

2 May 2018

ASX Announcement

METALLURGICAL TESTWORK CONFIRMS WILUNA TRANSITIONAL RESERVES AMENABLE TO PROCESSING THROUGH THE EXISTING WILUNA CIL PLANT

Highlights

- Expansion PFS published in Aug'17 includes a significant proportion of oxide and transitional probable reserves
- Expansion PFS conservatively assumed the transitional ores would be processed through the sulphide plant
- Further metallurgical testwork on the Wiluna transitional ores has averaged 84.3% Carbon In Leach (CIL) metallurgical recovery
- Testwork results from the Wiluna transitional ores are consistent with these ores mined and processed prior to 1993 when the Sulphide circuit was commissioned
- Testwork confirms the transitional ores can be processed in the Wiluna CIL plant at a lower cost and improved recoveries in comparison to the sulphide plant
- The Wiluna transitional ores tested have an expected average CIL recovered grade of 1.77g/t.

Blackham Resources Limited (ASX: BLK) (Blackham or the Company) is pleased to present an update on its successful results from metallurgical testwork on its Wiluna oxide and transitional ores. Independent Metallurgical Operations Pty Ltd (IMO) were engaged by Blackham to perform and review the testwork under the supervision of Blackham.

During March'18, Blackham's exploration team drilled 84 RC holes (6,491m) focused on delineating further free milling open pit reserves over the 4km's of strike at the Wiluna Mine. Initial results from this drilling are due to be released shortly. This was a follow up programme on the 77,000m of drilling completed during 2017, which successfully delivered probable reserves of 669,000oz (7.7Mt @ 2.7g/t Au), and included oxide, transitional and fresh reserves. The current drilling is focused on free milling ores above the top of fresh rock (generally top 60m) which metallurgical testwork has confirmed are best processed through the current Wiluna CIL plant rather than the sulphide circuit.

Wiluna mining and metallurgical studies are well advanced in this area following the successful Wiluna Expansion Preliminary Feasibility Study (Expansion PFS) published in August'17. The latest testwork confirms the Wiluna oxide and transitional ores are an attractive feed stock for the current operating Wiluna CIL plant. All of the historic open pits were processed through the Wiluna CIL plant with the exception of the 2007 East pit cut back. Blackham is currently re-estimating the open pit free milling reserves within the Wiluna Mine footprint.

BOARD OF DIRECTORS

Milan Jerkovic - Executive Chairman
Bryan Dixon - Managing Director
Greg Miles - Non-Executive Director
Greg Fitzgerald - Non-Executive Director

