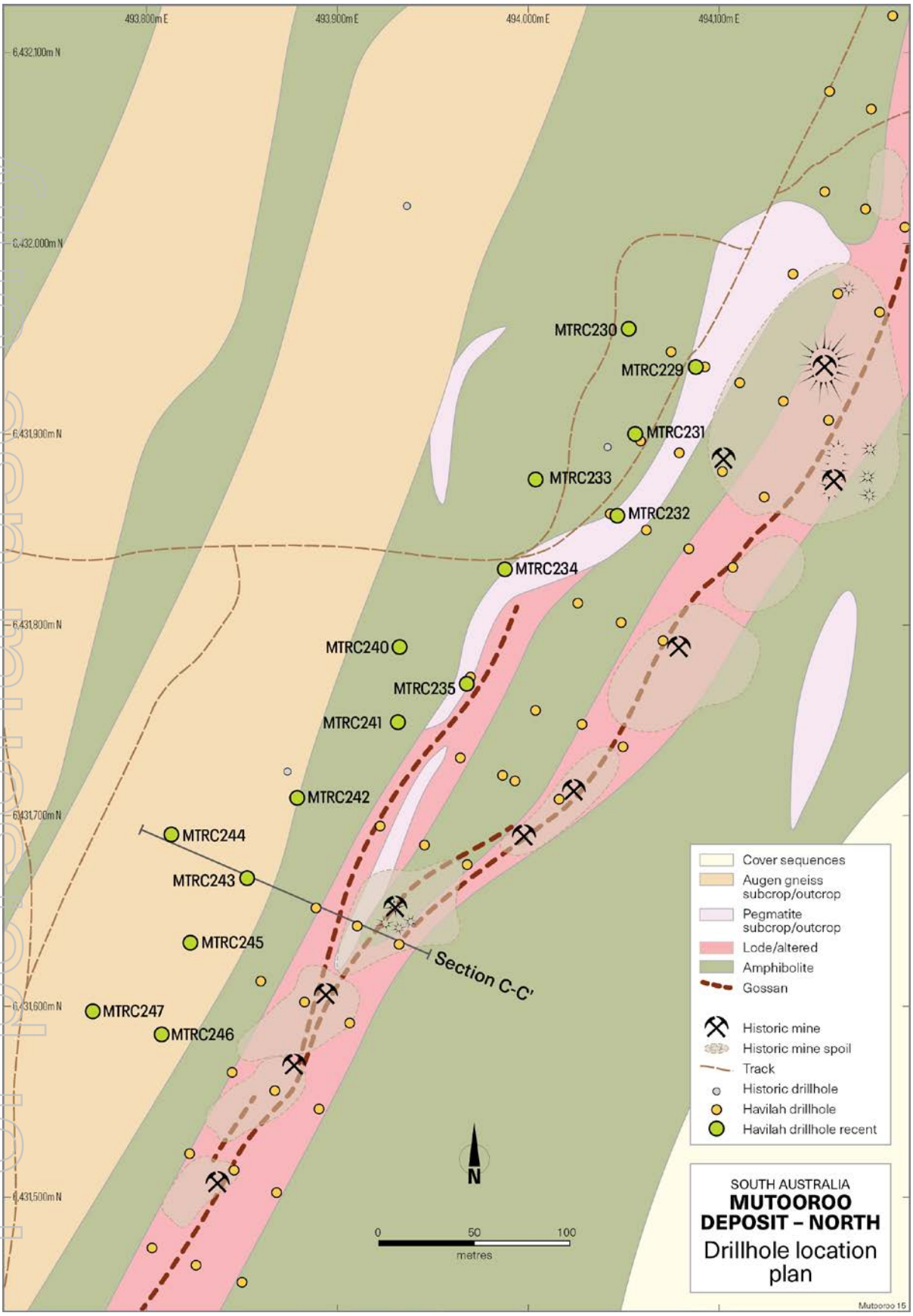

Figure 3 *Surface geological plan of the area drilled showing two generations of Havilah drillholes in relation to the historical mine workings and locations of mapped sulphide lodes, marked by outcropping gossans.*

