ASX Announcement
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BLACKHAM
Resources Limited

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Wiluna Expansion Study confirms +200kozpa long mine life opportunity

Blackham Resources Ltd ("Blackham" or "the Company") (ASX: BLK) has pleasure in announcing the completion and successful results of the Preliminary Expansion Study on its 100% owned Matilda/Wiluna Gold Operation ("Operation").

The Preliminary Expansion Study assumes a staged expansion which would give Blackham the flexibility to treat both oxide and sulphide ores. It also provides a lower risk staged approach to development and capex over an 18 month period ramping up gold production to over 200,000ozpa. The Preliminary Expansion Study has focused on the Wiluna Sulphides to assess it independently and as part of an integrated operation with the current free milling ores at Matilda and Wiluna. It has been assumed the expanded operation would be developed in two Stages 2A and 2B. On the completion of Stage 2B it is envisaged the treatment of free milling ore would recommence allowing the two processing facilities to run in parallel with total capacity of 3.2Mtpa.

Importantly it allows the Company to finance the expansion out of a combination of Stage 1 cash flow and a debt re-sizing.

Preliminary Expansion Study Highlights

- **Targeted Gold Production over 9 years** — **18Mt @ 2.7g/t for 1.31Moz**
- **Open Pit Mining Inventory** — **14Mt @ 2.0g/t for 890koz**
- **Underground Mining Inventory** — **4Mt @ 4.9g/t for 630koz**
- **Stage 2A Capital** — **$24.9M for circa 0.75Mtpa**
- **Stage 2B combined processing capacity of 3.2Mtpa for +200,000ozpa**
- **LOM All in sustaining costs** — **A$1,170/oz or US$870/oz**

- **Combined oxide/sulphide operation has the ability to produce over 200,000oz Au per annum with a long mine life**
- **Latest Wiluna open pit resource and reserve drilling programme nearing completion (49,000m) has the potential to strengthen and lengthen the reserves profile**
- **Wiluna underground has 23Mt @ 4.7g/t for 3.3Moz outside the mine plan with the economics still to be fully evaluated which will include assessing bulk mining opportunities**

Cautionary Statement

Blackham has concluded it has reasonable basis for providing the forward looking statements included in this announcement (see Appendix 1). The detailed reasons for that conclusion are outlined throughout this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules.

Cautionary Statement continued.
The Preliminary Expansion Study referred to in this announcement has been undertaken by Blackham Resources Limited to assess whether a business case can be made for proceeding to and setting parameters for sizing, scope and engineering for more definitive studies. The Preliminary Expansion Study relies on both the Definitive Feasibility Study ('DFS') announced to the ASX on 24 February 2016 plus additional scoping studies which are based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves for all of the production, however a high percentage of the early production years are based upon the Companies existing reserves from the 2016 DFS. Further exploration and evaluation work and appropriate studies are required before the Company will be in a position to estimate total ore reserves or provide further assurance of an economic development case or that the conclusions of the scoping study assumptions will be realised. The Production Targets and Forecast and any Financial Information contained in this announcement are based on detailed technical and economic assessments however a portion of the information is insufficient to support the estimation of Ore Reserves over all of the Production Targets, particularly in the later years. There is a lower level of geological confidence associated with Inferred Mineral Resources used in this report and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that all the Production Targets itself and timetables will be realised. The Preliminary Expansion Study is based on the material assumptions outlined in this announcement and to an accuracy level of +/- 20 for Underground Mining costs +/- 30% for the Open Pit and +/- 30% for processing costs.

Summary

The Preliminary Expansion Study assumes a staged expansion which would give Blackham the flexibility to treat both oxide and sulphide ores from July 2018, as an indicative date which will be confirmed during the Expansion Feasibility Study. It also provides a lower risk staged approach to development and capex over an 18 month period ramping up gold production of over 200,000ozpa.

The Preliminary Expansion Study has focused on the Wiluna Sulphides and their integration with the current free milling ores at Matilda and Wiluna. It has been assumed the expanded operation would be developed in two Stages, 2A would be refurbishment of the current sulphide treatment plant and the construction of a new float and Carbon in Leach (CIL) circuits and 2B would be the construction of a new crushing and grinding circuit to increase throughput by circa 1.5Mtpa. On the completion of Stage 2B it is envisaged the treatment of free milling ore would recommence allowing the two processing facilities to run in parallel with total capacity of 3.2Mtpa.

Blackham considers the results of the Study to be very positive and continues to advance the Expansion Feasibility Study. The Company has a number of options and flexibility as to how the Matilda/Wiluna Gold Operation can be expanded to over 200,000ozpa which will be further examined during the feasibility study. These include but are not limited to, timing of execution, option of producing a floatation concentrate for sale and examining underground bulk mining opportunities, particularly around the East West underground.

Blackham Managing Director Bryan Dixon stated "The Wiluna Expansion Plan aims to achieve a step change in gold production from the 6.4Moz resource at the Matilda/Wiluna Operation. The Preliminary Expansion Study has confirmed gold production of 200,000ozpa is achievable on a very capital efficient basis and is likely to be a long mine life. By undertaking a staged development approach the Company expects to maintain a strong balance sheet during stage 2A refurbishment and construction plus on the completion of Stage 2B run the sulphide and oxide circuits in parallel providing one of Western Australian's most flexible gold processing facilities."

Over the last 5 and a half years Blackham has consolidated the Wiluna Goldfield and now has a 1,000km^2 tenement package which has historically produced over 4.3 million ounces. The Matilda/Wiluna Gold Operation is located in Australia's largest gold belt which stretches from Norseman to Wiluna and passes through Kalgoorlie and Leinster. Blackham's 100% owned Wiluna Operation recommenced production in October 2016 which comprises a 1.7Mtpa gold plant, 17MW new gas and diesel power stations, 300 person camp, borefields and underground infrastructure. Stage 2B envisages increasing the **expanded plant capacity of 3.2Mtpa to unlock the value of a larger portion of the 6.4Moz gold resource** (63Mt @ 3.2g/t Au).

The Matilda/Wiluna Gold Operation's **63Mt @ 3.2g/t for 6.4Moz** gold Resources are to JORC 2012 standard and are all within a 20km radius of the Wiluna Gold Plant. **31Mt @ 3.1g/t for 3.1Moz** (49%) are in the Measured and Indicated Resource category (Table 8). Blackham has focused its exploration strategy around ensuring it has a long open pit mine life to provide certainty with feeding a 3.2Mtpa processing capacity. This represents a significantly different strategy from previous owners of the Operation.

Very few operations in premium mining jurisdictions have the geology on a scale to support +200,000oz operations with strong grade profile and potential for a long mine life. The Expanded Wiluna Processing Facility would have the ability to process most ore types.

Targeted Gold Production

Table 1: Expansion Study Outcomes

		LOM
Mine life	yrs	9
Tonnes Milled	Mt	17.8
Processed Grade	g/t	2.7
Recovery	%	86%
Production Ounces	**Moz**	**1.31**

The Preliminary Expansion Study assumes a staged ramp up of production to reduce the risk in commissioning the sulphide circuit. The first year (FY19) is the initial Stage 2A, leading into the 2B phase where the operation increases to a plant capacity of 3.2Mtpa. During Stage 2A the plant has the flexibility to process ore through either the oxide or sulphide circuits.

Initially, the underground operations provide the majority of the feed and grade before the open pits begin to supplement the ore feed as the Sulphide operation ramps up to circa 1.5Mtpa.

- Gold Production 17.8Mt @ 2.7g/t for 1.31Moz over 9 years (Chart 1)
- First 3 years of Expanded Plant 3.2Mtpa gold production averages 222,000oz @ 2.8 g/t (Chart 1)
- Base load open pit production (inc stockpiles) underpins plant feed which totals 13.8Mt @ 2.0g/t Au mined over 9 years (Chart 2)
- Underground production total of 4.0Mt @ 4.9g/t mined over 7 years (Chart 2) but is likely to be extended from the significant underground resources outside the mine plan of 3.3Moz (23Mt @ 4.7g/t Au)

