

**Havilah Resources Limited** plans to sequentially develop its portfolio of gold, copper, iron, cobalt, tin and other mineral resources in South Australia. Our vision is to become a new mining force, delivering value to our shareholders, partners and the community.

171 million Ordinary Shares -- 33 million Listed Options -- 8 million Unlisted Options

ASX and Media Release: 31 August 2016 ASX Code: HAV



# **QUARTERLY ACTIVITIES REPORT – PERIOD ENDING JULY 2016**

#### HIGHLIGHTS FOR QUARTER

- Processing plant construction completed and commissioned.
- Commercial production commenced with pouring of first gold bar at end of May.
- First \$1.0 million earned from gold sales and a record single day gold pour of 40 kg.
- First repayment of \$0.5 million of \$4.0 million debt owing to Investec Bank.
- Major gold mineralised system revealed in bedrock exposures in Portia open pit floor, supported by high grade drilling results eg drillhole PTAC 232: 30.5 metres of 39.3 g/t Au from 63.5 – 94.0 metres.
- High grade copper-gold intersections in North Portia resource infill drilling, including drillhole NPRC 94: 18.0 metres of 4.9% Cu and 2.0 g/t Au from 84.0 – 102.0 metres.

### **PORTIA GOLD MINE**

**Havilah Resources Limited (ASX: HAV)** achieved a major milestone of first commercial production when it poured its first gold bullion at the end of May. Since then, the focus has been on optimising the processing plant to maximise throughput and gold production. The table below summarises the first two months of production ending July 2016. The operations at Portia are being accounted for as a Joint Operation under the applicable financial reporting



standards, due to the specific agreement in place related to the development of Portia. Under this agreement the revenue is shared 50/50 with Consolidated Mining and Civil Pty Ltd (CMC). The table below therefore reflects only 50% of the ounces produced and sold from Portia.

	Units	July 2016 Quarter	FY16
Gold Produced	OZ	2,446	2,446
Gold Sold	OZ	1,698	1,698
Achieved Gold Price	A\$/oz	1,618	1,618
C1 Cash Cost	A\$/oz	332	332
All-In Sustaining Cost	A\$/oz	541	541

Preliminary unaudited results

It is important to note that the production costs at Portia listed in the above table are for the first two months of operation. As is normal in start-up operations costs may be expected to decrease as production ramps up and operations move into steady state production. A number of initiatives (described below) are being implemented that are expected to result in a decrease in production costs in the future.

Mining progressed according to plan with waste of 1.1 million BCM (Bulk Cubic Metres) and ore of 30,000 BCM mined during the quarter. This resulted in 14,000 tonnes of high grade and 20,000 tonnes medium grade ore being delivered to the ROM pad adjacent to the processing plant.

Havilah successfully designed, built, commissioned and operated the Portia gold processing plant through 30 June 2016. Subsequently, from 1 July 2016 CMC offered to operate the processing plant, excluding the gold room, on a sliding scale fixed rate per tonne of ore processed. CMC were able to offer an attractive rate because of access to a skilled workforce on site and extensive local resources in Broken Hill, which Havilah could not match without a major investment in additional human resources, infrastructure and systems. Operation of the gold room and gold pours still remains the responsibility of Havilah. Since operating the processing plant, CMC, assisted by Havilah's technical team, have been working steadily on improving plant throughput and reliability and have achieved consistent daily throughput of 1,000 tonnes per day. Plans are afoot to boost this to 2,000 tonnes per day by making strategic modifications and improvements to the processing circuit.

Bedrock material was exposed in the pit floor for the first time during the quarter and shows a vein/replacement mineralisation system similar to that at Kalkaroo and in the same regional "prospective sequence" stratigraphic package of rocks. A pervasive carbonate sulphide cross cutting vein system is observed over the 60 metres width of the current pit floor mostly within a distinctive black graphitic pelite unit (see photograph at right). Sampling and panning of the oxidised vein material