ASX CODE

BLK

ABN: 18 119 887 606

CORPORATE INFORMATION

1,265M Ordinary Shares
492M Quoted Options
4.2M Unquoted Options

PRINCIPAL AND REGISTERED OFFICE

L2, 38 Richardson Street
West Perth WA 6005

POSTAL ADDRESS

PO Box 1412
West Perth WA 6872

www.blackhamresources.com.au

E: info@blackhamresources.com.au

P: +61 8 9322 6418

F: +61 8 9322 6398

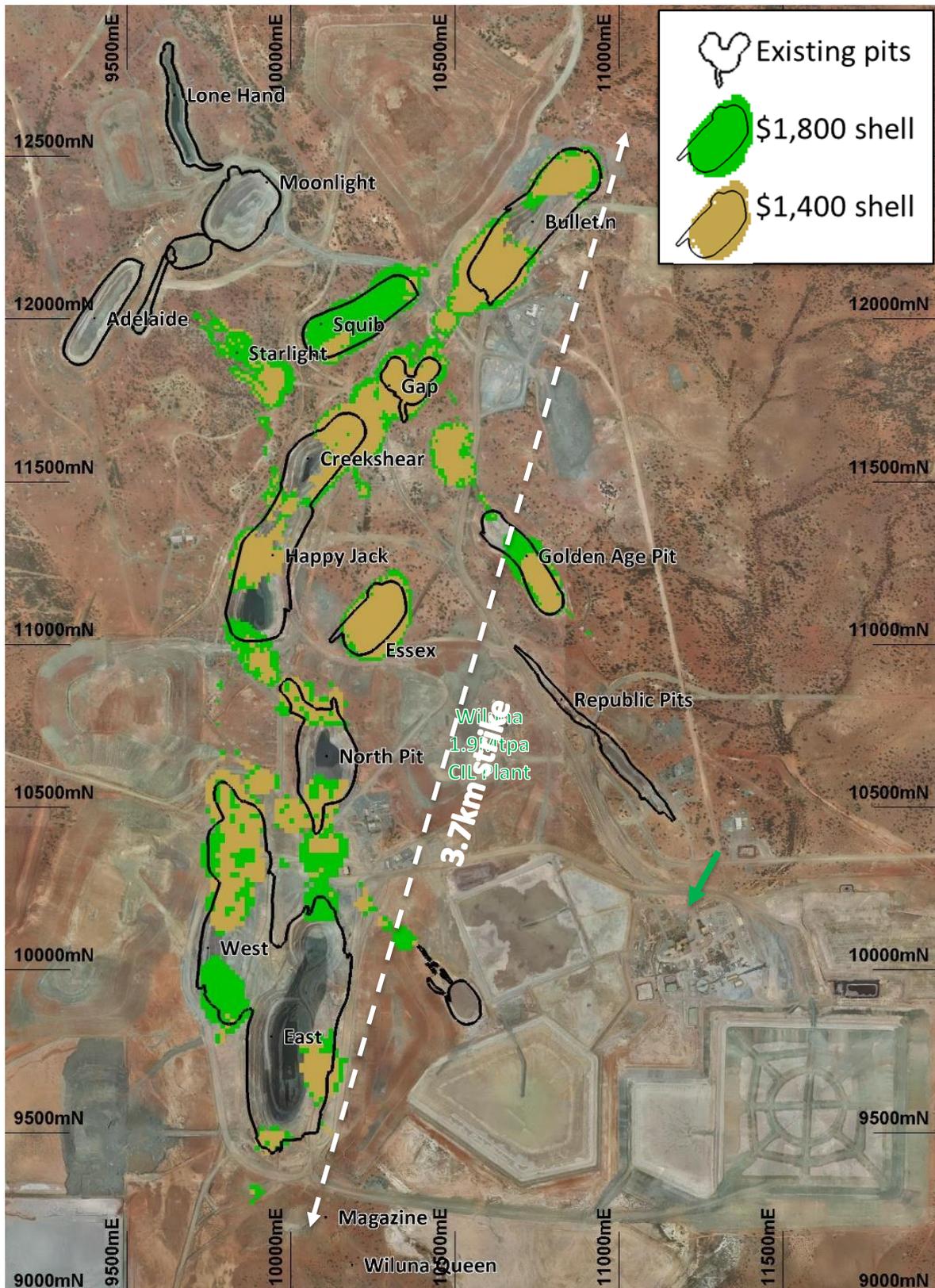


Figure 1. All of the Wiluna historical open pits above (black outline) were processed through the Wiluna CIL plant. The Brown (A\$1,400/oz) and Green (A\$1,800/oz) oxide and transitional only pit optimisations show the potential for distinct free milling open pits prior to the current drill programme.

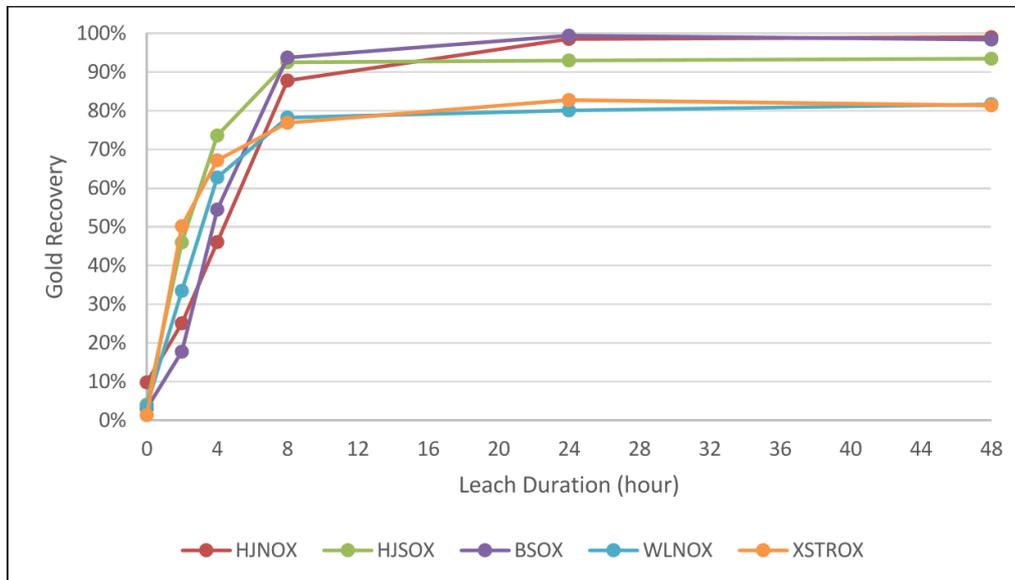
During 2017, Blackham completed 77,000m of RC and Diamond drilling used in completing the successful Expansion PFS. All of these drill holes have been assayed for gold, sulphur, sulphide and arsenic. The fresh (refractory) ores at Wiluna have significantly elevated As and S which can be seen in Table 1. The As, S and SO² analysis has been used to remodel both the base of oxidisation (BOCO) and top of fresh surfaces from a metallurgical view point to accurately define the free milling ore zones.