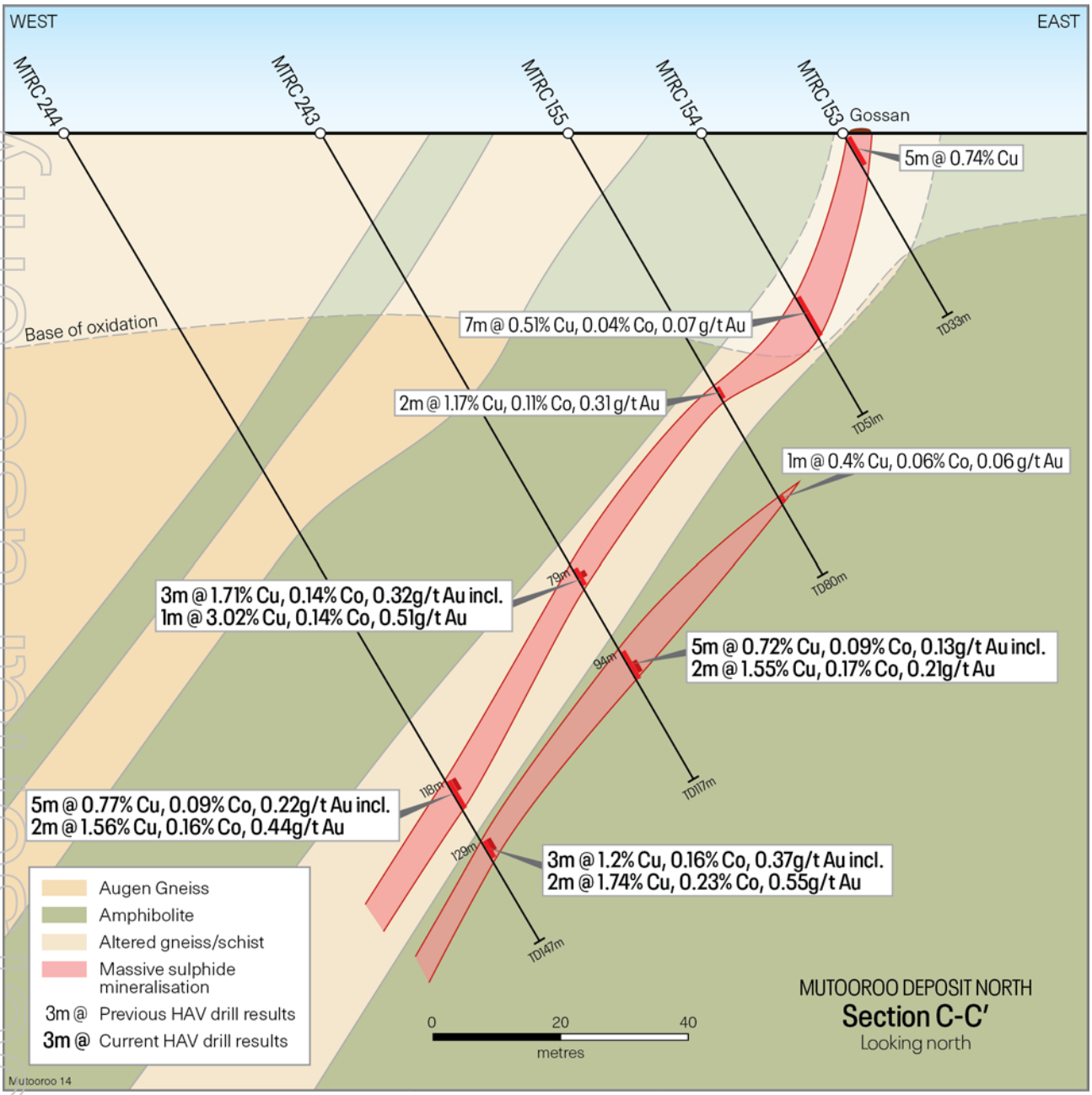

Figure 4 *Drillhole cross-section C-C' showing recent Havilah RC drillholes (MTRC243 and MTRC244) in relation to earlier Havilah drillholes that defined the Mutooroo sulphide lodes. Note the oxidised copper mineralisation near surface in earlier drillholes MTRC153, MTRC154 and MTRC155. Drill intercepts cited are near to true width due to the almost perpendicular intersection angle.*

In general the thicknesses of sulphide lode in the drillholes is comparable with historical records in nearby old mine workings, except in some cases only one of the two sulphide lodes intersected was recorded. Drilling elsewhere along strike has shown rapidly increasing grade-thickness of the sulphide lode with depth on some drill sections. Another tier of deeper drilling beneath the drillholes reported here would be required to test this possibility in this location.