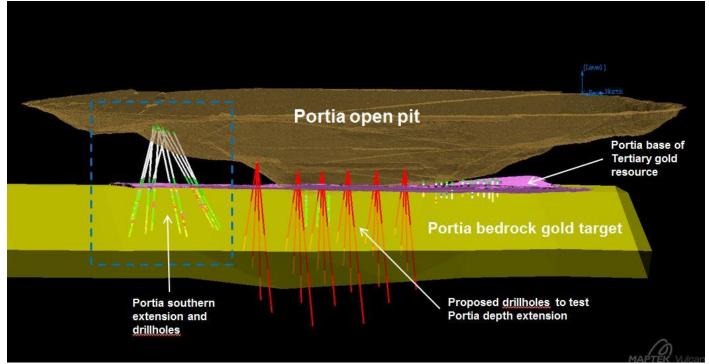


accessible in the pit walls shows abundant visible fine-grained gold, similar to that typically observed in the drill samples. The host mineralised unit dips east at approximately 45 degrees and Havilah has now commenced a drilling program to determine the down-dip extensions of the gold mineralisation beneath the current open pit (see Portia bedrock gold target identified on the diagram below). This will extend earlier limited pit floor drilling that was completed in an accessible part of the open pit.

An 11 hole aircore drilling program from a temporary ramp in the southern wall of the open pit was completed in order to test continuity of mineralisation in the southern extensions of the Portia resource. Higher grade base of Tertiary gold mineralisation, which has been the primary mining objective at Portia to date, was intersected in all southern extension drillholes and averages 12.2 g/t over approximately 2 metres thickness in nine drillholes. High grade results have been returned from the underlying bedrock as previously announced to the ASX after the end of the quarter on 2 August 2016 and 26 August 2016 as summarised below:

**PTAC 232**: 30.5 metres of 39.3 g/t Au from 63.5 – 94.0 metres **PTAC 228**: 6.0 metres of 53.6 g/t Au from 68.0 – 74.0 metres **PTAC 231**: 13.0 metres of 8.4 g/t Au from 79.0 – 92.0 metres **PTAC 236**: 4.0 metres of 35.4 g/t Au from 86.0 – 90.0 metres **PTAC 233**: 7.0 metres of 3.2 g/t Au from 81.0 – 88.0 metres

All of these assays have been derived by washing the entire percussion drill samples available and then having an independent laboratory fire assay the resulting concentrate. This method, although time consuming is considered to produce a very reliable result.



Portia long section showing proposed drillholes to test bedrock gold target beneath open pit (red lines) and location of recent drillholes that tested the southern extension (within blue box)



Owing to the promising drilling results, the economics of cutting back the southern wall are presently being evaluated. In anticipation, Havilah is currently working through the permitting requirements for a 120 metre cut back of the southern open pit wall. This cutback will require removal of approximately 3 million BCM of overburden to access approximately 30,000 tonnes\* of high grade base of Tertiary ore material and approximately 100,000 tonnes\* of medium grade bedrock (saprolite) ore material (\* Note: These are approximate volume estimates only for indicative purposes and are not JORC status resource estimates at this stage, pending generation of block models).

In the meantime, the southern pit wall is being re-profiled so that more saprolite (bedrock) ore can be accessed to greater depths below the current open pit floor.

#### About the Portia gold deposit:

Portia has a JORC Inferred Resource of 720,000 tonnes @ 2.9 g/t for 67,000 ounces of contained gravity recoverable gold (refer to ASX announcement dated 26 June 2009 - note that all the assumptions underpinning the information continue to apply and have not materially changed). The gold occurs as free grains, mostly within a 2-3 metre thick distinctive light grey silty horizon that lies beneath approximately 75 metres of free-digging Tertiary clay and sand overburden. The current mining plan is based on an optimised open pit design that aims to recover at least 80% of this resource. Considerable upside potential exists in the immediately underlying ancient Broken Hill age bedrock that is known to host a major gold mineralised replacement/vein system, and which is considered to be the source of the gold resource currently being mined. Recovery of the gold is by low cost gravity methods that does not require the use of chemicals.

#### NORTH PORTIA COPPER-GOLD PROJECT

Havilah completed resource infill drilling at North Portia during the quarter for a total of 20 aircore and reverse circulation drillholes, following up on 13 holes drilled earlier in the year. Better results in the latest round of drilling include:

**NPRC 94:** 18 metres of 4.90% Cu and 2.03 g/t Au from 84 - 102 metres **NPRC 83:** 14 metres of 3.31% Cu and 1.27 g/t Au from 108 - 122 metres **NPRC 82:** 15 metres of 2.79% Cu and 1.39 g/t Au from 112 - 127 metres **NPRC 86:** 32 metres of 1.24% Cu and 0.90 g/t Au from 84 - 116 metres **NPAC 76:** 13 metres of 1.49% Cu and 0.29 g/t Au from 81 - 94 metres **NPRC 72:** 58 metres of 0.56% Cu and 0.63 g/t Au from 84 - 142 metres, including:

7 metres of 2.90% Cu and 3.40 g/t Au from 135 - 142 metres

These results continue to confirm the high tenor of copper-gold mineralisation within the currently defined North Portia resource. In many drillholes low grade gold mineralisation is intersected in oxidised and deeply weathered bedrock (saprolite) above the copper sulphide-gold mineralisation, analogous to the gold cap defined above the Kalkaroo copper-gold deposit. Examination of panned concentrates shows abundant fine-grained free gold in this gold zone, similar to that observed in the saprolite bedrock at Portia, excepting the gold mineralisation is some 20 metres shallower at North Portia. Typical intersections of the gold saprolite material include:

NPRC 74: 21 metres of 1.05 g/t Au from 63 - 84 metres **NPRC 92:** 8 metres of 1.18 g/t Au from 56 - 64 metres **NPRC 91:** 11 metres of 0.83 g/t Au from 63 - 74 metres



With the resource infill drilling complete, work will now commence on generating an updated resource model and mining plan in order to determine the economics of mining the North Portia copper-gold deposit as a follow on from the Portia gold mine.

#### About the North Portia Copper-Gold Project

North Portia lies 500 metres north of Portia (see picture below) and contains a JORC Indicated and Inferred Resource of 11.3 million tonnes of 0.89% copper, 0.64 g/t gold and 500 ppm molybdenum (refer ASX announcement of 23 November 2010, noting that all the assumptions underpinning this previous announcement continue to apply and have not materially changed. See table below for the split of the resource categories). The immediate focus is on the upper oxidised part of the deposit that contains approximately 3.7 million tonnes of soft free digging saprolite ore (weathered bedrock) that could potentially be mined and treated for minimal capital outlay.

#### KALKAROO COPPER-GOLD PROJECT

Havilah continues to engage with the Adnyamathanha people with the objective of agreeing a fair level of compensation in a native title agreement that does not jeopardise the ability to raise development finance for the project in the future.

Havilah also continues to work on an updated resource model and Probable Ore Reserve for Kalkaroo which incorporates additional drilling data.

#### **EXPLORATION**

Havilah's application for a PACE (Program for Accelerated Exploration) grant was successful, with a grant of \$200,000 (to be matched by Havilah). This grant will be applied to exploration in the vicinity of Portia, including drilling of a large IOCG (iron oxide copper gold) target in the centre of the Benagerie dome only several hundred metres from the Portia gold deposit. It will also assist with additional drilling of the Croziers copper mineralisation midway between Portia and Kalkaroo, where a previous single diamond drillhole returned 12.5 metres of 0.46% Cu in a highly prospective skarn at the margin of a large granite body.

Havilah's partners on the Prospect Hill tin project were also successful in attracting a grant of \$90,000 to assist with further exploration drilling. Reconnaissance prospecting of this prospect has identified spectacular tin grades of more than 40% at several locations within meta-volcanic and sub-volcanic porphyry host rocks. Drilling will commence on this area following completion of an aboriginal heritage survey.

Drilling under these PACE grants will see the resumption of Havilah's regional exploration drilling, which can now be funded from Portia cash flow

#### **PROMOTION**

Havilah's Managing Director presented at the Sydney Mining Club and also at the Noosa Mining and Exploration Conference in July, and a copy of the presentation is available on the following link:

http://www.havilah-resources.com.au/pdf/A\_New\_Mining\_Force\_in\_South\_Australia\_Noosa27Jul2016.pdf



The Managing Director was also invited to give a presentation on Portia at the Exchange SA showcase of promising South Australian companies, which can be viewed on the following link:

http://www.havilah-

resources.com.au/pdf/A NEW MINING FORCE IN SOUTH AUSTRALIA Update 23Jun2016.pdf

David Brennan of State One Stockbroking Limited updated research on Havilah in an article entitled "Production Extension = Value Upflift" that is available on the following link:

http://www.havilah-resources.com.au/pdf/State One Capital Update note 160712.pdf

Several positive media articles appeared during the quarter and are posted on the media page on Havilah's website: <a href="http://www.havilah-resources.com.au/media.html">http://www.havilah-resources.com.au/media.html</a>

## **CORPORATE AND FINANCE**

As at 31 July cash at bank was \$0.7 million. Additional funding of \$2.0 million was available under the Investec Loan Facility at quarter end.