Chart 1: Gold Production for next five years

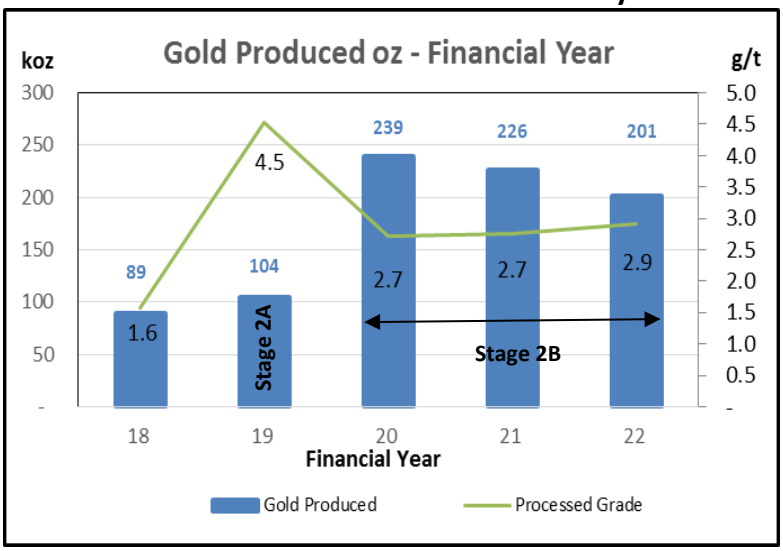
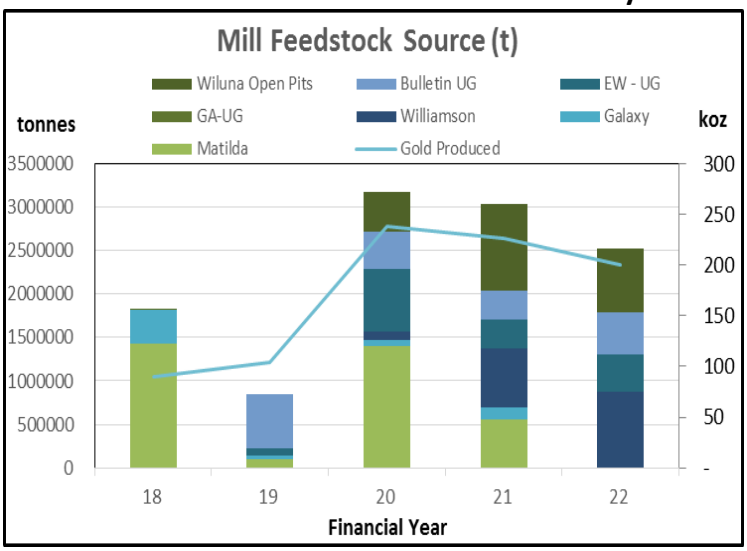


Chart 2: Mill Feed sources over next five years



By the beginning of FY19, Blackham has the ability process Oxide or Sulphide ores. The base case currently assumes the refurbishment of the current sulphide circuit (Stage 2A) and the installation of a new flotation circuit and CIL tanks. Stage 2A will be over 12 months of operation and will process a majority of high grade underground ore. Stage 2B will commence in the following year (FY20) of operation on completion of the new crushing and grinding circuit. Final timing for execution of Stages 2A, 2B and the optimisation with oxide processing will be considered during the Expansion Feasibility Study which has already commenced.

Stage 2A the sulphide plant throughput is circa 760ktpa and in the following year on the completion of the new crushing and grinding circuit the expanded plant throughput increases to 3.2Mtpa (oxide plus sulphide circuits).

The mine plan currently assumes Bulletin underground operations commence during the refurbishment of Stage 2A and is sustained over 6 years. The Bulletin Underground will be the first sulphide ore accessed due to it requiring very little development capital (decline and all mining infrastructure currently in place) to access mining inventory of 378,000oz (2,386,000t @ 4.9g/t Au) resulting in a very short payback of capital.

The East West underground commences in the first year of Sulphide production and contributes over the following 3 years. By the end of the third year of Stage 2B there is sufficient open pit ore being mined to sustain the operation at the increased throughput.

Table 2: Matilda/Wiluna Operation LOM Mining Inventory

	Tonnes (Mt)	Grade	Ounces (koz)	%
Measured	1	1.3	55	4%
Indicated	12	2.6	1,014	66%
Inferred	4	3.4	457	30%
Total	**17.8**	**2.7**	**1,530**	**100%**

Calculations have been rounded to the nearest million t of ore, 0.1g/t Au grade and 1,000 oz Au metal.

Table 2 above summarises the respective Mineral Resource Estimation classification (by ounces) that support the Expansion operations gold production. For the 1.5m ounce LOM total, 70% is classified as Measured and Indicated Mineral Resource and 30% as Inferred Mineral Resource. Additional infill drill programmes are nearing completion at the Wiluna Open Pits (49,000m) and are currently being planned for the Bulletin Underground.

There is a lower level of geological confidence associated with Inferred Mineral Resources used in this report and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The bulk of the inferred material in Mining Inventory is at the backend of the 9 year mine plan.

Mining and Mining Inventory

The Expanded Operation is Targeting Gold Production of **17.8Mt @ 2.7g/t and 86% recovery for 1.31Moz of gold produced over 9 years**. The Mining Inventory and Production has been calculated based upon the Gold Resources in Table 8, which include drilling up until 1 December 2016. During the Dec'16 quarter, Blackham increased the Operations total resources 25% from 25,000m of drilling. Over the last 3 months Blackham has completed a further 49,000m of drilling into the Wiluna open pit resources.

The Expansion mining scoping study focused on the Wiluna open pits and underground operations and incorporate the existing Matilda, Quartz reef and Lake Way reserves and mining inventory which are supported by the 2016 DFS. The mining is envisaged to be undertaken by mining contractors with management and technical services undertaken by Blackham's operations team. Scoping level designs and optimisations were used for the Wiluna open pits and detailed designs were undertaken for the underground operations.

The Wiluna Open pit mining will utilize a standard truck and excavator mining technique involving conventional drill, blast, load and haul. Ore will be hauled directly to the Wiluna gold plant on existing haul roads. In addition to the mining fleet, ancillary plant consisting of tracked bulldozers, wheel loaders, graders and water carts will be required. The ancillary fleet will prepare drill and blast areas, maintain active digging areas, mine roads and waste dumps. Ore will be delivered to the Run of Mine (ROM) pad at the plant site and then fed to the treatment plant via a ROM loader.

The underground operations at Wiluna have been divided into two distinct areas. The Bulletin underground operations, being initially accessed from the existing Bulletin Portal and the East West underground which will be accessed from existing underground infrastructure and portal access from East Pit. Ore from the underground mines will be predominately extracted via top-down mechanised long hole open stoping and a smaller amount of a bottom-up modified Avoca method using unconsolidated backfill. Suitable pillars are left behind to ensure ground stability during the mining. Ore is trucked to the surface and then hauled to the treatment plant.

Wiluna Open Pits – large, good grade and growing in size

The Wiluna open pits produce 7.6Mt of ore at a diluted grade of 2.5g/t Au for 610,000oz contained ounces at an average stripping ratio is 10:1 over the LOM. The open pit mining costs are estimated at $8.40/bcm and $3.81/t of material moved. The open pit schedule is based on bench by bench mining of the material inventory quantities calculated within the individual open pits incorporating a 10% dilution and 95% recovery which is considered reasonable for the widths and style of the Wiluna orebodies. Stockpiling ore will be required in the later years of the schedule. A summary of the material inventory within all pits that is available for mining, is provided in Table 3 below.

Table 3: Wiluna Open Pits LOM Mining Inventory

Pit	Waste (Mbcm)	Waste (Mt)	Ore (Mt)	Au (g/t)	(Koz)	Strip Ratio
East West	22.0	49.0	5.6	2.3	423.8	8.8
Happy Jack	4.1	8.4	0.7	3.0	66.0	12.0
Bulletin	3.7	7.7	0.7	2.7	57.2	11.7
Essex	2.5	5.5	0.3	3.0	32.6	16.5
Squib	2.1	4.3	0.2	3.2	22.5	19.4
Gap	0.9	1.7	0.1	2.2	7.5	16.2
Total	**35.3**	**76.6**	**7.6**	**2.5**	**609.6**	**10.0**

Blackham have delineated the Wiluna Open Pits LOM Mining Inventory based on historical drilling plus 25,000m completed during the Dec'16 Qtr. Over the last 3 months Blackham has completed a further 49,000m of drilling into the Wiluna open pit resources with a view to infill and extensional drilling around the Wiluna open pits.

The mining methods chosen are well-known and widely used in the local mining industry and production rates and costings can be predicted with a suitable degree of accuracy. Suitable access exists for all mines with allowances being made for earthworks and infrastructure requirements including haul road refurbishment and clearing for site facilities and mining areas.

The Wiluna open pits are all within 4kms of the Wiluna processing facility and will not require additional haulage. A first principles cost estimate was undertaken for comparison against open pit contractor quotes which were then incorporated into optimization analysis to derive the optimum pit shell for each mining area. Pit shells were then selected to create open pit designs that further work for scheduling and modelling is generated from.

