



Low cost pathway to 120kozpa gold production and long mine life

**ASX:BLK** 

Investor Presentation, March 2019

#### **COMPANY OVERVIEW**



Blackham's Matilda-Wiluna Gold Operation has >11Moz endowment

+1,440km<sup>2</sup> of tenure & 55km of strike across four large gold systems in Australia's biggest gold belt

Resources 96Mt @ 2.2 g/t for 6.7Moz Au (1) (58% Indicated)

Reserves 26Mt @ 1.8 g/t for 1.5Moz Au (2)

CY18 production of 78koz ~ A\$1,441/oz (US\$1,023/oz)

Low capex, low risk, near-term opportunity to ~100-120kozpa gold concentrate production

Very capital efficient pathway to a further expansion to ~250kozpa production

Expansion DFS to be completed in Sep'19 quarter Very experienced Board and Management team



<sup>(1)</sup> Refer to ASX release dated 13 September 2018

Refer to ASX release dated 31 October 2018

## **NEW SULPHIDE EXPANSION PLAN**



- Increased production
- Focussed on highest margin gold Reserves
- Sensible, staged approach

# **Current operations**

Free milling production ~ 80koz pa

~ 3 year mine life Sunk capital

# Stage 1 Expansion

Sulphide concentrate production

~ 100-120koz pa

~ 6 year mine life<sup>1</sup> Very low capex

# Stage 2 **Expansion**

Increased throughput

~ 250koz pa

Conversion of 4Moz Resource Very capital efficient

1. Includes underground reserves and mineral inventory only, with a clear pathway to +10 year life

#### **COMPELLING VALUE PROPOSITION**



- ✓ Free-milling production delivering operational cash flow
- ✓ Implementing a number of operational improvements to improve free milling cash flow
- ✓ Low cost, low risk, near-term interim expansion to initial ~100-120koz pa gold production, initial 6 year mine life and targeting +10 years
- ✓ Allows Blackham to immediately focus on mining its highest margin Reserves, with flexibility to process free milling and sulphide ores
- ✓ Significant opportunity to extend open pit mine life and convert large underground Resources (23.3Mt @ 4.6g/t Au for 3.5Moz) into Reserves
- ✓ Pathway to ~250kozpa with low operating cost and long mine life in a Tier 1 mining jurisdiction



1

Current Operations
Stable production
and cashflows

2.

Stage 1
Expansion to ~100-120kozpa

3.

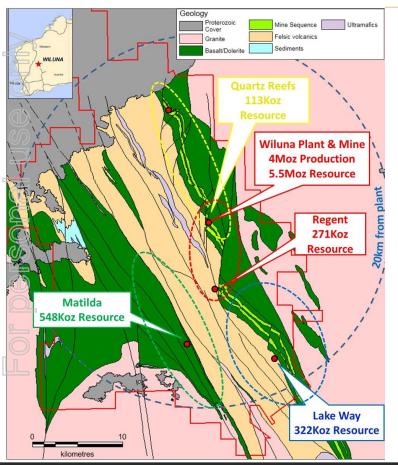
Stage 2
Expansion to ~250kozpa

4.

Continuing to Strengthen & Lengthen Reserves

#### **FOUR LARGE SCALE GOLD SYSTEMS**





- Four large scale gold systems, capable of sustaining a sizeable long life operation, within 20km of plant
- Resources of 96Mt @ 2.2g/t for 6.7Moz<sup>(1)</sup> (58% Indicated)
- Free milling Ore Reserves at Matilda, Wiluna and Williamson and Golden Age underground total 550koz<sup>(2)</sup>
- Ongoing exploration drilling targeting a "rolling" free milling open pit mine plan and "rolling" underground mine plan of 6-12 months
- Significant recent drill success and multiple drill ready targets

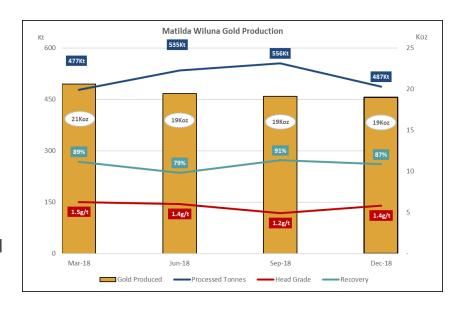
Refer to ASX release dated 13 September 2018

Refer to ASX release dated 31 October 2018

#### **CURRENT FREE MILLING OPERATIONS**



- ✓ Operational stability attained in CY'18 78koz production at A\$1,441/oz AISC
- ✓ FY'19 guidance of 72-80koz at A\$1,500-A\$1,700/oz AISC
- Mining over the next 18 months will focus on the Wiluna and Golden Age operations, with Matilda mining expected to transition to Williamson during 1H'FY20
- Currently implementing a number of operational improvements aimed at higher ounces and lower production costs to improve forward free milling gold production metrics
- ✓ Free milling operations are de-risking the larger sulphide expansion opportunity



## FREE MILLING OPERATIONAL IMPROVEMENTS



Reduce Mining Costs ✓ Open pit geotechnical review combined with wall monitoring

- ✓ Wiluna open pit wall angles already being steepened, decreasing strip ratios
- ✓ Reduces material movement and open pit mining costs
- ✓ Updated open pit mine plans will prioritise high margin mining areas whilst transitioning to concentrate production

Improve Mined Grades ✓ Blast movement study completed

- ✓ Additional measurement tools installed and operational
- ✓ Will reduce ore loss and improve open pit mined grades from Q2,2019
- ✓ Commencing mining at Golden Age Lower, a new mining area at Blackham's highest grade ore body
- ✓ Development started in February 2019, stoping to commence in June quarter, 2019

Improved Plant Throughput

- ✓ Crushing circuit improvements to increase performance and runtime
- ✓ Refurbishment of rod mill
- ✓ Expected to achieve a ~22% increase in mill throughput, for additional ~7koz / \$4M annually if treating low grade (more if increased throughput is high grade ore)