During the quarter Havilah made its first debt repayment of \$0.5 million, which reduced the Company's debt to \$3.5 million. Since the end of the quarter Havilah made further debt repayments of \$1.5 million to reduce the outstanding debt to \$2.0 million. It is the expectation that the Investec Loan Facility will be fully repaid by the end of 2016.

By 31 July the Company had delivered 1,698 ozs against the 10,000 ozs hedged at a gold price of A\$1,618 as part of the Investec Loan and Risk Management Facility. That leaves a balance of 8,302 ozs hedged at an average gold price of A\$1,618.

During the quarter 0.5 million listed options were exercised resulting in just over \$0.1 million in additional funds to the Company. Subsequent to the end of the quarter a further 2.2 million of listed options were exercised resulting in \$0.7 million of additional funds to bolster the cash resources of Havilah. This transaction introduced a well regarded institutional investor onto Havilah's share register.

The sale of unmarketable parcels was successfully completed during the quarter. This reduced the number of shareholders to less than 2,500.

#### **Cautionary Statement**

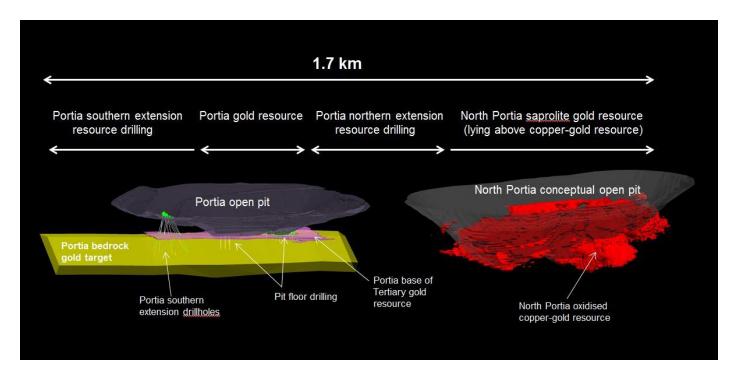
This announcement contains certain statements which may constitute "forward-looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, performance or achievements to differ materially from those expressed, implied or 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 Persons Statement**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or 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 Managing Director of the Company and is employed by the Company on a consulting contract. 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. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported

For further information visit www.havilah-resources.com.au

Contact: Dr Chris Giles, Managing Director, on (08) 8338-9292 or email: info@havilah-resources.com.au



Long section from Portia through North Portia, showing the Portia bedrock gold target and planned drilling areas

**Table 1 Drillhole Details** 

Hole ID	Grid system : UTM Zone 54 South (AGD 66 datum)				Dip degrees	EOH metres	
	Easting m	Northing m	RL m	UTM azimuth	1 0		
NPRC072	447936	6522425	67	270	-75	156	
NPRC074	447960	6522475	67	270	-75	174	
NPAC076	447821	6522625	67	270	-75	120	
NPRC082	447880	6522777	67	270	-75	172	
NPRC083	447872	6522627	67	270	-75	130	
NPRC086	447925	6522527	67	270	-75	154	
NPRC091	447819	6522575	67	270	-75	102	
NPRC092	447797	6522625	67	270	-75	114	
NPRC094	447823	6522775	67	270	-75	124	

Rule 5.5

# **Appendix 5B**

# Mining exploration entity quarterly report (Unaudited)

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/2013

Name of entity	
Havilah Re	esources Limited
ABN	Quarter ended ("current quarter")
39 077 435 520	31 July 2016

## **Consolidated statement of cash flows**

		Year to date
ows related to operating activities	Current quarter	(full year)
	\$A'000	\$A'000
Receipts from product sales and related	2,745	2,745
debtors		
Payments for (a) evaluation	(435)	(1,883)
(b) development	(1,902)	(5,044)
(c) production	(239)	(239)
(d) administration	(505)	(1,256)
Dividends received	-	-
Interest and other items of a similar nature		
received	2	19
	(133)	(480)
·	-	-
•	-	310
bonds)		
Net Operating Cash Flows	(467)	(5,828)
<b>.</b>		
	-	-
	-	- (0.1)
* *	-	(21)
	-	-
	-	-
• • • • • • • • • • • • • • • • • • • •	-	-
	-	-
	-	-
Other (provide details if material)	-	-
Net investing cash flows	_	(21)
_		-
(carried forward)	(467)	(5,849)
	Receipts from product sales and related debtors Payments for (a) evaluation	Receipts from product sales and related debtors Payments for (a) evaluation (435) (b) development (1,902) (c) production (239) (d) administration (505) Dividends received (1,902) Interest and other items of a similar nature received (1,33) Income taxes paid (133) Income taxes paid (134) Income taxes paid (133) Income taxes paid (134) Income