Figure 1. Happy Jack to Bulletin Pit Designs

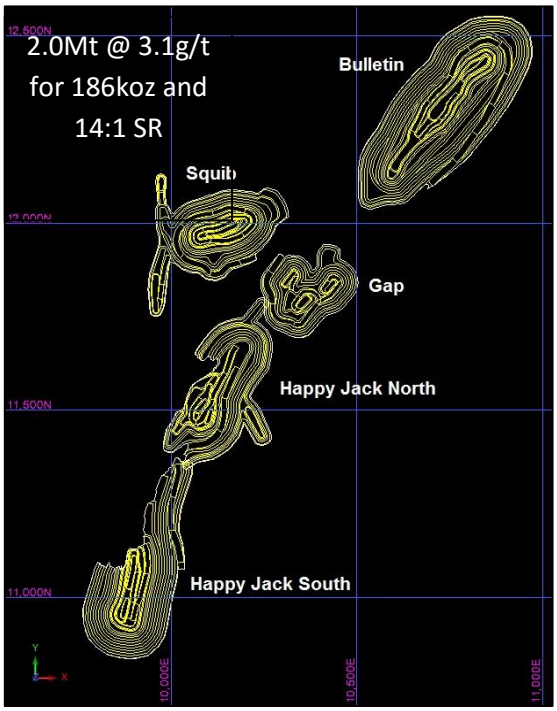
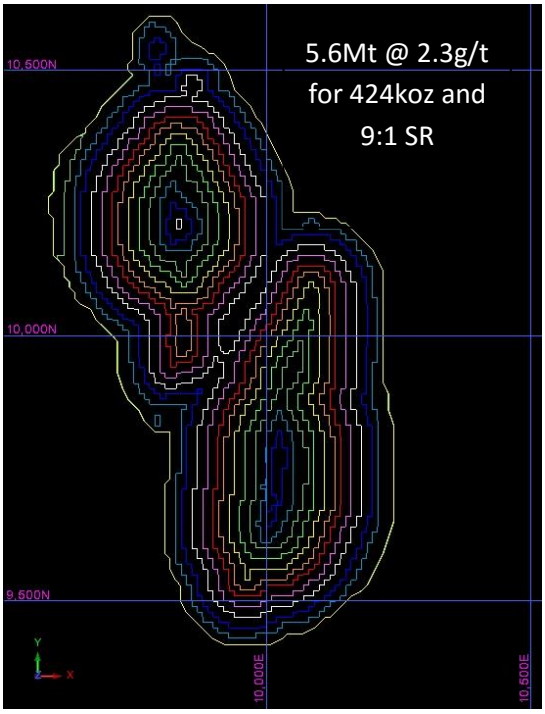


Figure 2. East West Pit Design Shell



All scoping study work for scheduling and modelling is generated from the pit designs and pit shell created in Whittle as shown in plan view for East and West pit, more detailed designs are being undertaken for future work.

The risk of interaction between the open pits and the underground operations has been reduced, by scheduling mining at different times that are in areas with close proximity to one another. There could be times when this is unavoidable and will be managed accordingly, by ensure that risk management processes and procedures including risk assessments are implemented.

Wiluna Underground Mine – higher grade profile for the mill

Blackham has employed independent mining consultants Entech Pty Ltd to review the underground deposits, perform stope optimizations and prepare detailed mine designs with a focus on the resources in the top 500m from surface. Blackham's strategy has been to leverage off existing underground infrastructure and follow the previously mined orebodies along strike with a view to minimizing mining costs.

Table 4: Wiluna Underground LOM Mineral Inventory

Summary of Mining Material Inventory by Underground			
Underground	**Ore (Mt)**	**Au (g/t)**	**(Koz)**
Bulletin*	2.4	4.9	0.38
East West	1.6	5.0	0.25
Total	**4.0**	**4.9**	**630**

*Bulletin includes Essex and Creek Shear orebodies

An updated Bulletin mine plan has been completed with the major changes to the 2016 DFS being the inclusion of a new incline to the south of the existing Bulletin workings and the development of accesses to the Essex underground from the Happy Jack Decline. The Bulletin upper and mid will be long hole open stoping also and the Bulletin 200 and Creek Shear will utilize a bottom-up modified Avoca method using unconsolidated backfill. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation.

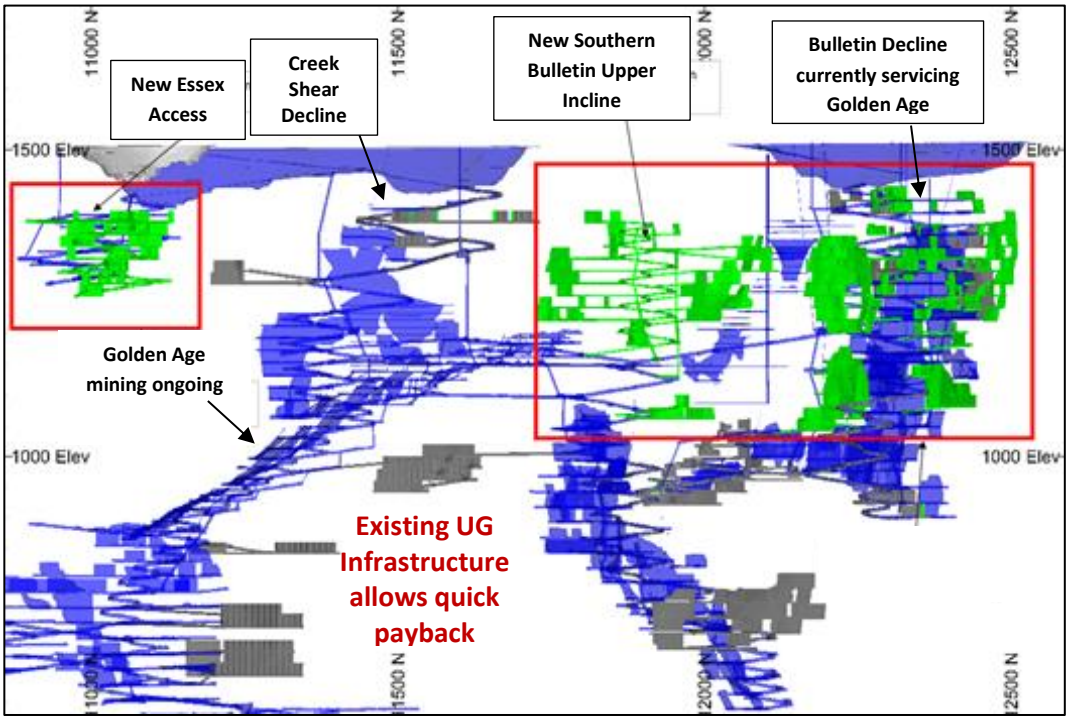


Figure 3: 2017 Bulletin to Essex Underground Mine Designs (Long-Section Looking West)
(Green=New Mine designs, Grey= from 2016 DFS)

Underground production at East-West will be mined top-down via mechanized long hole open stoping with in-situ pillars retained for stability as per the original 2016 DFS. The initial mining study has focused on areas to the north and south of historical workings. Recent drilling at East West has provided further confidence in the accuracy of historical mining development and stoping voids. The same design criteria and mine design parameters were used as outlined in the DFS announced to the ASX on 24 February 2016. The underground Sulphide mining operating costs are estimated at $66/t of ore plus $22/t of ore for sustaining capital. During the Expansion Feasibility Study an assessment will be made on bulk mining opportunities focused on the East West underground.