Commenced in Feb'19

Implemented from Feb'19

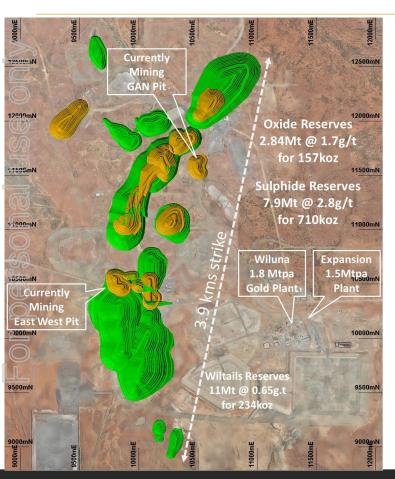
In progress

These identified benefits provide potential upside to FY19 quidance and the benefits will flow into FY20

8

#### WILUNA MINE





- Mining commenced in Oct'18
- Wiluna Open Pit Ore Reserves
  - Free milling Reserves 2.8Mt @ 1.7g/t for 157koz
  - Sulphide Reserves of 7.9Mt @ 2.8g/t for 710koz
- ~60% of the open pit mill plant feed this half
- Wiluna open pit geotechnical review has allowed steepening of wall angles, will reduce strip ratios from Feb'19
- Mining of the oxide pits de-risks the larger sulphide pits



## **MATILDA OPEN PIT MINE**



Soft, deeply weathered oxide ore

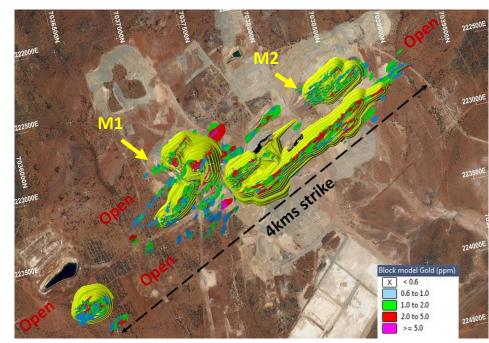
Grade increases below depletion zone

10km of stacked, repeating gold lodes with very limited drilling outside immediate mine plan

Very limited deeper drilling

Currently mining Matilda M1 and M2 pits which represent ~40% of the open pit mill feed this half

Matilda Resources (depleted to 30 June 2018)	Mt	Grade	koz
Measured	0.1	1.1	4
Indicated	7.1	1.5	333
Inferred	4.1	1.7	212
Total	11.3	1.5	548



## **GOLDEN AGE HIGH GRADE CONTRIBUTION**

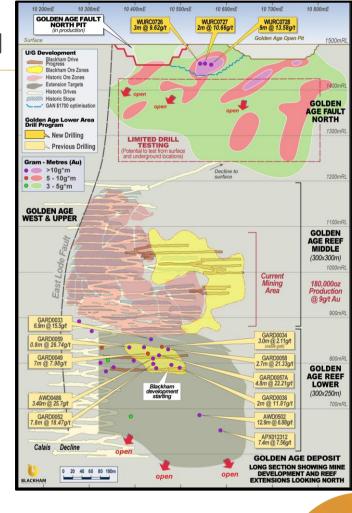
Golden Age is Blackham's highest grade ore body

#### Open Pit

- Currently mining GAN stage 1 pit and in strong grades
- Grade control below historical mined zone has confirmed excellent grades potential for new shallow UG operation
  - Historical UG mining produced 27koz @ 17g/t Au over 180m strike ~30 depth

#### Underground

- Golden Age underground mine has generated healthy cash flows for the last 6 quarters
- Grades averaging 6-8 g/t Au
- Golden Age mining studies recently extended the underground mine plan to Jun'19. Golden Age mine life has continued to be extended over the last 2 years of operations successfully maintaining a rolling mine life of at least 6 months
- Development of GA Lower has begun and will allow faster mining rates
- Exploration targets up and down dip currently being drilled with the aim of increasing reserves and rate of mining





1.

**Stable production and cashflows** 

2.

Stage 1
Expansion to
~100-120kozpa

3.

Stage 2
Expansion to ~250kozpa

4.

Continuing to Strengthen & Lengthen Reserves

## STAGE 1 EXPANSION – CONCENTRATE GOLD PRODUCTION



Simple, low capital, low risk, near-term route to ~100-120kozpa gold production from large sulphide Reserves

Flexibility to process both free milling or sulphide ores

Allows Blackham to focus on mining its highest margin Reserves

Addition of flotation circuit to produce ~100-120kozpa, comprising 100kozpa concentrate production (~46ktpa @ 70g/t Au) and ~20kozpa Wiltails processing

Initial focus on high-grade underground inventory, which support an initial 6 year mine life @ 100-120kozpa, with AISC of A\$1,280-1,490/oz (including concentrate payability discount)

Pathway to +10 year mine life from 1.53Moz of Reserves<sup>2</sup>

Shipped in standard containers via Fremantle (Geraldton and Esperance ports options)

Received various approaches from smelters and traders, discussions for gold concentrate offtake and financing underway. Strong demand for marketable concentrates.

De-risks the expansion to ~250kozpa processing route for Blackham's 6.7Moz Resources<sup>1</sup>

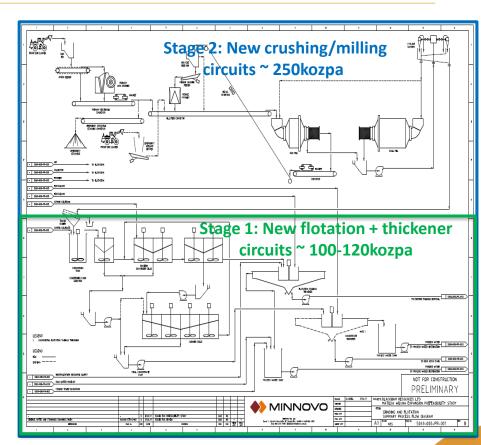
DFS on Stage 1 and 2 expansion to be completed in Sep'19 quarter

Low Capex and potential for gold concentrate offtake financing allows for potential early decision to progress Stage 1