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Four holes (MTRC236 to MTRC239) drilled on the southern extensions of the lode channel/shear zone returned low grade, sub-economic copper, cobalt and gold intercepts. These holes effectively close off the sulphide lode at shallow depth in the south, but potential still remains at depth due to the south-plunging nature of the thickened sulphide lode in this area (Figure 2).

This drilling is part of the Mutooroo PFS with the immediate objective to test for shallow, open pit copper-cobalt-gold sulphide resources along strike from the existing Mutooroo resource and conceptual open pit design and below the shallow oxidised copper ore that was exploited via several historic mine shafts (Figures 2 and 3). Earlier Havilah drillholes discovered shallow oxidised copper mineralisation that could materially add to the near surface open pit resources in this area. Significant earlier drilling results in the oxidised mineralisation in the vicinity of the new drillholes reported here include:

MTRC148 14 metres of 0.43% copper 0.02% cobalt and 0.1 g/t gold from 5 metres downhole.
MTRC149 9 metres of 0.70% copper, 0.08% cobalt and 0.43 g/t gold from 34 metres downhole.
MTRC151 25 metres of 0.41% copper from 6 metres downhole.
MTRC152 16 metres of 1.0% copper, 0.08% cobalt and 0.1 g/t gold from 45 metres downhole.

Exploration in the Mutooroo Project Area (MPA)

Havilah's stated exploration objective is to discover new copper-cobalt-gold resources in the surrounding highly prospective MPA that can provide additional ore-feed for a central sulphide ore processing hub at Mutooroo. Promising drilling targets exist at many historic prospects, some dating from 1960-1990 with potentially ore-grade copper drilling intersections, that have never been assayed for cobalt or gold (such as Kings Dam, Trinity, Mutooroo West, Green and Gold – Figure 1).

Havilah's surface geochemical sampling and gossan search has also identified several undrilled prospects that have either been previously overlooked or unrecognised by earlier explorers. An example is the Cockburn prospect, which returned potentially economic intercepts in Havilah's first drillholes of 27 metres of 0.4 g/t gold, 0.12% copper and 0.11% cobalt within sight of the Barrier Highway and Cockburn township (refer to ASX announcement of 17 August 2021 and also 26 August 2021 page 7).

A heritage survey during August 2022 cleared several high potential prospects for first round Havilah drilling, including the Mingary Mine prospect area where earlier Minotaur drilling returned two potentially economic drilling intersections, including 16 metres of 0.38% copper and 0.66 g/t gold plus a 4 metre higher grade intersection in drillhole 14RCBH009 (see Figure 5; refer to Minotaur ASX announcement of 22 May 2014). Mapping has shown at least 1 km of mineralised target strike potential remains almost untested to the south and similarly 2 km to the north (Figure 5). This is a high priority prospect that is planned to be drilled in the near future, subject to finalisation of access arrangements.

Lying approximately 1 km to the east is the Mingary East prospect marked by a small historic working and a scattered gossanous trend that extends for over 600 metres. This prospect was not previously recorded by earlier explorers and was identified during reconnaissance mapping by Havilah's experienced exploration geologist. Samples of the gossan routinely contain > 400 ppm copper (peak of 1,500 ppm) and > 300 ppm cobalt and weakly anomalous gold of 40 to 50 ppb (parts per billion).

A further 2.5 km east is the Fallout prospect marked by 2 sizeable gossan outcrops with highly anomalous copper ranging from 300 ppm to > 1,000 ppm (Figure 5). Historic drilling from the 1970's returned 6 metres of 1% copper and 0.4 g/t gold plus elevated cobalt in the sulphide zone, but only partially tested the prospect.

Havilah expects exploration drilling will resume shortly following rig refurbishment. Initially, a further 8-10 holes will be drilled at Mutooroo to complete the resource expansion drilling, followed by the cleared MPA regional prospects which will be drilled in order of priority.