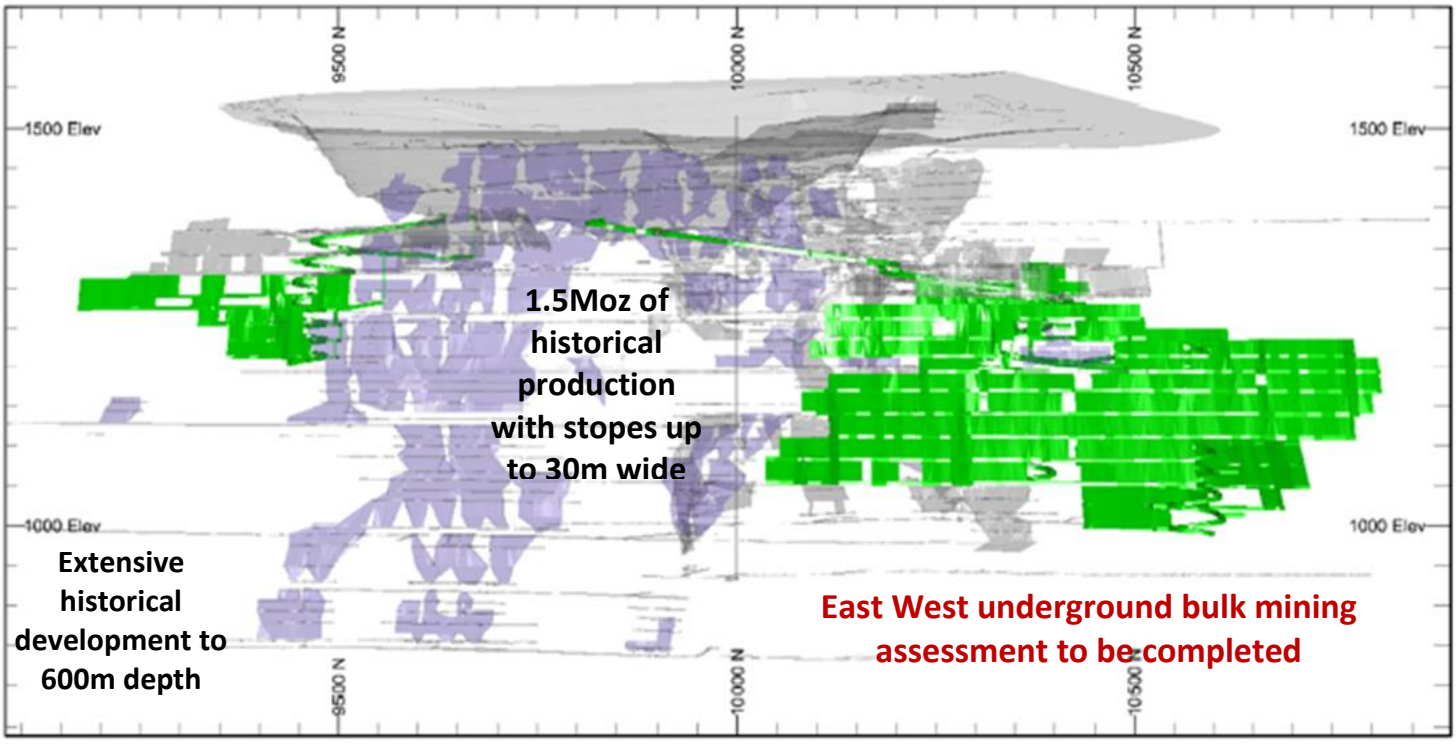


Figure 4: East-West Underground Mine Designs from 2016 DFS in Green (Long-Section View Looking West)
Grey areas represent historical mining that produced 1.5Moz mainly between the 1930-1950's

Gold Ore Processing

The Wiluna Gold Plant has run under several incarnations in the last three decades of operation including Carbon in Pulp (CIP) and Carbon in Leach (CIL) to process free-milling (oxide) ores and, more recently, as a BIOX® CIL to process refractory (sulphide) ore.

Blackham recently revitalised the oxide CIP circuit of the Wiluna Gold Plant to process Matilda, Galaxy and Golden Age ores, as defined in the 2016 DFS. Results of the 2016 DFS metallurgical testwork program on these ores were used to optimise the oxide CIP plant and where necessary, upgraded components accordingly.

Also, as part of the 2016 DFS, comminution and flotation testwork was completed on Wiluna sulphide ore to assess optimal grind size and compatibility with the existing grinding circuit configuration. In addition to metallurgical testwork, historic operating data for the last 20 years on Wiluna Gold Plant production was reviewed to support the metallurgical production assumptions. Wiluna sulphide gold ore was processed through the Wiluna Gold Plant's Sulphide Circuit for 20 years between 1993 and 2013 and extensive data is available for analysis including metallurgical reports, operating log sheets, plant assays, recoveries, reconciled head grades and operating costs. All of the sulphide orebodies included in the mine plan have been processed through the Wiluna sulphide circuit previously. The 2016 DFS also included a preliminary scope of work and respective cost estimate to refurbish the BIOX® Plant.

Process Modelling and Optimisation

Wiluna ores are refractory (excluding Quartz reef ores), with most gold occurring in either solid solution or as sub-microscopic particles within fine-grained sulphides. For the 8-year period from July 1999 to July 2007, for which data is readily available, the Wiluna sulphide circuit averaged 84% gold recovery from a feed grade of 5.4 grams per tonne. Overall gold recovery is largely a function of sulphide recovery through the flotation circuit. The 2016 testwork suggests an improvement on sulphide flotation recovery with smaller grind sizes; in turn, an improvement in gold recovery may be realised. The current metallurgical testwork is focussing on improving the sulphide flotation recoveries with a view to improving the overall gold process recovery. The BIOX® reactors have a capacity of approximately 36 tonnes of sulphur per day; optimisation of throughput and flotation recovery is required to achieve BIOX® capacity.

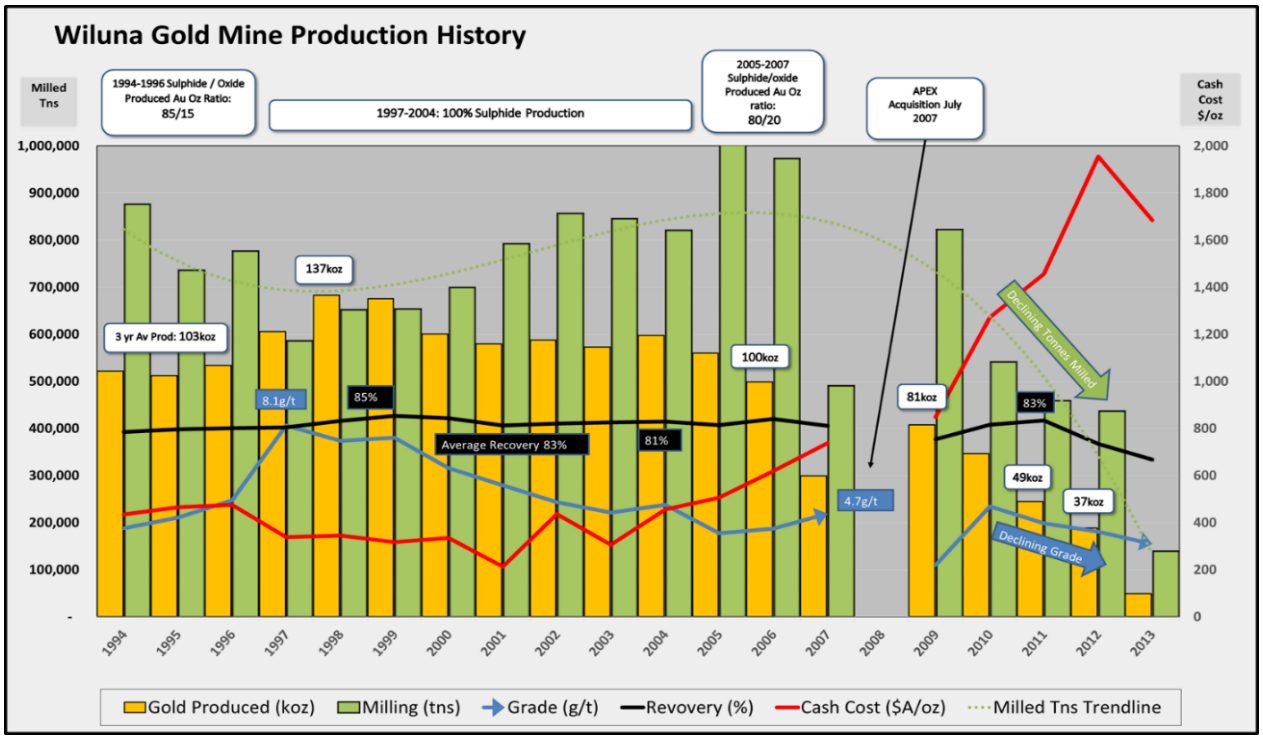


Figure 5: Wiluna Sulphide Circuit operating history demonstrates consistent metallurgical recoveries between 1994 & 2011.

Given the elevated hardness of the Wiluna ores, Sulphide circuit throughput is limited to grinding capacity of the existing circuit at approximately 760ktpa, reflecting Stage 2A in the Expansion scenario. The existing mill setup has 2 ball mills, a rod mill and a regrind mill post floatation that have been used to treat the hard underground ores. The existing mill configuration reflects the transition from oxide ore into sulphide ore but is not ideal for treatment of lower grade sulphide open pit orebodies.

As part of the Preliminary Expansion Study, Orway Mineral Consultants (OMC) were engaged to model and, provide capital and operating cost estimates for a new 'Front End' fit, that is, crushing, grinding and flotation circuits, capable of a 1.5 Mtpa throughput (Stage 2B Expansion). The OMC study assessed a series of comminution options based on available metallurgical data, and indicated that a single stage crushing into a SAG mill with a recycle (pebble) crusher would produce the lowest capital and operating costs. Sulphide processing costs during 2B (~1.5Mtpa) are expected to be reduced from $48/t to $35/t.