<sup>+</sup> See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(467)	(5,849)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	137	1,075
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	1,250	4,000
1.17	Repayment of borrowings	(504)	(604)
1.18	Dividends paid	-	-
1.19	Other (share issue costs)	-	(49)
	Net financing cash flows	883	4,422
	Net increase (decrease) in cash held	416	(1,427)
1.20	Cash at beginning of quarter/year to date	293	2,136
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	709	709

# Payments to directors of the entity, associates of the directors, related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	49
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Item 1.23 consists of director's fees, salaries and superannuation paid to directors. All transactions are on commercial terms.

# Non-cash financing and investing activities

2.1	Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
2.2	Details of outlays made by other entities to establish or increase their share in projects in which the
	reporting entity has an interest

Appendix 5B Page 2 01/05/2013

<sup>+</sup> See chapter 19 for defined terms.

# Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	5,500	3,500
3.2	Credit standby arrangements	-	-

# Estimated cash outflows for next quarter

		\$A'000
4.1	Evaluation	375
4.2	Development	461
4.3	Production	5,007
4.4	Administration	658
	Total	6,501

## **Reconciliation of cash**

show	nciliation of cash at the end of the quarter (as in in the consolidated statement of cash flows) to elated items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	184	137
5.2	Deposits at call	525	153
5.3	Bank overdraft	-	-
5.4	Other (provide details) Share options cash acct	-	3
Total: cash at end of quarter (item 1.22)		709	293

<sup>+</sup> See chapter 19 for defined terms.

# Changes in interests in mining tenements

		Tenement reference and location	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	EL5050 EL5106	Exploration Licence Exploration Licence	100% 100%	0% 0%
6.2	Interests in mining tenements acquired or increased	EL5785	Exploration Licence	0%	100%

# Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)	-	-	-	-
7.2	Changes during quarter (a) Increases through issues	-	-	-	-
	(b) Decreases through returns of capital, buy- backs, redemptions	-	-	-	-
7.3	<sup>†</sup> Ordinary securities	168,596,524	168,596,524	-	-
7.4	Changes during quarter (a) Increases through issues	-	-	-	-
	(b) Decreases through returns of capital, buy- backs	-		-	-
7.5	*Convertible debt securities (description)	-	-	-	-

Appendix 5B Page 4 01/05/2013

 $<sup>\</sup>boldsymbol{+}$  See chapter 19 for defined terms.

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted		-	-	-
7.7	Options	Listed		Exercise price	Expiry date
	(description and conversion	35,572,200		30 cents	30 June 2017
	factor)	<u>Unlisted</u>			
	, ,	250,000	Contractor	21 cents	30 June 2017
		250,000	Contractor	28 cents	30 June 2017
		100,000	Employee	22 cents	18 August 2017
		1,200,000	Employee	36 cents	1 April 2018
		2,150,000	Employee	25 cents	26 June 2018
		500,000	Contractor	54 cents	30 June 2018
		3,600,000	Director	36 cents	15 December 2018
		100,000	Employee	38 cents	1 May 2019
7.8	Issued during	Unlisted			
	quarter	-	-	-	-
7.9	Exercised during	<u>Listed</u>			
	quarter	455,860		30 cents	30 June 2017
7.10	Expired during	Unlisted			
7.10	quarter	602,00	Employee	109 cents	25 Jun 2016
7.11	Debentures	-	-		
	(totals only)				
7.12	Unsecured	-	-		
	notes (totals				
	only)				

# **Compliance statement**

- This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here: Date: 31 August 2016

(CFO & Company Secretary)

Print name: Walter D. Richards

<sup>+</sup> See chapter 19 for defined terms.

Table 1: Summary of Tenements for Quarter Ending 31 July 2016 (ASX Listing Rule 5.3.3)