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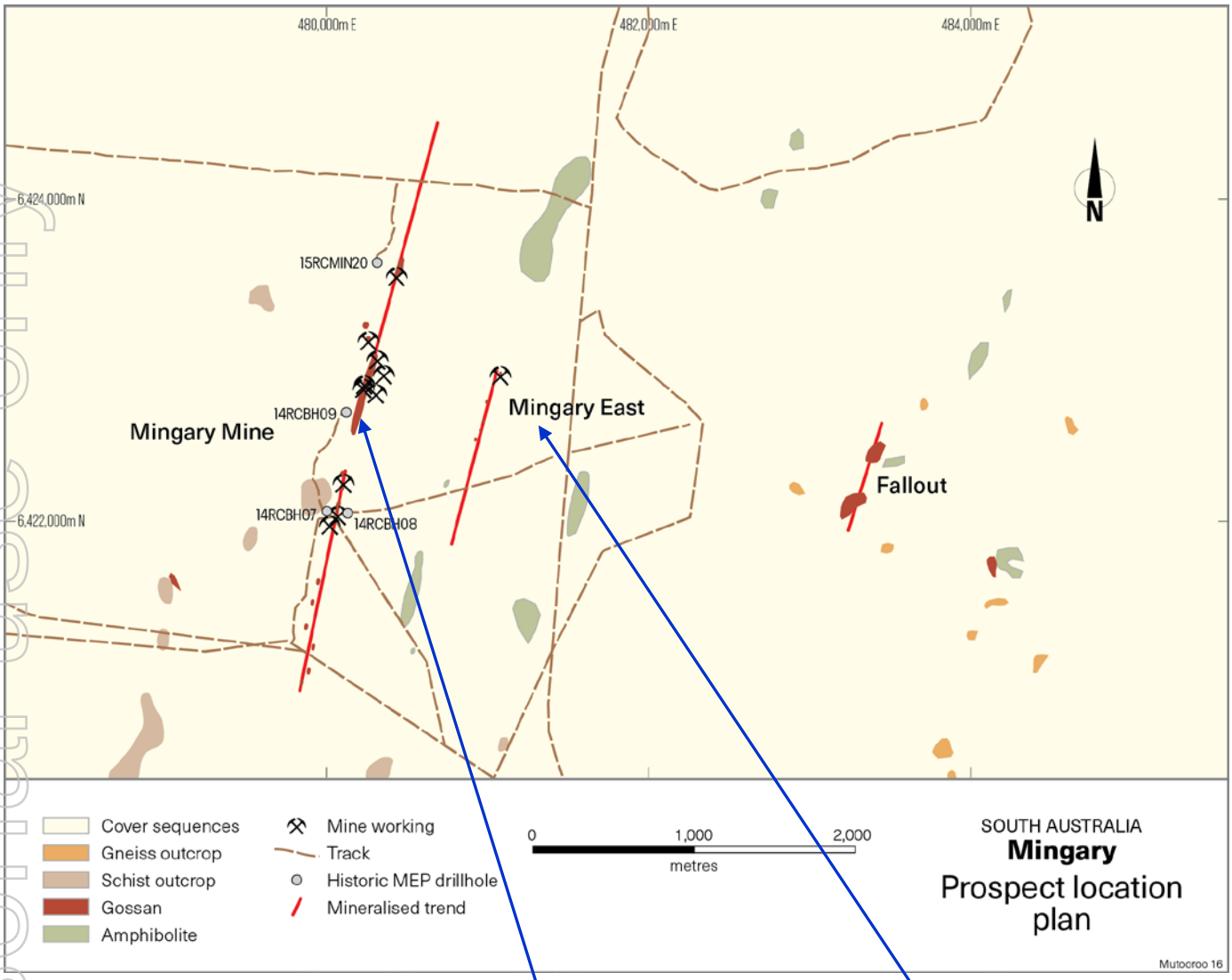