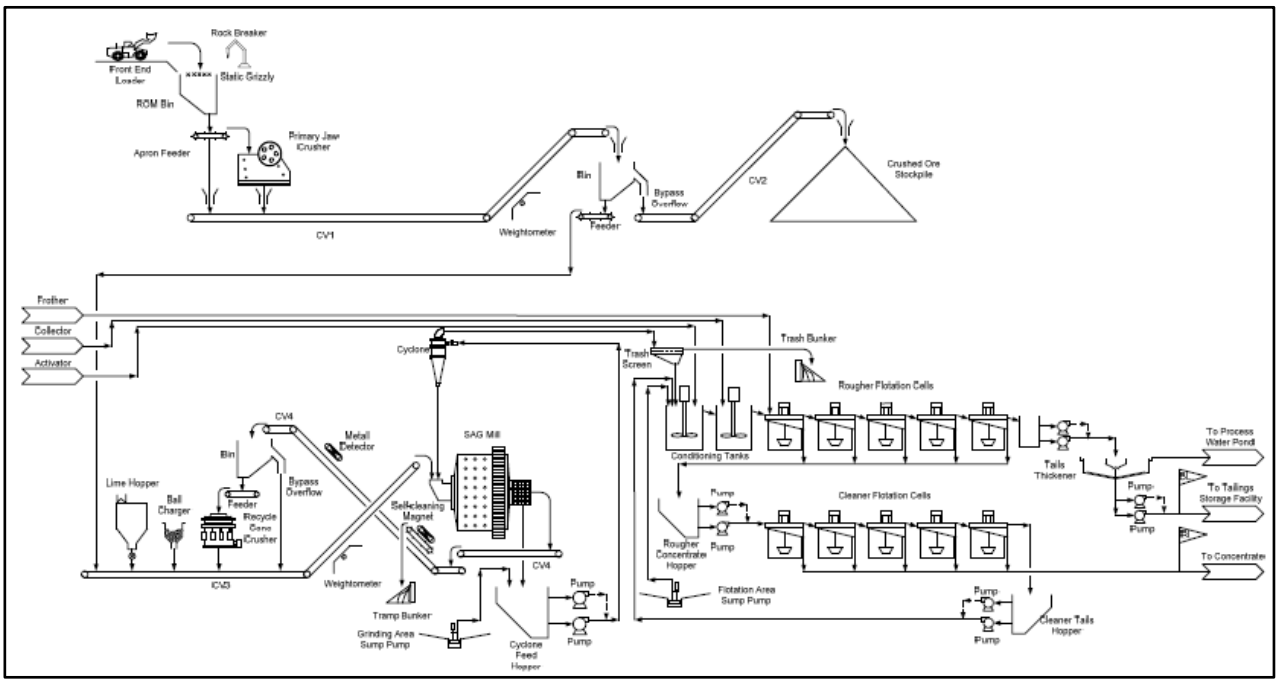


Figure 6: Process Flow Diagram – SS SAC and Flotation

Future Work – Metallurgy, Process Design, Plant Refurbishment and Operating Strategy

Additional metallurgical sampling and testwork programs are underway to gain further confidence on ore physical characteristics and bacteria oxidation rates. In addition, and as noted, additional flotation recovery tests against grind size will ensue to support process design criteria. The preliminary work on the new Front End will be re-evaluated against latest metallurgical data in combination with historic data. Furthermore, a review of the scope of work, an additional investigation for the BIOX® Plant Refurbishment and, evaluations on potential process improvements therein will be conducted. The staged approach in the Expansion operating strategy will be assessed against the distribution of capital costs and optimal throughput.

Furthermore, alternative processing scenarios to BIOX® are being assessed during the Expansion Feasibility, including production and sale of a high-grade gold/sulphur concentrate. Initial concentrate investigations suggest potential benefits include:

- Competitive pricing terms and potential credits for non-gold related minerals
- Simpler flowsheet and with only front end capacity to the floatation circuit required
- Lower capital and operating costs

During the feasibility study, in addition to metallurgical and assay testwork, the assessments involve trade-off studies of potential lower capital and operating costs (and a simplification of processing) against a potential reduced recovery will be assessed.

Tailings Storage

Stage 1 of the new tailings storage facility (TSF J) was completed as part of the 2016 Project. Blackham engaged Knight Piésold Pty Ltd (KP) to provide engineering services for detailed design and construction supervision for Stage 1 of TSF J. KP recently completed an evaluation of the ultimate capacity of TSF J under current and projected throughputs. The work indicated that the facility would reach capacity in 2021, a scoping level cost provision has been made for the continued life of mine. In addition, a preliminary investigation was recently completed to identify potential locations for a new tailings storage facility. Detailed work for a new tailings storage facility is to be considered further closer to execution and will include an assessment of underground paste fill integrated into future mine planning studies. TSF J is monitored and audited regularly including production discharge against elevation and area to assess tailings settled densities.

Operating Costs and Capital Costs

The Expanded Matilda Gold Operation C1 cash costs and All in sustaining costs are forecast to be A$964/oz[1] and A$1,174/oz[2], respectively.

Table 5: Preliminary Study Key Findings	
Mine Plan Inventory	17.8Mt @2.7g/t for 1.31M Au oz
LOM Open pit strip Ratio (t:t)	10
Sulphide Throughput Stage 2A	0.76Mtpa
Combined Throughput Stage 2B Capacity	3.2Mtpa
Life of Mine	9 years
Processing Recovery	85.5%
Gold Produced over 9 years	1.31Moz

Table 6: Cash Costs and AISC		LOM	$/oz	$/t
Mining Costs	A$	$736,405,000	$562	$41
Processing Costs	A$	$496,346,000	$378	$28
Onsite G&A Costs	A$	$31,282,000	$24	$2
Cash Costs C1	**A$**	**$1,264,033,000**	**$964**	**$71**
Royalties	A$	$129,848,000	$99	$7
Corporate Costs	A$	$22,211,000	$17	$1
Sustaining Capital - Mining	A$	$92,274,000	$70	$5
Sustaining Capital - Plant & infrastructure	A$	$31,173,000	$24	$2
All-in Sustaining Costs	**A$**	**$1,539,539,000**	**$1,174**	**$86**

1. C1 Cash Costs include all mining, processing, general & administration
2. AISC includes C1 Cash Costs plus royalties, refining costs, sustaining capital and corporate costs

Table 7: Scoping Expansion Study Capital			Source
Stage 2A - BIOX® Plant Refurbishment	$M	6.8	DFS 2016
Stage 2A - New Flotation Circuit	$M	6.0	OMC Study
Stage 2A - New CIL Circuit	$M	2.4	DFS 2016
Stage 2A - Contingency	$M	5.5	DFS 2016
Stage 2A - Indirect Costs	$M	2.0	DFS 2016
Stage 2A - First Fills	$M	0.5	Blackham
Stage 2A - Expansion Infrastructure	$M	1.7	Blackham
TOTAL Stage 2A	**$M**	**24.9**	

Stage 2B - New Crushing Circuit	$M	6.7	OMC Study
Stage 2B - New Grinding Circuit	$M	26.8	OMC Study
Stage 2B - New Plant Auxiliary	$M	14.0	OMC Study
Stage 2B - Contingency	$M	14.0	OMC Study
Stage 2B - Indirect Costs	$M	9.2	OMC Study
Stage 2B - Expansion Infrastructure	$M	8.3	Blackham
TOTAL Stage 2B	**$M**	**79.0**	

*All the above capital costs are scoping level of confidence and sourced mainly from engineering firm databases.

Approvals

Matilda Operations Pty Ltd, a 100% owned subsidiary of Blackham, has an existing Department of Environment and Regulation (DER) License to operate under the Environmental Protection Act 1986. The licence primarily allows for the processing of ore, mine dewatering and discharge, plus other activities required for the Operation. The DER approved an amendment to the license in 2016 permitting the construction and operation of TSF J and an increase to the processing plant throughput to 1.8 Mtpa. An amendment to this License is required to expand production to 3.2Mtpa.

Matilda Operations Pty Ltd also has Water (DoW) licences required for abstraction of water for use in processing of ore and dewatering for mining purposes at the Operation.

The Mining Proposals and Mine Closure Plans for Wiluna are approved for the current operation. However, the Wiluna Mining Proposal must be amended to account for the proposed cutbacks on the Wiluna open pits. While most of these areas are disturbed as a result of historic mining operations, some survey work may be required; a desktop study by Animal Plant Mineral (APM) is underway to identify any information gaps and to ensure the Wiluna Mining Proposal aligns with the latest (2016) DMP Guidelines. Furthermore, Environmental Geochemistry International Pty Ltd (EGI) is progressing geochemical characterisation of the mine waste material at Wiluna as an additional contribution to the Mining Proposals and Mine Closure Plans.

Gold Resources increased 25% during the 3 months to Jan'17.

The Matilda Gold Operation's **63Mt @ 3.2g/t for 6.4Moz** gold Resources are to JORC 2012 standard (see Table 8) and are all within a 20km radius of the Wiluna Gold Plant. **31Mt @ 3.1g/t for 3.1Moz** (48%) are in the Measured and Indicated Resource category.