Location	Project Name	Tenement No.	Tenement Name	Registered Owner <sup>1</sup>	% Interest	Status
	ring Quarter Ended 31 J					
South Australia	Curnamona Craton	EL4727	Oratan	Havilah	100	Current
South Australia	Curnamona Craton	EL4782	Benagerie	Havilah	100	Current
South Australia	Curnamona Craton	EL4806	Prospect Hill	Teale & Brewer <sup>2</sup>	65	Current
South Australia	Curnamona Craton	EL4817	Border Block	Havilah	100	Current
South Australia	Curnamona Craton	EL4818	Mundaerno Hill	Havilah	100	Current
South Australia	Curnamona Craton	EL4940	Emu Dam	Havilah	100	Current
South Australia	Curnamona Craton	EL4967	Frome	Curnamona	100	Current
South Australia South Australia	Curnamona Craton Curnamona Craton	EL5049 EL5051	Jacks Find Thurlooka	Curnamona	100 100	Current Current
South Australia	Curnamona Craton	EL5051 EL5052	Yalkalpo East	Curnamona Curnamona	100	Current
South Australia	Curnamona Craton	EL5052 EL5053	Billeroo	Curnamona	100	Current
South Australia	Curnamona Craton	EL5054	Moolawatana	Curnamona	100	Current
South Australia	Gawler Craton	EL5107	Pernatty	Red Metal, Havilah <sup>3</sup>	13.29	Current
South Australia	Curnamona Craton	EL5179	Cutana	Havilah	100	Current
South Australia	Curnamona Craton	EL5246	Chocolate Dam	Havilah	100	Current
South Australia	Curnamona Craton	EL5260	Cochra	Havilah	100	Current
South Australia	Curnamona Craton	EL5369	Lake Charles	Havilah	100	Current
South Australia	Curnamona Craton	EL5370	Yalkalpo	Curnamona	100	Current
South Australia	Curnamona Craton	EL5393	Mingary	Exco, Polymetals <sup>4</sup>	0	Current
South Australia	Curnamona Craton	EL5396	Olary	Havilah	100	Current
South Australia	Curnamona Craton	EL5420	Lake Namba	Havilah	100	Current
South Australia	Curnamona Craton	EL5421	Swamp Dam	Havilah	100	Current
South Australia	Curnamona Craton	EL5422	Telechie	Havilah	100	Current
South Australia	Curnamona Craton	EL5423	Yalu	Havilah	100	Current
South Australia	Curnamona Craton	EL5448	Carnanto	Havilah	100	Current
South Australia	Curnamona Craton	EL5463	Prospect Hill South	Havilah	100	Current
South Australia	Curnamona Craton	EL5476	Lake Yandra	Havilah	100	Current
South Australia	Curnamona Craton	EL5478	Tarkarooloo	Havilah	100	Current
South Australia	Curnamona Craton	EL5488	Eurinilla	Havilah	100	Current
South Australia	Curnamona Craton	EL5505	Lake Frome	Havilah	100	Current
South Australia	Curnamona Craton	EL5578	Kalabity	Havilah	100	Current
South Australia	Gawler Craton	EL5579	Sandstone	Havilah	100	Current
South Australia	Curnamona Craton	EL5593	Billeroo West	Havilah	100	Current
South Australia	Curnamona Craton	EL5703	Bundera	Havilah	100	Current
South Australia	Curnamona Craton	EL5753	Mutooroo Mine	Havilah	100	Current
South Australia	Curnamona Craton	EL5754	Mundi Mundi	Havilah	100	Current
South Australia	Curnamona Craton	EL5755	Bonython Hill	Havilah	100	Current
South Australia	Curnamona Craton	EL5760	Bumbarlow	Havilah	100	Current
South Australia	Curnamona Craton	EL5764	Maljanapa	Havilah	100	Current
South Australia	Curnamona Craton	EL5785	Moko	Havilah	100	Current*
South Australia	Curnamona Craton	EL5800	Kalkaroo	Havilah	100	Current
South Australia	Curnamona Craton	EL5801	Mutooroo West	Havilah	100	Current
South Australia	Curnamona Craton	EL5802 EL5803	Mulyungarie Telechie North	Havilah Havilah	100 100	Current Current
South Australia	Curnamona Craton		Coolibah Dam	Havilah		
South Australia South Australia	Curnamona Craton Curnamona Craton	ELA 2016/00016 ELA 2016/00088	Coonarbine	Havilah	100 100	Application Application*
South Australia	Portia	ML6346	Portia	Benagerie	100	Current
South Australia	Portia	MC4345	Portia	Benagerie	100	Current
South Australia	Kalkaroo	MC3826	Kalkaroo	Kalkaroo	100	Current
South Australia	Kalkaroo	MC3827	Kalkaroo	Kalkaroo	100	Current
South Australia	Kalkaroo	MC3828	Kalkaroo	Kalkaroo	100	Current
South Australia	Kalkaroo	MC4368	Kalkaroo	Kalkaroo	100	Current
South Australia	Kalkaroo	MC4369	Kalkaroo	Kalkaroo	100	Current
South Australia	Kalkaroo	MPLA T02680	Kalkaroo	Kalkaroo	100	Application
South Australia	Kalkaroo	MPLA T02978	Kalkaroo	Kalkaroo	100	Application
South Australia	Lilydale	MC4264	Lilydale	Lilydale	100	Current
South Australia	Lilydale	MC4265	Lilydale	Lilydale	100	Current
South Australia	Lilydale	MC4266	Lilydale	Lilydale	100	Current
South Australia	Lilydale	MC4267	Lilydale	Lilydale	100	Current
South Australia	Maldorky	MC4271	Maldorky	Maldorky	100	Current
South Australia	Maldorky	MC4272	Maldorky	Maldorky	100	Current
South Australia	Maldorky	MC4273	Maldorky	Maldorky	100	Current
South Australia	Maldorky	MC4274	Maldorky	Maldorky	100	Current
South Australia	Maldorky	MC4364	Maldorky	Maldorky	100	Current
South Australia	Mutooroo	ML5678	Mutooroo	Mutooroo	100	Current
South Australia	Mutooroo	MC3565	Mutooroo	Mutooroo	100	Current
South Australia	Mutooroo	MC3566	Mutooroo	Mutooroo	100	Current
South Australia	Frome	GEL181	Frome	Geothermal	100	Current
Tenements disposed during Quarter Ended 31 July 2016:						
South Australia	Curnamona Craton	EL5050	Kopi Flat	Curnamona	100	Surrendered
South Australia	Curnamona Craton	EL5106	Coonee	Curnamona	100	Surrendered