#### LOW CAPITAL SULPHIDE PROCESSING PLAN



- Stage 1: Current mills plus a new flotation plant with concentrate thickener and handling
  - The existing 2 ball mills and refurbished rod mill combined with the new flotation plant would allow the existing plant to process 750ktpa, with 90% flotation recovery to produce around 46ktpa gold concentrate at 70g/t Au
- Expansion PFS Concentrate Circuit cost \$17.6M (includes 15% contingency) for 100ktpa capacity which is double Stage 1 output
- When gold concentrate production commences the existing CIP tanks can be used for a whole of ore leach of historical tailings bat 2.2Mtpa with 42-54% recoveries
- Wiltails Reserves 11Mt @ 0.65g/t for 234koz
- Stage 1 All in sustaining costs A\$1,280-1,490/oz (including the concentrate payability discount)
- Stage 2: New comminution, flotation and leach circuits and refurbish BIOX® Plant lifting ore processing to 2.2-3.3Mtpa
- Stage 2 All in sustaining costs reduce to A\$1,050-1,150/oz

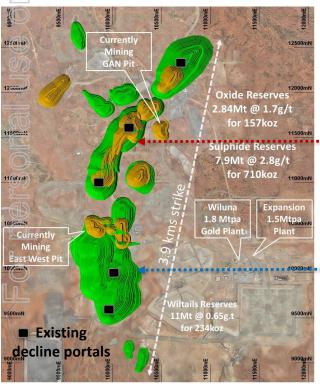


# WILUNA SULPHIDE RESERVES 980koz @ 3.2g/t Au



Mining free milling pits de-risks the open pit sulphide Reserves

Extensive underground development access already in place

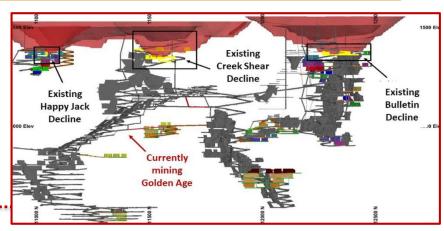


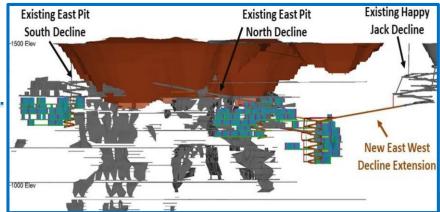
Bulletin – Happy Jack Probable Reserves 155koz @ 4.6g/t Au<sup>1</sup>

5 existing declines over 3.9kms of strike = low development cost

Fast West
Probable Reserves
115koz @ 5.0g/t Au<sup>1</sup>

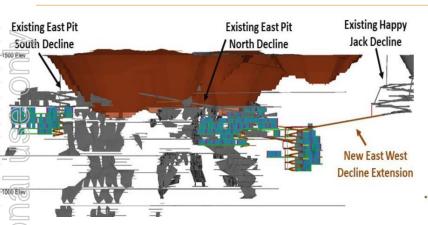
(1) Refer to ASX release dated 31 October 2018





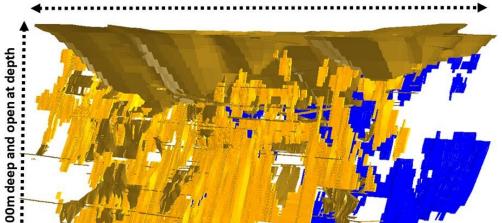
## **EAST WEST UNDERGROUND OPPORTUNITY**





UG Probable Reserves 115koz @ 5.0g/t Au<sup>2</sup>

- 2 large lodes up to 30m wide
- 1.9km strike and open to the south
- \_\_3.9Moz endowment in top 500m
- Early mining of East West UG allows ramp up to ~250kozpa
- Extensive UG Resource beyond Reserves requires further drilling
- Very large exploration target in next 500m vertical



1.9km strike and UG open in both directions

East Lode Resource in 2.5g/t stope optimisation

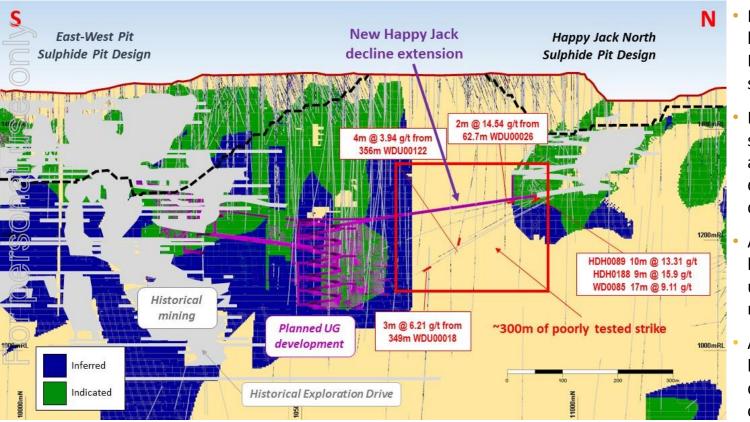
West Lode Resource in 2.5g/t stope optimisation

2.1Moz mined mainly in period from 1930-1946 Resource 1.8Moz @ 3.8g/t Au to 500m depth 3,600oz/vm

- (1) Refer to ASX release dated 13 September 2018
- (2) Refer to ASX release dated 31 October 2018

## **WEST LODE NORTH & HAPPY JACK – orebody extensions**





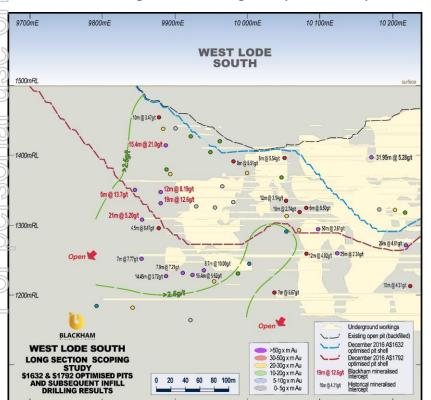
- Happy Jack access brings higher grade East & West Lodes earlier in the mining sequence
- Existing Happy Jack drilling suggests likely to pick up additional ore whilst developing the new decline extension
- Allows both West and East lodes to be drilled from underground, significantly reducing costs
- Allows both West and East lodes to be completely drilled out prior to commencing mining

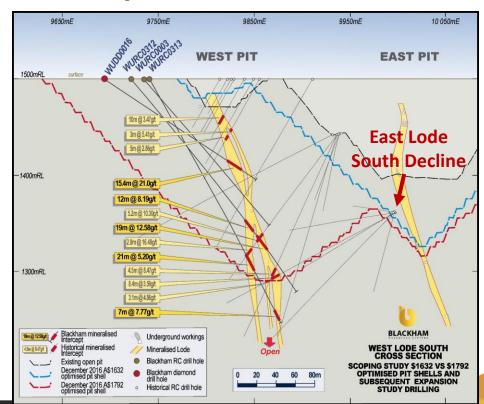
West Lode North – Happy Jack long section looking West showing orebody extensions