Table 8: Matilda/Wiluna Gold Operation Gold Resources

OPEN PIT RESOURCES

Mining Centre	Measured			Indicated			Inferred			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	Mt	g/t Au	Koz Au
Matilda Mine OP	0.2	2.1	13	7.6	1.8	435	4.3	1.4	200	12.1	1.7	**648**	12.0	1.7	**640**
Galaxy				0.4	3.1	42	0.4	2.2	25	0.8	2.6	**68**	0.8	2.7	**68**
Williamson Mine				3.3	1.6	170	3.8	1.6	190	7.1	1.6	**360**	7.1	1.6	**360**
Wiluna OP[1]				8.4	2.7	730	4.1	2.5	330	12.5	2.6	**1,060**	1.2	1.4	**54**
Regent				0.7	2.7	61	3.1	2.1	210	3.8	2.2	**271**	1.3	1.9	**78**
Stockpiles				0.4	1.0	13				0.4	1.0	13			
OP Total	**0.2**	**2.1**	**13**	**21**	**2.2**	**1,451**	**16**	**1.9**	**955**	**37**	**2.1**	**2,420**	**22**	**1.7**	**1,200**

UNDERGROUND RESOURCES

Mining Centre	Measured			Indicated			Inferred			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	Mt	g/t Au	Koz Au
Golden Age				0.5	5.3	81	0.9	3.7	110	1.4	4.2	**191**	1.4	4.3	**190**
Wiluna				9.4	5.2	1570	15.0	4.4	2165	24	4.8	**3,735**			
Matilda Mine UG				0.1	2.5	10	0.6	3.6	70	0.7	3.6	**80**			
UG Total				**10**	**5.2**	**1,661**	**17**	**4.4**	**2,345**	**26**	**4.8**	**4,006**	**1**	**4.2**	**190**
Grand Total	**0.2**	**2.1**	**13**	**31**	**3.1**	**3,112**	**32**	**3.2**	**3,300**	**63**	**3.2**	**6,426**	**24**	**1.8**	**1,390**

1) Wiluna Open Pit Resources include the East, West, Happy Jack, Creek Shear, Golden Age North, Gap, Bulletin, Essex, Adelaide and Moonlight orebodies.
2) Free Milling resource is a subset of the overall Mineral Resource
3) Mineral Resources are reported inclusive of Ore Reserves and include all exploration and resource definition drilling information, where practicable, up to 1st December 2016.
4) 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.

Following successful drilling campaigns in 2016, Measured, Indicated and Inferred Resource estimates were updated at the Wiluna Gold Operation. Mineral Resources at Wiluna had previously been estimated with a focus on high grade underground mining opportunities using a 4.0g/t lower-cut. Significant lower grade mineralisation which can potentially be extracted from an open pit was not captured by previous interpretations. A geological model was completed incorporating drilling by Blackham with the mineralisation re-interpreted above a 0.3g/t lower-cut. For more information on the Matilda/Wiluna Gold Resources please refer to ASX announcements from 13th December 2016 and 23rd January 2017. The resources in Table 6 are the basis for the Wiluna Preliminary Expansion Study which are based on drilling up until 1 December 2016 which included 25,000m of drilling into the Wiluna open pits.

Over the last 3 months, Blackham has completed 49,000m of RC and diamond drilling into the Wiluna open pits. First results were announced in the ASX release "Drill success confirms potential for larger open pit" dated 23rd March 2017 highlighted:

- Significant broad zones of mineralisation in the Central Zone between East and West Lodes confirmed
- Central zone mineralisation all outside the existing resource
- Drilling confirms and extends high grade open pit mineralisation on the East and West Lodes
- Successful drilling likely to extend the planned East West open pit further north

Future drilling programmes will focus on:

- Drilling the extensions of Matilda and Golden Age to resource and reserve confidence
- Bulletin underground infill to upgrade the majority to reserves
- Lake Way infill drilling to lift Williamson and Carroll-Prior structures to resource confidence

Financing and Project Implementation

Blackham continues to advance its Expansion Feasibility Study, with a view to monetarising a larger portion of its 6.4Moz Matilda Gold Operation, which is expected to be completed by the Dec'17 Qtr.

The Company has $34.8M is cash at 31 March 2017, and is fully funded to complete its Expansion Feasibility Study. Blackham management are mindful of matching Stage 1 operating cash flow to Stage 2 capital requirements and commitment to the Expansion Implementation Plan will be done at the earliest opportunity the balance sheet allows.

The Company has also appointed a financing advisor who began engaging potential debt providers with a view to re-sizing the current $39M debt facility. The Company has received a number of expressions of interests in the financing of the Stage 2 Expansion Plan. The Company plans to continue discussions with debt financiers in parallel to the completion of its Expansion Feasibility Study.

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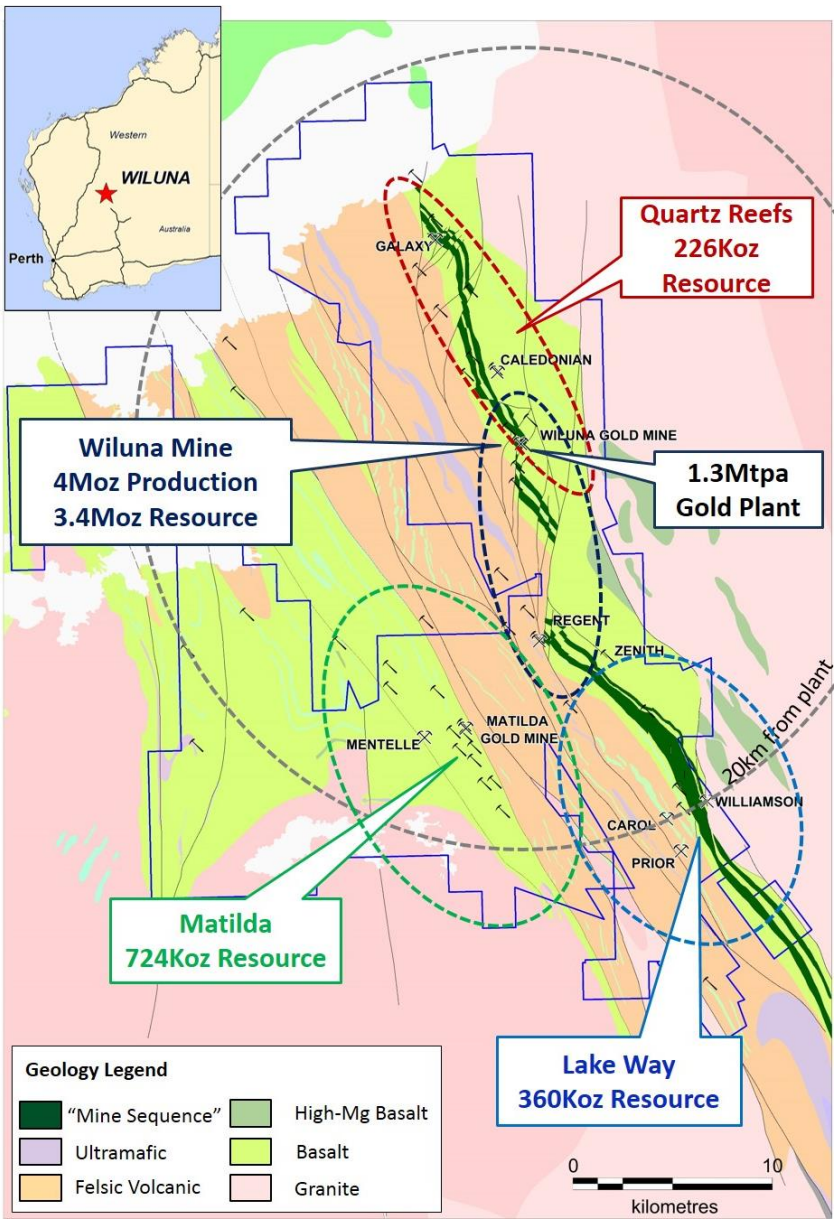

Competent Persons Statement

The information contained in the report that relates to Exploration Targets and Exploration Results at the Matilda Gold Project is based on information compiled or reviewed by Mr Bruce Kendall, who is a full-time employee of the Company. Mr Kendall is a Member of the Australian Institute of Geoscientists 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 Kendall 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.

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 December 2016 and 23rd January 2017 continue to apply and have not materially changed.

APPENDIX 1 – FORWARD LOOKING AND CAUTIONARY STATEMENTS

The Board has concluded that it has a reasonable basis for providing the forward-looking statements and production targets discussed in this announcement. The Board also considers that it has reasonable basis to expect that it will be able to fund the development of the Wiluna Expansion. The detailed reasons for those conclusions are outlined throughout this announcement and all material assumptions are disclosed in this document and in the JORC table disclosures of the relevant Resource Statements.