Note 1 Havilah: Curnamona: Benagerie: Kalkaroo: Lilydale: Maldorky: Mutooroo: Oban: Geothermal: Exco, Polymetals: Red Metal: Teale & Brewer: Havilah Resources Limited
Curnamona Energy Pty Limited, a wholly owned subsidiary of Havilah Resources Limited
Benagerie Gold Pty Limited, a wholly owned subsidiary of Havilah Resources Limited
Kalkaroo Copper Pty Ltd, a wholly owned subsidiary of Havilah Resources Limited
Lilydale Iron Pty Ltd, a wholly owned subsidiary of Havilah Resources Limited
Maldorky Iron Pty Ltd, a wholly owned subsidiary of Havilah Resources Limited
Mutooroo Metals Pty Ltd, a wholly owned subsidiary of Havilah Resources Limited
Oban Energy Pty Limited, a wholly owned subsidiary of Havilah Resources Limited
Geothermal Resources Pty Limited, a wholly owned subsidiary of Havilah Resources Limited
Exco Operations (SA) Ltd, Polymetals (White Dam) Pty Ltd
Red Metal Limited
Teale and Associates Pty Ltd, Adrian Mark Brewer

Note 2
Agreement - farm-in to earn 85% interest in tenement

Note 3
Agreement - farm-in to dilute to 10%

<u>Note 4</u> Agreement - farm-in to earn 75% interest in the rights to iron ore and associated minerals

<sup>\*</sup> Denotes a change in the quarter.



# JORC Code, 2012 Edition – "Table 1"

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>RC or AC drill chips received directly from the drilling rig via a cyclone were riffle split as 0.5 or 1m intervals to obtain 2-3kg samples and collected in numbered calico bags that were submitted to ALS Global 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 3 kg 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 are then analysed for a 33 element package using ALS's ME-ICP61 suite, whereby samples undergo a 4 acid digest and analysis by ICP-atomic emission spectrometry and ICP mass spectrometry. Over limit Cu, Pb and Zn are re-assayed using ME-OG62.</li> <li>Gold is analysed by 50g fire assay, with atomic absorption spectrometry finish using ALS method Au-AA26</li> <li>In order to mitigate the coarse gold nugget sampling problem, Havilah routinely takes the balance of any samples with anomalous gold fire assay results (typically amounting to more than 10 kg sample weight) and produces a concentrate of several grams by gemini tabling and panning. This concentrate is sent to ALS Townsville laboratory for fire assay. Havilah calculates the original sample gold grade by dividing by the weight concentration factor obtained by dividing the fire assay gold prill weight by the original drill sample weight.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by</li> </ul>	<ul> <li>All RC holes were drilled using standard face-sampling bits, with bit sizes ranging from 120mm to 136mm.</li> <li>All AC holes used 121mm blade bit</li> </ul>