# **WEST LODE SOUTH** – high grade Resource extensions



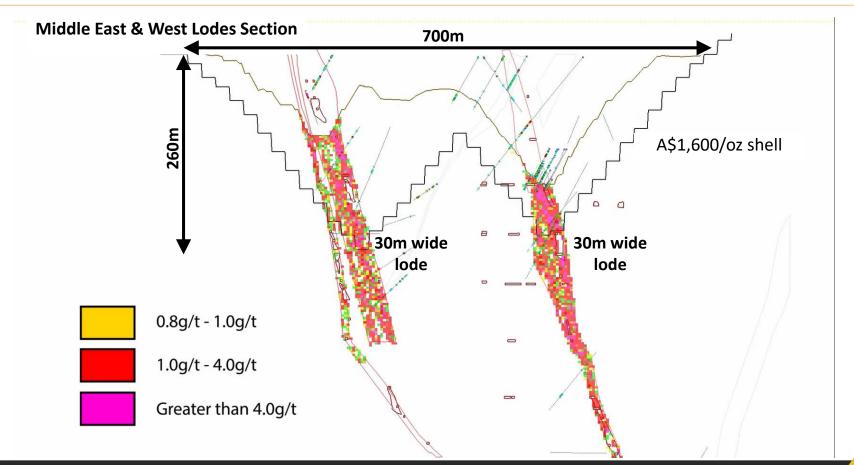
- High grade mineralisation intersected at the southern end of West Lode
- Underground mining study underway within 200m of existing East Lode South decline





# EAST WEST OPEN PIT - 650koz @ 2.8g/t Au







1.

**Stable production and cashflows** 

2.

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Expansion to
~100-120kozpa

3.

Stage 2
Expansion to ~250kozpa

4.

Continuing to Strengthen & Lengthen Reserves

# STAGE 2 EXPANSION – Pathway to +250kozpa, low cost and long mine life



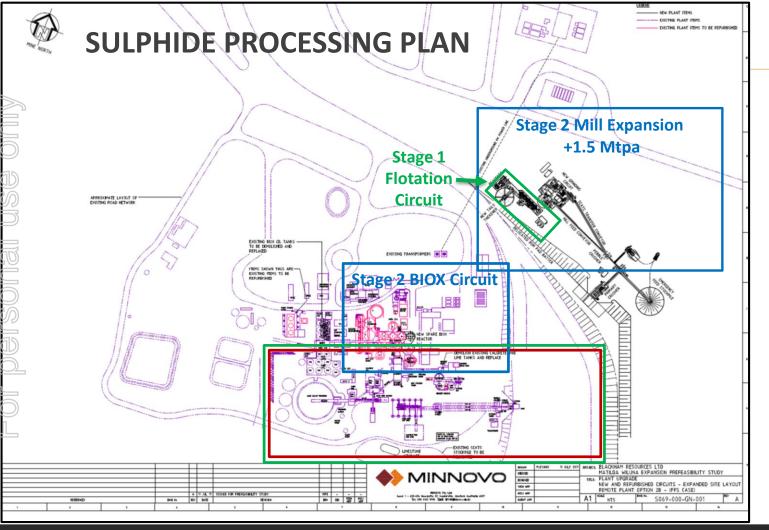


Expansion P	FS Highlights <sup>+</sup>
initial Gold Production	1.5Moz Au over initial 9 years
Open Pit Mining Inventory	15Mt @ 2.3g/t for 1.1Moz
UG Mining Inventory	4Mt @ 4.7g/t for 608koz
Expanded plant capacity	2.2 to 3.3Mtpa
Gold production average	207koz over first 6 years
LOM All in sustaining costs	A\$1,058/oz or US\$751/oz <sup>(2)</sup>

- 1) Refer to ASX released dated 30<sup>th</sup> August 2017
- 2) 1 AUD = 0.71 USD, 18 February 2019

## **Expansion increasing economic potential**

- Current mine plan: 20Mt @ 3.2g/t for 2.1Moz Au
- 4Moz Resource outside the mine plan with significant underground Resource conversion potential
- Feasibility advancing to sell a sulphide gold concentrate at very low capital cost as an interim step to sulphide processing
- Revised East West mine plan allows ramp up to ~250kozpa
- Interest from a number of strategic investors regarding the financing of Stage 2 expansion





Stage 2 Sulphide
Gold Concentrate
2.2-3.3Mtpa + Free
Milling / Wiltails
~ 250kozpa



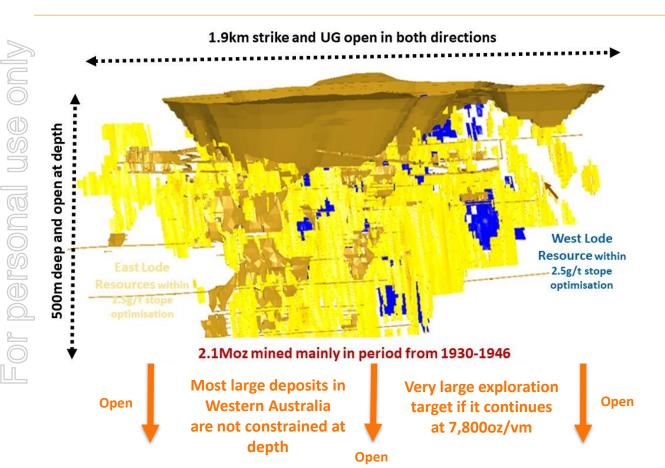
Stage 1 Current Mills
Sulphide Gold
Concentrate
0.75Mtpa + Wiltails
~ 100-120kozpa