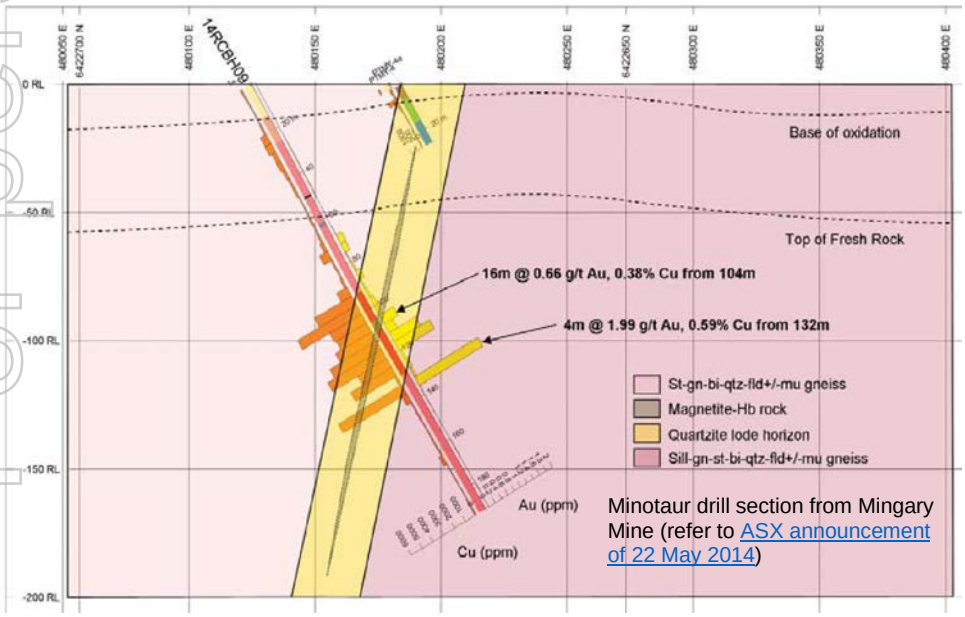

Minotaur drill section from Mingary Mine (refer to ASX announcement of 22 May 2014)

Figure 5 *Mingary Mine, Mingary East and Fallout prospects showing potential strike of mineralised target zones.*

About Mutooroo and the Mutooroo Project Area (MPA)

Mutooroo is an advanced stage copper-cobalt-gold project that is located within commuting distance of Broken Hill and 16 km south of the Transcontinental railway line and Barrier Highway. It contains **195,000 tonnes of copper, 20,200 tonnes of cobalt and 82,100 ounces of gold** in a massive sulphide lode (see JORC table below). As such, Mutooroo is one of the larger and higher-grade undeveloped sulphide cobalt deposits associated with copper in Australia. Such sulphide cobalt deposits are generally rarer and smaller than nickel-cobalt laterite deposits, but they usually have significant mineral processing advantages.

Cobalt is deemed a **critical mineral** and is used in high performance lithium batteries to enhance charging characteristics. The current London Metal Exchange price of cobalt of approximately **US$52,000 (A$81,000) per tonne** adds significantly to the potential value of the Mutooroo deposit. Much of the global cobalt production comes from the high sovereign risk Democratic Republic of the Congo, where the ESG regulations are less stringent than those in South Australia.

Havilah is undertaking a PFS on the Mutooroo project as a proposed 1 million tonne per annum throughput copper and cobalt producer, based on current JORC Measured Resources, initially from an open cut mine that transitions to a longer-term underground mining operation. The economics of Mutooroo as an open pit, and later as an underground, mining operation would be underpinned by comparatively high grades of copper (1.53%) in the sulphide ore. Any revenues from by-product cobalt, gold and sulphur could improve returns from the Mutooroo project. The present drilling campaign is designed to boost open pit resources to sustain an initial 5 year open pit mining operation.

The surrounding MPA is highly prospective for the discovery of lode style copper-cobalt-gold mineralisation. Geologically, the MPA lies in the shadow of the giant Broken Hill lead-zinc-silver ore deposit in similar age rocks, and there is evidence to suggest that the mineralising processes that generated Broken Hill also operated in the MPA. Many earlier economic grade copper and/or gold drilling intersections in the MPA have never been followed up, in some cases for more than 50 years (Figure 1). In addition, numerous copper, cobalt and gold surface geochemical anomalies identified by Havilah and earlier explorers present completely new targets to test.

The MPA is particularly attractive for exploration owing to the generally thin cover and applicability of surface geochemical sampling methods and electrical geophysical methods, plus the excellent logistics in proximity to Broken Hill, the Barrier Highway and Transcontinental railway line. All known prospects are located within trucking distance of the Mutooroo copper-cobalt deposit and the terrain is generally flat.

Havilah's exploration objective in the MPA is to discover copper-cobalt-gold resources that can support a mining and processing operation centred on the Mutooroo deposit. Havilah is systematically exploring the MPA with an experienced exploration geologist presently dedicated to this task. Drilling of the Cockburn and Mutooroo West prospects was the first step in this objective and it is planned to drill several further promising prospects during 2022 following the recent heritage clearance survey (Figure 1).