Criteria	JORC Code explanation	Commentary
	what method, etc).	
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>The sample yield and wetness of the RC and AC samples was routinely recorded in drill logs.</li> <li>Sample recoveries were continuously monitored by the geologist on site and adjustments to drilling methodology were made to optimize sample recovery and quality where necessary.</li> <li>It is noted that sample quality may be less than optimum for short intervals particularly at rod changes, which is a perennial problem in air core and reverse circulation drilling at Portia, where soft, fractured and wet sample may be encountered. There is no evidence that gold is concentrated in intervals with poor sample recoveries, so that the possibility of systematic grade overestimation is unlikely. Overall RC and AC sample recoveries were at an acceptable level for interpretation purposes at an exploration level.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All RC and AC samples were logged in detail by experienced geologists directly into a digital logging system with data uploaded directly into an XL spreadsheet.</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>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>RC and AC drill samples are dry 1 or 2 m riffle splits.</li> <li>Sample preparation and assaying methods are summarized above.</li> <li>Quality control procedures include the insertion of standards (1 in 20 samples), blanks (1 in 20 samples) and duplicates (1 in 20 samples) into the regular sample number sequence. If any blank, standard or duplicate is out of spec, re-assay of retained samples is requested of the laboratory as a first step.</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.</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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> <li>All samples are prepared at ALS Global laboratory in Adelaide and assayed interstate. The total assay methods are standard ALS procedure and are considered appropriate at the exploration reporting stage.</li> <li>All gold was determined by fire assay with AAS finish. Higher grade samples were check re-assayed as described below.</li> <li>Other elements were analysed by multi-element digest methods with ICP finish.</li> <li>Quality control procedures include the insertion of standards (1 in 20 samples), blanks (1 in 20 samples) and duplicates (1 in 20 samples) into the regular sample number sequence. If any samples are out of spec re-assay is requested.</li> </ul>
Verification of sampling and assaying  Location of data points	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <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</li> </ul>	<ul> <li>Rigorous internal QC procedures are followed to check all assay results.</li> <li>All data entry is under control of a specialist database geologist, who is responsible for data management, storage and security.</li> <li>No adjustments to assay data are carried out.</li> <li>Down hole drill surveys were not conducted due to the shallow depths of the holes.</li> <li>Drillhole collar coordinates are surveyed in UTM coordinates using a differential GPS system with an x:y:z accuracy of 20cm:20cm:40cm and are quoted in ADG</li> </ul>
Data spacing and distribution	<ul> <li>control.</li> <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> <li>This is an infill drilling program designed to demonstrate continuity of geology and mineralisation within an existing Inferred Resource. Drillhole spacing is variable, as this is an infill drilling program with holes located to increase density of data.</li> <li>Sample compositing was not used.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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</li> </ul>	<ul> <li>The drillhole azimuth and dip was chosen to intersect the mineralized zones as nearly as possible to right angles and at the desired positions to maximize 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>

Criteria	JORC Code explanation	Commentary
	material.	
Sample security	The measures taken to ensure sample security.	<ul> <li>RC and 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 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 have occurred since drilling commenced</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Ongoing internal auditing of sampling techniques and assay data has not revealed any material issues.</li> </ul>

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Exploration is taking place on Havilah Resources 100% owned mining lease ML6534</li> <li>Security via current valid mining lease granted to Havilah</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Aircore drilling was carried out in the region by the Pasminco – Werrie Gold JV in the late 1990s.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Stratiform replacement / vein style gold mineralisation within Willyama Supergroup rocks of the Curnamona Craton</li> </ul>
Drill hole Information	<ul> <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> <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> </ul> </li> </ul>	See separate Table1 in this report



Criteria	JORC Code explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</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>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Intercepts are calculated using the length-weighted averages of individual samples. Minimum grade truncations are applied.         Local geology is also used as an input.     </li> <li>Where higher grades exist, a separate high grade sub-interval will normally be reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Down-hole lengths are reported.         Drillholes are always 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>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Oblique view showing the location of the drillholes in relation to previous drillholes and the resource model is included.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Only meaningful potentially economic grade intervals are reported.</li> </ul>
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	<ul> <li>Relevant geological observations are reported in this and previous announcements. Other data not yet collected or not relevant</li> </ul>



Criteria	JORC Code explanation	Commentary
	contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>These holes are part of an infill drilling program that is designed to increase the level of confidence in executing a pitwall cutback</li> <li>Resource estimation work will be completed at the conclusion of the drilling program when all assay results are in hand.</li> </ul>