Current: Free milling 1.8Mtpa ~ 80kozpa

#### EAST WEST UG MINE PLAN – EXPANSION OPPORTUNITY





Resource 1.8Moz @ 3.82g/t Au to 500m depth

3,600oz/vm in to 500m after mined depletion

Gold Endowment = 3.9Moz in top 500m ~7,800oz/vm

prior to mine depletion

Wiluna north underground extends to 1,200m depths



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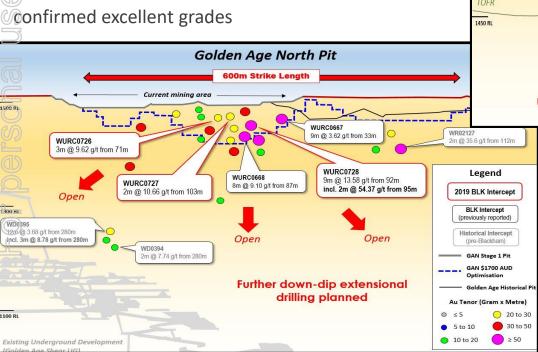
Stage 2
Expansion to ~250kozpa

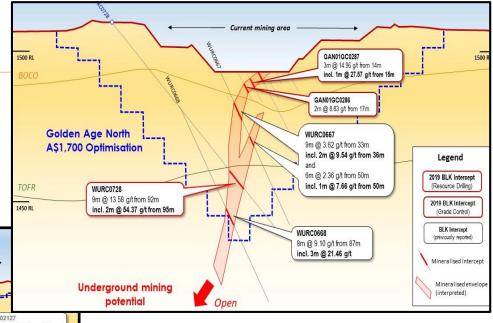
4.

Continuing to Strengthen & Lengthen Reserves

# **GOLDEN AGE NORTH – high grade**

- Historical mining ~ 27koz @ 17g/t Au over 180m strike 30m depth
- Currently mining strong grades from GAN stage 1 pit
- Grade control results below historical mined zone has





- Underground grades from base of pit to 80m
- Higher-grade intercepts from 10-120 gram metres.
- Drilling intercepted the GAN fault at depth of 370m - 1.0m @ 15.5 g/t Au GAGC0241
- Drilling aimed at justifying an underground mining operation in the top 200-300m

# **GOLDEN AGE UNDERGROUND** – highest grade orebody consistently extended

Approximately 180Koz @ 9g/t Au has been historically mined from GA Middle area (300m strike & 300m dip)

Blackham's highest-grade orebody has been consistently extended over the last 2 years and maintained a rolling mine life of at least 6 months

Blackham GA Lower drilling located along 300m strike & 250m below the current mining levels

Low-cost development of GA Lower commences this week providing additional high grade ore for the mill

2 new underground mining areas (GA Lower & GAN) would significantly

increase the volume of high grade ounces delivered to the plant

Best intercepts:

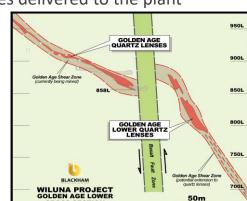
7.8m @ 18.47 g/t Au 144 g\*m 4.8m @ 22.21 g/t Au 107 g\*m

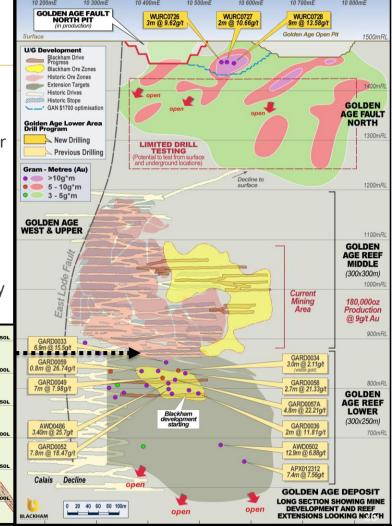
2.7m @ 22.21 g/t Au 107 g\*m 2.7m @ 21.33 g/t Au 58 g\*m

6.9m @ 15.5 g/t Au 107 g\*m

3.4m @ 25.7 g/t Au 87 g\*m 12.9m @ 6.88 g/t Au 89 g\*m

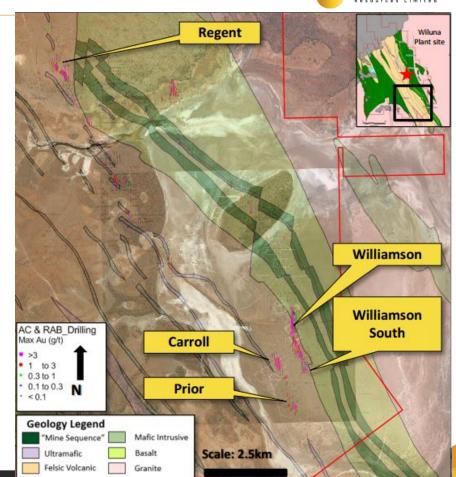
7.4m @ 7.56 g/t Au 56 g\*m





# LAKE WAY – LARGE TONNAGE FREE MILLING POTENTIAL (L) BLACKHAM

- High priority targets identified to extend free milling mine life
- Williamson Mineral Resource of 322koz
- Regent Mineral Resource of 270koz
- 90,000m of air core drilling demonstrated the potential for large tonnage open pits
- Auger drilling, gravity and SAM surveys have defined extensive new targets
- Multiple targets very limited drilling into primary mineralization
- Recent successful drilling at Williamson South and Carroll-Prior
- Currently drilling Williamson South extensions to existing reserves



# Wiluna West – Exciting High Grade Drilling Results



72 RC drill holes for 3,918m completed at the Golden Monarch, Eagle and Emu prospects High grade shallow intercepts achieved in all three prospect areas results include;

#### **Golden Monarch**

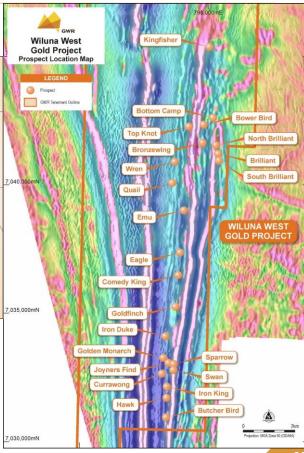
	7m @ 12.0 g/t Au from 28m 7m @ 11.8 g/t Au from 36m	WGRC0054 WGRC0061
	7m @ 8.3 g/t Au from 18m	WGRC0073
Emu	5 m @ 15.0 g/t Au from 45m	WGRC0092
	12 m @ 7.3 g/t Au from 48m	WGRC0096
	8 m @ 11.1 g/t Au from 53m	WGRC0101
	10m @ 2.6 g/t Au from 47m	WGRC0105
Eagle	12 m @ 2.1 g/t Au from 43m	WGRC0083
	6 m @ 3.7 g/t Au from 10 m	WGRC0086
	7 m @ 3.0 g/t Au from 50 m	WGRC0089
	6 m @ 4.00 g/t Au from 118 m	WGRC0108
	5 m @ 9.7 g/t Au from 54 m	WGRC0114

Gold Project

Binding Heads of Agreement executed with Blackham Resources 65% interest (refer to GWR, ASX announcement dated 23rd Nov 2018)

Wiluna Gold Plant located 40km to the north east of the Wiluna West Gold project

- Latest drilling shows the potential higher grade feed source for the Wiluna Plant
- Mining approvals are largely in place for Golden Monarch.