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Table 1 Significant assay results for recent Mutooroo RC drillholes

Hole_ID	From	To	Width	Au (g/t)	Co (%)	Cu (%)	Comment
MTRC240	105	106	1	0.02	0.08	0.04	
MTRC241	**82**	**86**	**4**	**0.16**	**0.11**	**1.31**	Main sulphide lode
including	**83**	**85**	**2**	**0.24**	**0.07**	**1.9**	
MTRC242	31	33	2	0.04	0.02	0.23	Western lode, oxide/transition
	38	45	7	0.03	0.04	0.43	Western lode, one sample being re-assayed
including	**44**	**45**	**1**	**0.08**	**0.03**	**1.19**	
	84	**87**	**3**	**0.44**	**0.09**	**1.03**	Main sulphide lode
including	**84**	**86**	**2**	**0.62**	**0.13**	**1.4**	
MTRC243	28	36	8		0.01	0.13	Western lode, oxide/transition. 4 metre composite
	79	**82**	**3**	**0.32**	**0.14**	**1.71**	Main sulphide lode
including	**80**	**81**	**1**	**0.51**	**0.14**	**3.02**	
	94	99	5	0.13	0.09	0.72	Footwall sulphide lode
including	**96**	**98**	**2**	**0.21**	**0.17**	**1.55**	
MTRC244	118	123	5	0.22	0.09	0.77	Main sulphide lode
including	**118**	**120**	**2**	**0.44**	**0.16**	**1.56**	
	129	132	3	0.37	0.16	1.2	Footwall sulphide lode
including	**129**	**131**	**2**	**0.55**	**0.23**	**1.74**	
MTRC245	39	44	5	0.06	0.05	0.57	Western sulphide lode
including	**39**	**41**	**2**	**0.12**	**0.11**	**1.12**	
	44	48	4	0.02	0.08	0.72	4 metre composite sample
	84	88	4	0.06	0.07	0.27	Main sulphide lode
	90	91	1	0.05	0.02	0.16	
MTRC246	75	76	1	0.16	0.09	0.92	Main sulphide lode
	85	86	1	0.04	0.04	0.68	Main sulphide lode
MTRC247	78	79	1	0.06	0.08	0.28	
	119	124	5	0.09	0.06	0.66	Main sulphide lode
including	**122**	**123**	**1**	**0.1**	0.06	**1.24**	
	128	129	1	0.1	0.02	0.47	

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

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Mutooroo JORC Mineral Resource Table as at 31 July 2022 from the Havilah 31 July 2022 ASX Activity Report

Project	Classification	Resource Category	Tonnes	Copper %	Cobalt %	Gold g/t	Copper tonnes	Cobalt tonnes	Gold ounces
Mutooroo [1]	Measured	Oxide	598,000	0.56	0.04	0.08			
	Total	**Oxide**	**598,000**	**0.56**	**0.04**	**0.08**	**3,300**	**200**	**1,500**
	Measured	Sulphide Copper-Cobalt-Gold	4,149,000	1.23	0.14	0.18			
	Indicated	Sulphide Copper-Cobalt-Gold	1,697,000	1.52	0.14	0.35			
	Inferred	Sulphide Copper-Cobalt-Gold	6,683,000	1.71	0.17	0.17			
	Total	**Sulphide Copper-Cobalt-Gold**	**12,529,000**	**1.53**	**0.16**	**0.20**	**191,700**	**20,000**	**80,600**
		Total Mutooroo	**13,127,000**				**195,000**	**20,200**	**82,100**

Numbers in above table are rounded. [1] Details released to the ASX: 18 October 2010 and 5 June 2020.

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. Given the ongoing uncertainty relating to the duration and extent of the global COVID-19 pandemic, and the impact it may have on the demand and price for commodities (including copper, cobalt and gold), on our suppliers and workforce, and on global financial markets, the Company continues to face uncertainties that may impact its operating and financing activities.

Competent Person's Statements

The information in this announcement that relates to Exploration Results and JORC Mineral Resources 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. Information for the Mutooroo Inferred cobalt & gold Mineral Resources complies with the JORC Code 2012. All other Mutooroo Mineral Resource information was prepared and first disclosed under the JORC Code 2004 and is presented on the basis that the information has not materially changed since it was last reported. Havilah confirms that all material assumptions and technical parameters underpinning the resources continue to apply and have not materially changed.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant ASX announcements.

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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 Reporting of Exploration Results.