	Au	As	S	S ₂ -
Composite	g/t	%	%	%
Oxide				
Happy Jack North	1.820	0.082	0.02	0.01
Happy Jack South	0.980	0.050	0.04	0.01
Bulletin South	2.640	0.191	0.03	0.01
West Load North	2.985	0.213	0.13	0.08
Cross Structures	0.645	0.066	0.12	0.00
Transitional				
Happy Jack	0.975	0.092	0.12	0.11
Bulletin North	1.200	0.073	0.07	0.06
Cross Structures	1.270	0.067	0.08	0.06
Fresh				
East Load North	2.955	3.31	1.37	1.3
East Load South	3.481	4.51	1.07	1.03
West Load North	3.458	3.96	1.06	0.86
West Load South	7.928	6.00	1.51	1.37
Cross Structures	1.794	2.92	0.90	0.77
Bulletin South	3.873	6.35	1.53	1.46
Bulletin North	2.104	3.50	0.93	0.79
Happy Jack South	3.388	2.63	1.63	1.45

Table 1. Oxide, transitional and fresh composites mineral analysis.

Metallurgical testwork on both the oxide and transitional ores has confirmed that these ores are best processed through the current CIL plant. In the Expansion PFS it was conservatively assumed that the transitional ores would be processed through the Flotation and Biox[®] Plant (Sulphide Circuit). Not only does the transitional ore gain higher recoveries through the CIL plant, the processing cost is approximately 30% less than the sulphide circuit.

Figure 2. Oxide Composite Kinetic Leach Curves – Average recovery 90.8% after 24 hours



Average leach recoveries on the oxide ores were 90.8% after 24 hours with little increase in recovery after that. Bond ball mill work index tests on the oxide ore range from 10-14 kWh/t. Gravity gold recoveries were low ranging from 1.3-9.8%. Cyanide consumption results were low to moderate ranging from 0.14-0.23kg/t over 24 hours. Lime consumptions were low range from 0.6-1.4kg/t over 24 hours.

Table 2. Transitional metallurgical results

		Recovery
Happy Jack	CIL- 48 hours	82.6%
Bulletin North	Bottle roll	91.7%
EW Cross Structures	Bottle roll	78.7%
Average Recovery		84.3%

Average leach recoveries on the transitional ores were 84.3% (see Table 2). Cyanide consumption results were low to moderate ranging from 0.14-0.20kg/t over 24 hours. Lime consumptions were low range from 0.7-1.3kg/t over 24 hours. Bond ball mill work index tests on the transitional ore range from 16-19 kWh/t. Follow up drilling has now been completed to obtain additional transitional ore samples for the next round of metallurgical testwork.

Blackham is currently re-estimating the open pit free milling resources and reserves around the Wiluna Mine site. The Blackham management team believes the free milling ores within the existing Wiluna Mine footprint are an attractive feed stock for the current operating mill and allows for fast tracking mining approvals.