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- ✓ Allows Blackham to immediately focus on mining its highest margin Reserves, with flexibility to process free milling and sulphide ores
- ✓ Outstanding long-term upside from dominant land position and 6.7Moz Resource (96Mt @ 2.2g/t Au − 58% indicated) with well defined geology
- ✓ Pathway to ~250kozpa with low operating cost and long mine life in a Tier 1 mining jurisdiction

# APPENDIX 1: CORPORATE OVERVIEW



During 2018, free milling operating cash flows, together with equity capital raisings of ~\$32m, enabled Blackham to repay ~\$35m of debt, effect a \$21m normalisation of working capital and reinvest \$27 million in its Wiluna Project

A\$ millions	CY18
Mining cash flows	14.4
Growth – capex	(9.5)
Growth – reserve definition & exploration expenditure	(7.5)
Net operating and investing cash flows	(2.6)
Net equity capital raising proceeds	32.2
Net borrowing repayments	(34.8)
Financing cash flows	(2.6)
Net cash flow	(5.2)

Gold forwards as at 1 Mar'19 - 38,123oz @  $A$1,771/oz \sim 6$  months protection

Capital Structure	
Shares on issue	1,377 million
Share price @ 26 Feb'19	3.1 cents
Market capitalisation	A\$43 million
Net debt @ 31 Dec'18 *	A\$14 million
Enterprise value	A\$57 million
Options – unquoted (avg ~10c) Options – ZEPOs	75 million 43 million

nt Team
Executive Chairman
Managing Director
Non-Executive Director
Non-Executive Director
Chief Operations Officer
Chief Financial Officer
Chief Geological Officer

<sup>\*</sup> Comprises \$7m cash and bullion, \$14m loan with Blackham's mining contractor MACA Limited and \$7m convertible note (converts at Blackham's election)

#### **APPENDIX 2:**

## Non core assets – immediate benefits, upside retained



A-Cap (ASX: ACB) farm in agreement over Wiluna Nickel Cobalt Project<sup>(1)</sup>

ACB has paid \$2.8 million for a 20% interest in the Wiluna Nickel Cobalt Project

ACB to spend \$5 million in ground and pay \$3 million in consideration to Blackham within 3 years to get to 75% interest

JORC (2004) inferred resource of 80.5 Mt @ 0.77% Ni & 0.058% Co (using a 0.5% Ni cut-off grade)

ACB plans to begin an aggressive drilling campaign to bring existing inferred resources in line with the JORC 2012 standard, as well as following anomalous cobalt away from the currently defined zones

#### Salt Lake Potash (ASX: SO4) farm in agreement over Lake Way

Blackham and SO4 entered a sulphate of potash (SOP) Memorandum of Understanding<sup>(2)</sup>

SO4 recently announced a Scoping Study on development of a 50,000tpa SOP Demonstration Plant at Lake Way supporting a low capex, highly profitable, staged development model, with capital costs of ~A\$49m and average cash operating costs (FOB) of approx. A\$387/t. (3)

SO4 paying Blackham for Williamson pit dewatering, use of infrastructure and tenement holding costs

SO4 has begun construction on Blackham's mining leases for initial Lake Way demonstration ponds

Blackham's mining leases contain SOP Indicated Resource (drainable porosity) 522,000t<sup>(3)</sup>

• SO4 to pay Blackham a 4% royalty on SOP production from Blackham's tenements

Refer to ASX release dated 1 October 2018
 Refer to ASX release dated 12 March 2018

Refer to ASX release dated 31 July 2018



# APPENDIX 3: WILUNA HISTORICAL PRODUCTION 4.4MOZS



Long History of gold production +4.4Moz

Historical oxide, quartz, tailings ~1.1Moz

1897 - 1924 Oxide & Quartz

1984 – 1993 Oxide & Tailings

1993: BIOX fitted to existing oxide plant

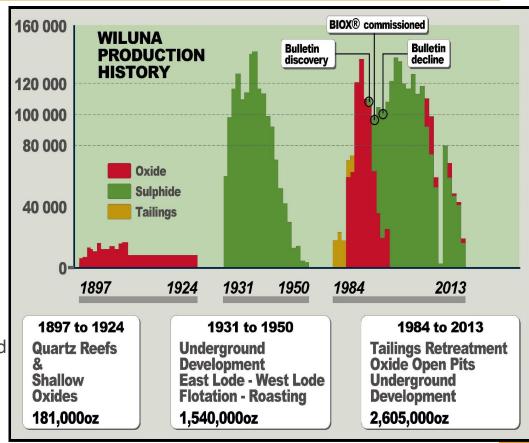
2007: Project broken up - Wiluna mine assets sold to Apex for \$29.5M

2007-2011: Apex spends \$71M on exploration

Nov 2011: Blackham acquires Matilda Gold Project

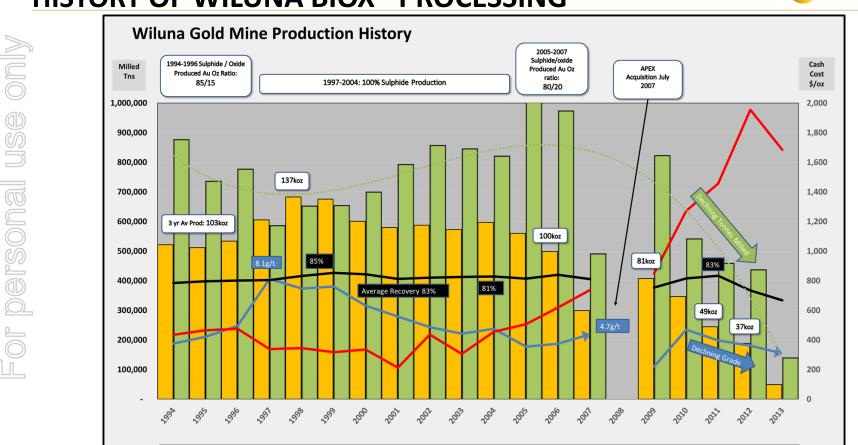
Mar 2014: Blackham acquires Wiluna Mine and plant