Details for drillholes cited in the text

Hole Number	Easting m	Northing m	RL m	Grid azimuth	Dip degrees	EOH depth metres
MTRC236	493349	6430406	254	116	-60.0	78
MTRC237	493302	6430416	254	116	-60.0	90
MTRC238	493225	6430220	258	116	-60.0	66
MTRC239	493189	6430234	258	116	-60.0	90
MTRC240	493811	6431609	244	116	-60.0	126
MTRC241	493810	6431570	245	116	-60.0	108
MTRC242	493757	6431530	246	116	-60.0	110
MTRC243	493731	6431488	247	116	-60.0	117
MTRC244	493691	6431511	247	116	-60.0	147
MTRC245	493701	6431454	248	116	-60.0	129
MTRC246	493686	6431406	248	116	-60.0	123
MTRC247	493650	6431418	249	116	-60.0	141

Datum: GDA94 Zone 54.
Note: All azimuths and dips are as measured at surface; deviations from this typically occur at depth.

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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 Havilah reverse circulation (RC) drillholes as documented in the table above. • RC assay samples averaging 2-3kg were riffle split at 1 metre intervals. • All RC 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. • Some samples that did not appear to be obviously mineralised were composited over 4 metre intervals. These were later resampled on 1 metre intervals if the 4 metre composite assay results were considered to be significant.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• All RC holes were drilled with a face sampling hammer bit. All samples were collected via riffle splitting directly from the cyclone.
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.*	• The sample yield and quality of the RC 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. • No evidence of significant down hole or inter-sample contamination was observed. • Sample recoveries were continuously monitored by the geologist on site and adjustments to drilling methodology were made in an effort to optimise sample recovery and quality where necessary.
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)*	• All RC samples were logged by an experienced exploration geologist directly into an Excel spreadsheet and transferred to a laptop computer. • All RC chip sample trays and some representative samples are stored on site. • Logging is semi-quantitative and 100% of reported intersections have been logged.

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Criteria	JORC Code explanation	Commentary
	photography. • *The total length and percentage of the relevant intersections logged.*	• 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.* • *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.*	• RC 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. • 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. • All Havilah samples were collected in numbered calico bags that were sent to BV assay lab in Adelaide. • 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.*	• Fire assay method FA001 is a total gold analysis. • 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. • Assay data for laboratory standards and repeats have been previously statistically analysed and no material issues were noted.
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 the responsible geologist, who is responsible for data management, storage and security.
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*	• The holes were surveyed using an electronic downhole camera. • Present drillhole collar coordinates were

Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	surveyed in UTM coordinates using a GPS system with an x:y:z accuracy of <5m and are quoted in GDA94 Zone 54 datum.
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 RC drillholes were positioned at appropriate spacing to test down dip of the surface expression of mineralisation. • 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 to maximise the value of the drilling data. • 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.*	• RC chip samples are directly collected from the riffle splitter in numbered calico bags. • 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. • 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. • This is considered to be a secure and reasonable procedure and no known instances of tampering with samples occurred during the drilling programs.
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 current exploration licences over the Mutooroo Project Area, owned 100% by Havilah. • Exploration drilling reported is undertaken on Mutooroo Exploration Licence EL 6592. • A Native Title Exploration Agreement is in place for the Mutooroo Project Area. The agreement was executed between Havilah and Wilyakali Native Title Aboriginal Corporation.

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Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Mutooroo was historically mined for oxide and supergene copper to shallow depths in the late 1800's and early 1900's. The area has been explored by a number of groups in the past including Mines Exploration, Noranda, Adelaide Wallaroo and CRAE. Broad spaced drillholes were completed at the prospect area in the mid 1960's by Mines Exploration. • All previous exploration data has been integrated into Havilah's databases. • Mingary Mine was historically prospected to shallow depths, presumably in the late 1800's and early 1900's with no records of tonnage or grade. The area has been explored by several groups in the past including Australian Selection, MIM and Minotaur Exploration. Broad-spaced shallow drillholes were completed at the prospect area in the late 1970's by Australian Selection and four deeper, broad-spaced RC drillholes in the mid-2010's by Minotaur Exploration.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation style is massive sulphide vein style copper-cobalt mineralisation within Broken Hill Domain rocks of the Curnamona Province.
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.
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*	• Not applicable as not reporting mineral resources.

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	aggregation should be stated and some typical examples of such aggregations should be shown 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. • 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 applicable as not reporting a mineral discovery.
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.*	• Not applicable as not reporting mineral resources.
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.
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 resource delineation.

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