For further information on Blackham please contact:

Milan Jerkovic
Executive Chairman
+61 8 9322 6418

Bryan Dixon
Managing Director
+61 8 9322 6418

Jim Malone
Investor Relations
+61 419 537 714

Matilda-Wiluna Gold Operation

Measured, Indicated & Inferred Resources (JORC 2012) as at 30 June 2017

OPEN PIT RESOURCES												
Mining Centre	Measured			Indicated			Inferred			Total 100%		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda Mine OP	0.9	1.5	44	6.1	1.7	340	4.1	1.4	185	11.1	1.6	569
Galaxy	0.7	1.4	32	0.1	3.7	5	0.2	2.8	16	1.0	1.6	53
Williamson Mine				3.3	1.6	170	3.8	1.6	190	7.1	1.6	360
Wiluna OP ¹				13.6	2.6	1150	3.3	3.3	355	16.9	2.8	1,505
Regent				0.7	2.7	61	3.1	2.1	210	3.8	2.2	271
Stockpiles				0.4	0.9	11				0.4	0.9	11
OP Total	1.6	1.5	76	24	2.2	1,737	15	2.1	956	40	2.1	2,769
UNDERGROUND RESOURCES												
Mining Centre	Measured			Indicated			Inferred			Total 100%		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Golden Age UG	0.1	4.2	8	0.2	7.1	46	0.6	3.8	75	0.9	4.5	129
Wiluna UG				8.2	5.5	1441	14.6	4.4	2086	23	4.8	3,527
Matilda Mine UG				0.1	2.5	10	0.6	3.6	70	0.7	3.6	80
UG Total	0.1	4.2	8	9	5.5	1,497	16	4.4	2,231	24	4.8	3,736
Grand Total	1.7	1.5	84	33	3.1	3,234	30	3.3	3,187	65	3.1	6,505

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location shape and continuity of the occurrence and on the available sampling results. The figures in the above table are rounded to two significant figures to reflect the relative uncertainty of the estimate.

Probable Reserves (JORC 2012) as at 30 June 2017

OPEN PIT RESERVES										
Mining Centre	Proven			Probable			Total			
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	
Matilda Mine OP	0.9	1.2	37	2.2	1.6	114	3.1	1.5	151	
Galaxy OP	0.7	1.3	29	0.1	0.8	4	0.8	1.2	33	
Williamson Mine				1.4	1.5	67	1.4	1.5	67	
Wiluna Open Pits				7.7	2.7	669	7.7	2.7	669	
Stockpiles				0.4	0.9	11	0.4	0.9	11	
OP Total	1.6	1.3	66	12	2.3	865	13	2.2	931	
UNDERGROUND RESERVES										
Mining Centre	Proven			Probable			Total			
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	
Golden Age UG	0.04	5.6	7	0.02	8.7	4	0.06	6.4	12	
East West UG				0.56	5.0	91	0.56	5.0	91	
Bulletin UG ¹				1.15	4.6	168	1.15	4.6	168	
UG Total	0.04	5.6	7	1.73	4.7	263	1.8	4.7	271	
Grand Total	1.7	1.4	73	13.6	2.6	1,128	15.2	2.6	1,201	

Competent Persons Statement

The information contained in the report that relates to all other Mineral Resources is based on information compiled or reviewed by Mr Marcus Osiejak, who is a full-time employee of the Company. Mr Osiejak, is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Osiejak has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

With regard to the Matilda-Wiluna Gold Operation Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcements dated 12 October 2017 continue to apply and have not materially changed.

The information contained in the report that relates to Ore Reserves for the Operations Open Pits is based on information compiled or reviewed by Steve O'Grady. Mr O'Grady confirmed that he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 JORC Edition). He is a Competent Person as defined by the JORC Code 2012 Edition, having more than five years' experience which is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which he is accepting responsibility. Mr O'Grady is a Member of The Australasian Institute of Mining and Metallurgy, has reviewed the Report to which this consent statement applies and is a full time employee working for Interline

Engineering Consultants having been engaged by Blackham Resources Ltd to prepare the documentation for the Operation on which the Report is based, for the period ended 30 June 2017. He disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. Mr O’Grady verifies that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Ore Reserves.

Forward Looking Statements

This announcement includes certain statements that may be deemed ‘forward-looking statements’. All statements that refer to any future production, resources or reserves, exploration results and events or production that Blackham Resources Ltd (‘Blackham’ or ‘the Company’) expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward-looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.