Oct'16: Blackham free milling production commences



# APPENDIX 4: HISTORY OF WILUNA BIOX® PROCESSING





Gold Produced (koz) ■Milling (tns) → Grade (g/t) —Revovery (%) —Cash Cost (\$A/oz) ·····Milled Tns Trendline

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#### **APPENDIX 5:**

#### WILUNA MISCONCEPTIONS



- For 20 years prior to Blackham operation, owners of the Wiluna Gold Operation have pursued a high grade underground mining strategy with a short mine life
- Blackham has a medium grade strategy milling (~ 3Mtpa @ 3g/t) which is underwritten by a base load open pit Reserves and supplemented by the very large UG Resource

History	Planned
Apex < 250,000oz Reserves	Reserves 1.5 Million Ounces Au With both UG and OP Reserves
1 UG operation	Large Open Pit Mining Operation with 3 x UG Operations from 5 existing declines
Only UG Operation with no open pits	Blended medium grade strategy open pit and multiple underground areas
High processing cost Milling circuit did not suit hard UG feed	New front end designed for scale and low cost milling
0.75-1.0Mtpa BIOX® and Oxide	2.2-3.3Mtpa total throughput capacity 1.8Mtpa free milling and 1.5Mtpa sulphide plant
Over 20yrs production from Wiluna BIOX <sup>®</sup> averaged 83% recoveries	Optimising floatation recoveries to improve economics

## **APPENDIX 6:**

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## **GOLD ORE RESERVES** as at 30 June 2018



				OF	PEN PIT F	RESERVE	S					
Mining Centre		Proved		Probable			Total 100%			Free Milling		
	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	0.03	1.7	2	1.23	1.7	68	1.26	1.7	70	1.26	1.7	70
Williamson				0.95	2.2	68	0.95	2.2	68	0.95	2.2	68
Wiluna				10.74	2.5	867	10.74	2.5	867	2.84	1.7	157
Stockpiles	0.54	0.8	15				0.54	0.8	15	0.54	0.8	15
OP Total	0.57	0.9	16	12.92	2.4	1,003	13.49	2.3	1,019	5.59	1.7	309
				UNDER	RGROUI	ND RESE	RVES					
Mining Centre		Proved	l	F	robabl	е	To	otal 100			ee Milli	ng
	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				0.04	6.1	7	0.04	6.1	7	0.04	6.1	7
East West				0.72	5.0	115	0.72	5.0	115			
Bulletin <sup>1</sup>				1.03	4.6	155	1.03	4.6	155			
UG Total				1.79	4.8	277	1.79	4.8	277	0.04	6.1	7
				\	Niluna 1	<b>Tailings</b>						
Mining Centre		Proved	l	F	Probabl	е	To	otal 100	)%	Fr	ee Milli	ng
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Tailings Total				11.20	0.7	234	11.20	0.7	234	11.20	0.7	234
Total	0.57	0.9	16	25.91	1.8	1,514	26.48	1.8	1,530	16.82	1.0	550

- 1. Bulletin Underground includes reserves from the Essex, Creek Shear and Lennon underground mining areas
- 2. Calculations have been rounded to the nearest 10,000 t of ore, 0.1 g/t Au grade and 1,000 oz. Au metal
- 3. See ASX announcement 31 October 2018 for further information

# APPENDIX 7:

## GOLD RESOURCES - as at 30 June 2018



					OPEN PIT	RESOURCE	S					
Mining Contro		Measure	∍d	I	ndicated			Inferred		To	tal 100%	
Mining Centre	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 <sup>1</sup>	0.1	1.14	4	7.0	1.44	323	3.6	1.30	151	10.7	1.39	477
Wiluna <sup>2</sup>	-		-	15.4	2.38	1,181	3.1	3.21	324	18.6	2.52	1,505
Williamson <sup>3</sup>	-		-	4.1	1.68	219	1.6	1.58	79	5.6	1.65	298
Regent	-		-	0.7	2.71	61	3.1	2.11	210	3.8	2.22	271
Tailings	-		-	34.0	0.62	680	-		-	34.0	0.62	680
Stockpiles				0.5	0.84	15				0.5	0.84	15
OP Total	0.1	1.14	4	61.7	1.25	2,479	11.4	2.08	763	73.2	1.38	3,246
												I
						ND RESOU	RCES					
Mining Centre		Measure	•d		IDERGROU ndicated	ND RESOU	RCES	Inferred		To	otal 100%	
Mining Centre	Mt		ed Koz Au			ND RESOU	RCES Mt	Inferred g/† Au	Koz Au	To Mt	otal 100% g/t Au	Koz Au
Mining Centre	M†			I	ndicated				Koz Au 61			Koz Au 71
	M†			<b>I</b> Mt	ndicated g/t Au	Koz Au	Mt	g/t Au		Mt	g/t Au	
Matilda <sup>1</sup>	Mt		Koz Au	Mt 0.1	ndicated g/t Au 2.51	Koz Au 10	Mt 0.5	g/t Au 3.66	61	Mt 0.6	g/t Au 3.44	71
Matilda <sup>1</sup> Wiluna <sup>2</sup>	Mt 0.02		Koz Au	Mt 0.1	ndicated g/t Au 2.51	Koz Au 10	0.5 13.5	g/t Au 3.66 4.33	61 1,885	Mt 0.6 21.5	g/t Au 3.44 4.72	71 3,262
Mafilda <sup>1</sup> Wiluna <sup>2</sup> Williamson <sup>3</sup>	-	g/t Au	Koz Au - -	0.1 8.0	g/t Au 2.51 5.37	Koz Au 10 1,376	Mt 0.5 13.5 0.3	g/t Au 3.66 4.33 2.61	61 1,885 23	Mt 0.6 21.5 0.3	g/t Au 3.44 4.72 2.61	71 3,262 23
Matilda <sup>1</sup> Wiluna <sup>2</sup> Williamson <sup>3</sup> Golden Age <sup>4</sup>	-	6.80	Koz Au - -	0.1 8.0 - 0.1	ndicated g/t Au 2.51 5.37	Koz Au 10 1,376 - 24	0.5 13.5 0.3 0.5	g/t Au 3.66 4.33 2.61 3.77	61 1,885 23 63	Mt 0.6 21.5 0.3 0.6	g/t Au 3.44 4.72 2.61 4.46	71 3,262 23 91

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 Table above are rounded to two significant figures to reflect the relative uncertainty of the estimate.

See ASX announcement 13 September 2018 for further information

## **APPENDIX 8:**

#### **BOARD & MANAGEMENT TEAM**



#### MILAN JERKOVIC - EXECUTIVE CHAIRMAN

Mr Jerkovic is a qualified geologist with postgraduate qualifications in mining & mineral economics and over 30 years of experience in the mining industry involving resource evaluation, operations, financing, acquisition, project development and general management. He is the current Chairman of Geopacific and a non-Executive Director of Metals X Limited.

Mr Jerkovic was previously the CEO of Straits Resources Limited and has held positions with WMC, BHP, Nord Pacific, Hargraves, Tritton and Straits Asia Resources (as founding chairman). He is a Fellow of the AIMM and a member of the Australasian Institute of Company Directors.

#### **BRYAN DIXON - MANAGING DIRECTOR**

Mr Dixon has over 20 years experience in the mining sector, focused mainly in the gold industry and was joint winner of the Asia-Pacific Mining Executive of the Year in 2017. Mr Dixon is a Chartered Accountant and has extensive experience in the management of public and listed companies. Previously, Mr Dixon has been employed by an international accounting firm, Resolute Limited and Archipelago Resources Plc. Mr Dixon has held a numerous director and management roles with emerging resource companies. Mr Dixon specializes in project acquisition, feasibility, financing, development and operations of mining projects.

#### TONY JAMES - NON-EXECUTIVE DIRECTOR

Mr James is a mining engineer with considerable operational, new project development and corporate experience including roles as Managing Director of Carbine Resources , Atherton Resources and Mutiny Gold. Mr James held a number of senior executive positions with international gold producer Alacer Gold Corporation, including President of its Australian Operations following the merger between Anatolia Minerals and Avoca Resources in 2011. He also played a key role in Avoca's initial growth and success, leading the feasibility, development and operations of the Higginsville Gold Operations.

#### GREG FITZGERALD - NON-EXECUTIVE DIRECTOR

Mr Greg Fitzgerald has now been formally appointed as a Non-Executive Director of the Company. Mr Fitzgerald is a Chartered Accountant with more than 30 years of gold mining and resources related experience, and extensive executive experience in managing finance and administrative matters for listed companies. He held the positions of Chief Financial Officer and Company Secretary for ASX 200 company, Resolute Mining Limited, for more than 15 years. Mr Fitzgerald is Chairman of the BLK Audit and Risk Committee and a member of the BLK Remuneration and Nomination Committee.

#### **RICHARD BOFFEY - CHIEF OPERATIONS OFFICER**

Mr Boffey is an internationally experienced mining executive with over 26 years' experience specialising in mining project start-ups, mine management, feasibilities and continuous improvement. Mr Boffey has a successful track record of leading and delivering mining projects through the various phases of planning, permitting, construction and full operations safely, on schedule and on budget. He led the development of the Efemcukuru Gold Mine in Turkey for Eldorado Gold Corporation and the Wallaby underground project for Granny Smith Mines. Mr Boffey was the GM Operations at Cupric Canyon's Khoemacau Copper Mines project in Botswana and also previously held the role of Regional Manager, Mining for Barrick.

#### JONATHAN LEA - CHIEF GEOLOGICAL OFFICER

Mr Lea is a geologist with over 30 years with significant experience in gold mining , focusing on production and near mine exploration. Branching out from geological roles, Mr Lea was the technical services manager for the Kalgoorlie region for a major gold producer. This experience has resulted in a comprehensive technical knowledge in all aspects of mining, exploration and mine development. He has worked in a corporate capacity heading junior exploration and development companies with a focus both on mine development and in project generation. Mr Lea brings a diverse and extensive experience in all aspects of project development and mining.

#### ANTHONY RECHICHI - CFO AND COMPANY SECRETARY

Mr Rechichi is a Chartered Accountant and a highly accomplished senior accounting and finance professional with over 17 years of experience in public companies and professional services, predominantly in the gold mining industry. Mr Rechichi spent ten years with Resolute Mining Limited where he most recently performed the role of General Manager – Finance with responsibilities for three operating gold mines.

# CONTACT For further information

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#### DISCLAIMERS AND IMPORTANT INFORMATION



This presentation 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.

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 13th September 2018 continue to apply and have not materially changed.

The information contained in the report that relates to Ore Reserves for the Bulletin, Creek Shear, Essex and East-West underground mines at the Wiluna Gold Mine is based on information compiled or reviewed by Matthew Keenan. Mr Keenan 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 Keenan 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 Entech Pty Ltd having been engaged by Blackham Resources Ltd to prepare the documentation for the Matilda Gold Project on which the Report is based, for the period ended 30 June 2018. 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 Keenan 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.

The information contained in the report that relates to Ore Reserves for the Open Pits at the Matilda-Wiluna Gold Operation is based on information compiled or reviewed by Simon Hewson. Mr Hewson 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 Hewson 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 of Blackham Resources Limited and having prepared the documentation for the Matilda/Wiluna Gold Project on which the Report is based, for the period ended 30 June 2018. He has 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 Hewson 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.

The information contained in the report that relates to Ore Reserves for Wiluna Tailings at the Matilda-Wiluna Gold Operation is based on information compiled or reviewed by Daryl Evans. Mr Evans 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 Evans is a Fellow 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 Independent Metallurgical Operations Pty Ltd having been engaged by Blackham Resources Ltd to prepare/review the documentation for the Matilda/Wiluna Gold Project on which the Report is based, for the period ended 30 June 2018. 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 Evans 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.