This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. The Company advises that it completed a Definitive Feasibility Study in February 2016 but some of the Production Targets and any Financial Information contained in this announcement are preliminary in nature and some of the conclusions are in-part based on low-level technical and economic assessments and are insufficient to support the estimation of Ore reserves over all of the Production Targets, particularly in the later years, or to provide an assurance of economic development of the Stage 2B Expansion. The outcomes of the Study provide a reasonable basis for the company to release the results whilst not providing an assurance of the economic development of Stage 2b. This is based on the current mining inventory indicating that for the next *5* years of production most of the material can be sourced from the Indicated Resources.

The Board confirms the results from the Preliminary Expansion Study are positive and that justifies the Company committing to the next stage of detailed resource and engineering test work for the definitive study which is fully funded.

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.

To achieve the outcomes indicated in the Expansion Study, funding of in the order of A$79 million will likely be required for Stage 2B. The Company expects to fund this capital requirement out of Stage 1 and 2a operations and a re-sizing of the current $39 million debt facility.

The Company has also appointed a financing advisor who began engaging potential debt providers with a view to re-sizing the current $39M debt facility. The Company has received a number of expressions of interests in the financing of the Stage 2 Expansion Plan. The Company plans to continue discussions with debt financiers in parallel to the completion of its Expansion Feasibility Study.

Investors should note that there is no certainty that the company will be able to secure the amount of funding needed. Given the uncertainties involved, investors should not make any investment decision solely on the results of the Expansion Study.
This announcement has been prepared in compliance with the current JORC Code 2012 Edition and the ASX Listing Rules. All material assumptions on which the forecast financial information is based have been included in this announcement.

This announcement makes reference to Mineral Inventory which has a portion of Inferred Mineral Resources (30%) and therefore cannot be classified as Ore Reserves. Based on advice from relevant Competent Persons, the Company is confident that as per the definitions in the JORC Code 2012 it is reasonably

expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued infill drilling. Investors should note that there is no certainty that the company will be able to convert Inferred Mineral Resources to Indicated Mineral Resources nor that the company will be able to convert Mineral Inventory to Ore Reserves.

The lithological and structural controls on the mineralization are well understood across the Mineral Inventory at Matilda, Galaxy, Golden Age, Williamson and Wiluna. Logging of historical and recent Blackham drilling is available in conjunction with detailed mapping and extensive historical mining documentation to provide Blackham with a high degree of confidence in the geological characteristics of the potential mines that comprise the Matilda/Wiluna Gold Operation.

Blackham has a proven track record of successfully converting existing Inferred Resources in the Mineral Inventory to Indicated Resources. Blackham has completed a significant portion of drilling aimed at converting the Inferred Resource in the Mineral Inventory to Indicated Resources for the early years of the mine life.

The Company also notes it has a total resource of 63Mt @ 3.2g/t for 6.4Moz of which only 20% has been included in the Mining Inventory. The measured and indicative resource totals 31Mt @ 3.1g/t for 3.1Moz of which only 18% is included in the 2016 DFS Reserves.

The Company believes it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any Production Targets and economic evaluation based on information contained in this announcement and in particular:

- The Company is currently in Stage 1 production and completed a Definitive Feasibility Study in February 2016 over a significant portion of the Production Targets particularly at the front end of the mine plan.
- In relation to Mineral Resources, the Company confirms that all material assumptions and technical parameters that underpin the relevant market announcement continue to apply and have not materially changed.
- Blackham has a highly experienced management and operations team with significant experience in developing and operating Western Australian gold mines.
- 100% of the Matilda Gold Operation Mining Inventory is located on granted Mining Leases.
- Blackham owns 100% of the Wiluna Gold Plant and commissioned Stage 1 of the Operation in October 2016.
- Blackham's management, operations team and consultants have many years of experience economic studies and evaluation, geotechnical, mining, processing, engineering and environmental assessments and have sufficient experience on matters relating to underground and open pit gold mining for the Matilda Gold Operation.
- The Company has $34.8 Million in cash and a Debt Facility of $39 Million as at 31 March 2017 and is currently looking to fund its Stage 2B expansion from the expected cash flow from its Stage 1 and 2A operations and a re-sizing of its debt levels.

APPENDIX 2

JORC Code, 2012 Edition – Table 1 (Wiluna)

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be*	• Blackham Resources has used i) reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig, and ii) NQ2 or HQ core with ½ core sampling. Samples from RC and diamond drilling are reported herein. • Blackham's sampling procedures are in line with standard industry practice to ensure sample representivity. Core samples are routinely taken from the right-hand-side of the cut line. For Blackham's RC and AC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. It is assumed that previous owners of the Operation had procedures in place in line with standard industry practice to ensure sample representivity. • Historically (pre-Blackham Resources), drill samples were taken at predominantly 1m intervals in RC holes, or as 2m or 4m composites in AC holes. Historical core sampling is at various intervals so it appears that sampling was based on geological observations at intervals determined by the logging geologist. • At the laboratory, samples >3kg were 50:50 riffle split to become <3kg. The <3kg splits were crushed to <2mm in a Boyd crusher and pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay. Historical assays were obtained using either aqua regia digest or fire assay, with AAS readings. • Blackham Resources analysed samples using ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish. Historically, gold analyses were obtained using industry standard methods; split samples were pulverized in an LM5 bowl to produce a 50g charge for assay by Fire Assay or Aqua Regia with AAS finish at the Wiluna Mine site laboratory.

	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.	
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Blackham data reported herein is RC 5.5" diameter holes. Diamond drilling is oriented NQ or HQ core • Historical drilling data contained in this report includes RC, AC and DD core samples. RC sampling utilized face-sampling hammer of 4.5" to 5.5" diameter, RAB sampling utilized open-hole blade or hammer sampling, and DD sampling utilized NQ2 half core samples. It is unknown if core was orientated, though it is not material to this report. All Blackham RC drilling used a face-sampling bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• For Blackham RC drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. For DD drilling, recovery is measured by the drillers and Blackham geotechnicians and recorded into the digital database. Recoveries were typically 100% except for the non-mineralised upper 3 or 4m. For historical drilling, recovery data for drill holes contained in this report has not been located or assessed, owing to incomplete data records. Database compilation is ongoing. • RC drilling, sample recovery is maximized by pulling back the drill hammer and blowing the entire sample through the rod string at the end of each metre. Where composite samples are taken, the sample spear is inserted diagonally through the sample bag from top to bottom to ensure a full cross-section of the sample is collected. To minimize contamination and ensure an even split, the cone splitter is cleaned with compressed air at the end of each rod, and the cyclone is cleaned every 50m and at the end of hole, and more often when wet samples are encountered. Historical practices are not known, though it is assumed similar industry-standard procedures were adopted by each operator. For historical drilling with dry samples it is unknown what methods were used to ensure sample recovery, though it is assumed that industry-standard protocols were used to maximize the representative nature of the samples, including dust-suppression and rod pull-back after each drilled interval. For wet samples, it is noted these were collected in polyweave bags to allow excess water to escape; this is standard practice though can lead to biased loss of sample material into the suspended fine sample fraction. For DD drilling, sample recovery is maximised by the use of short drill runs (typically 1.5m) and triple tube splits for HQ3 drilling. • For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	• Drill samples have been logged for geology, alteration, mineralisation, weathering, geotechnical properties and other features to a level of detail considered appropriate for geological and resource modelling. • Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral

	estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	percentages is quantitative. • All holes were logged in full. • Core photography was taken for BLK diamond drilling.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• For core samples, Blackham uses half core cut with an automatic core saw. Samples have a minimum sample width of 0.3m and maximum of 1.2m, though typically 1m intervals were selected. A cut line is routinely drawn at an angle 10 degrees to the right of the orientation line. Where no orientation line can be drawn, where possible samples are cut down the axis of planar features such as veins, such that the two halves of core are mirror images. • For historical drilling sampling techniques and preparation are not known. Historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies. Holes have been selectively sampled (visibly barren zones not sampled, though some quartz vein intervals have been left un-sampled), with a minimum sample width of 0.3m and maximum of 1.2m, though typically 1m intervals were selected. • RC sampling with cone splitting with 1m samples collected. 4m scoop composites compiled from individual 1m samples. RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice. • For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias in the results • Blackham drilling, 1m RC samples were split using a cone splitter. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure. AC samples were 4m composites; • Boyd <2mm crushing and splitting is considered to be standard industry practice; each sample particle has an equal chance of entering the split chute. At the laboratory, >3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, >3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl. • Field duplicates were collected approximately every 40m down hole for Blackham holes. With a minimum of one duplicate sample per hole. Analysis of results indicated good correlation between primary and duplicate samples. RC duplicates are taken using the secondary sample chute on the cone splitter. AC duplicates were scooped in the field. It is not clear how the historical field duplicates were taken for RC drilling.

		• Riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. Note comments above about samples through 'stope' intervals; these samples don't represent the pre-mined grade in localized areas. • For historical drilling, field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Investigation revealed sufficient quality control performance. No field duplicate data has been located or evaluated in earlier drilling. Field duplicates were collected every 20m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples. • Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Fire assay is a total digestion method. The lower detection limits of 0.01ppm is considered fit for purpose. For Blackham drilling, ALS completed the analyses using industry best-practice protocols. ALS is globally-recognized and highly-regarded in the industry. Historical assaying was undertaken at Amdel, SGS, and KalAssay laboratories, and by the on-site Agincourt laboratory. The predominant assay method was by Fire Assay with AAS finish. The lower detection limit of 0.01ppm Au used is considered fit for purpose. • No geophysical tools were required as the assays directly measure gold mineralisation. For Blackham drilling, down-hole survey tools were checked for calibration at the start of the drilling program and every two weeks. • Comprehensive programs of QAQC have been adopted since the 1980's. For Blackham drilling certified reference material, blanks and duplicates were submitted at approximately 1:20. Check samples are routinely submitted to an umpire lab at 1:20 ratio. Analysis of results confirms the accuracy and precision of the assay data. It is understood that previous explorers great Central Mines, Normandy and Agincourt employed QAQC sampling, though digital capture of the data is ongoing, and historical QAQC data have not been assessed. Results show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%).
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager. • There were no twinned holes drilled in this program. Drilling has been designed at different orientations, to help correctly model the mineralisation orientation. • Wiluna data represents a portion of a large drilling database compiled since the 1930's by various project owners. • Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within Blackham's manual "Blackham Exploration Manual 2016v2". Historical procedures are not documented. • The only adjustment of assay data is the conversion of lab non-numeric code to numeric for estimation.

Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All historical holes appear to have been accurately surveyed to centimetre accuracy. Blackham's drill collars are routinely surveyed using a DGPS with centimetre accuracy, though coordinates reported herein are GPS surveyed to metre-scale accuracy. • Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S. Drilling collars were originally surveyed in either Mine Grid Wiluna 10 or AMG, and converted in Datashed to MGA grid. • An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Blackham's exploration holes are generally drilled 25m apart on east-west sections, on sections spaced 25-50m apart north-south. • Using Blackham's drilling and historical drilling, a spacing of approximately 12.5m (on section) by 20m (along strike) is considered adequate to establish grade and geological continuity. Areas of broader drill spacing have also been modelled but with lower confidence. • The mineralisation lodes show sufficient continuity of both geology and grade between holes to support the estimation of resources which comply with the 2012 JORC guidelines • Samples have been composited only where mineralisation was not anticipated. Where composite samples returned significant gold values, the 1m samples were submitted for analysis and these results were prioritized over the 4m composite values.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation. • The perpendicular orientation of the drillholes to the structures minimises the potential for sample bias.
Sample security	• *The measures taken to ensure sample security.*	• It is not known what measures were taken historically. For Blackham drilling, Drill samples are delivered to McMahon Burnett freight yard in Wiluna by Blackham personnel, where they are stored in a gated locked yard (after hours) until transported by truck to the laboratory in Perth. In Perth the samples are likewise held in a secure compound.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A high level audit has been completed on the East-West Mineral Resources. This did not include detailed reviews of sampling techniques or data. However no material issues were identified. No external audit has been completed for the Matilda resource estimate. Recommendations from an audit by SRK as part of the DFS were incorporated in all subsequent resource updates. For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be

		satisfactory.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The drilling is located wholly within M53/6, M53/200, M53/44, M53/40, M53/30, M53/468, M53/95 M53/96, M53/32 and M53/34. The tenements are owned 100% by Matilda Operations Pty Ltd, a wholly owned subsidiary of Blackham Resources Ltd. • The tenements are in good standing and no impediments exist. • Franco Nevada have royalty rights over the Wiluna Mine mining leases of 3.6% of net gold revenue.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Modern exploration has been conducted on the tenement intermittently since the mid-1980's by various parties as tenure changed hands many times. This work has included mapping and rock chip sampling, geophysical surveys and extensive RAB, RC and core drilling for exploration, resource definition and grade control purposes. This exploration is considered to have been successful as it led to the eventual economic exploitation of several open pits during the late 1980's / early 1990's.The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The gold deposits are categorized as orogenic gold deposits, with similarities to most other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna greenstone belt.

Drill hole Information	• *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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
		• There is no new drilling information included in this release

	○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• There are no new Exploration Results reported in this release • No metal equivalent grades are reported because only Au is of economic interest.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Lode geometries at Wiluna are generally steeply east or steeply west dipping. Generally the lodes strike north-northeast. Historical drilling was oriented vertically or at -60° west, the latter being close to optimal for the predominant steeply-east dipping orientation. Drill holes reported herein have been drilled as closed to perpendicular to mineralisation as possible. In some cases due to the difficulty in positioning the rig close to remnant mineralisation around open pits this is not possible. See significant intercepts in Appendix 1 for estimates of mineralisation true widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See body of this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high*	• Full reporting of the historical drill hole database of over 80,000 holes is not feasible.

	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Other exploration tests are not the subject of this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions. • Diagrams are provided in the body of this report.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All data has been uploaded using Datashed which incorporates a series of internal checks. • The Wiluna dataset has been validated in Datashed and Surpac using internal validation macros and checks. Holes have been checked and corrected where necessary for: • Intervals beyond EOH depth • Overlapping intervals • Missing intervals • Holes with duplicate collar co-ordinates (i.e. same hole with different names) • Missing dip / azimuth • Holes missing assays • Holes missing geology

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The site is regularly visited by the Competent Person, and no problems were identified.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The interpretation of the mineralisation was carried out using a methodical approach to ensure continuity of the geology and estimated mineral resource using Surpac software. The confidence in the geology and the associated mineralisation is high. • All available geological data was used in the interpretation including mapping, drilling, oxidation surfaces and interpretations of high grade ore shoots. Only diamond and reverse circulation drilling samples were used in the final estimate however all available grade control data was used in the geological assessment. • For the open pit resource a lower cut-off grade of 0.3g/t was used. Previous models had focussed on the high grade underground mineralisation and was modelled to a 4g/t lower cut. • No alternate interpretations have been completed. The current interpretation follows similar methodology to that used historically. • Drill logging has been used to constrain the 3D wireframes. • Gold mineralisation is predominantly associated with second to third order north and northeast trending brittle to brittle-ductile dextral strike-slip faults, localised at dilational bends or jogs along faults, at fault intersections, horsetail splays and in subsidiary overstepping faults.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Strike length = ~ 3700 m • Width (total of combined parallel lodes) = ~ 800 m • Depth (from surface) = ~ 0 to 1000 m
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was*	• The sample domains were flagged into an Access database from a validated wireframe. • A composites string-file was then created in Surpac with a 1.0 m composite length and a minimum percentage of sample to include at 30%. • Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate. • Resource estimation for the Wiluna mineralisation was completed using Ordinary Kriging for Gold (Au) and for Sulphur (S). Blockmodel field coding was used to constrain the estimate. • Soft boundaries were utilised between the oxidation surfaces. Only samples contained within each individual ore wireframe were used for the estimate of that lode. • A number of previous resource estimates and studies have been undertaken and were reviewed to assist

	chosen include a description of computer software and parameters used.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		in the development of this resource estimate.
		• The modelled wireframes were used to create a blockmodel with a user block size varying depending on orebody geometry, estimation parameters and drillhole spacing.
		• Specifically for the Golden Age narrow vein a user block size of 2mE by 2mN by 2mRL. The model used variable sub-blocking to 0.5mE by 0.5mN by 0.5mRL. The smaller block sizes are based on the narrow nature of the Golden Age ore body and the corresponding data density.
		• The search ellipses used were based on the ranges of continuity observed in the variograms along with considerations of the drillhole spacing and lode geometry. The search ellipse was rotated to best reflect the lode geometry and the geology as seen in the drilling and as described in the logging. This geometry was checked to ensure that it was also supported by the variogram analysis.
		• Ordinary kriging parameters were also checked against those used in previous resource estimates and variography studies. No significant differences were discovered.
		• Three search passes were used to populate blocks using search ellipse distances based on ranges observed in the variograms. Typically the first pass was no more than 30 m and a second pass no more than 60 m. Each pass incorporated a different set of sample selection criteria to ensure blocks were filled with an appropriate level of statistical confidence.
		• For the first pass at least 3 individual drillholes were required to complete the estimate.
		• Top cuts were determined from statistical analysis. A number of factors were taken into consideration when determining the top-cuts including:
		• The disintegration point of the data on the probability plots;
		• Having a coefficient of variance (CV) under 2.0; and
		• Reviewing the model (block) grades against the composites.
		• The estimate was validated using a number of techniques including but not limited to:
		  • A visual comparison of block grade estimates and the drill hole data;
		  • A comparison of the composite and estimated block grades;
		  • A comparison of the estimated block grades for the ordinary kriged model against an inverse distance model.
		  • A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.
		  • A comparison of the estimated block grades against the composite grades along northings.

Moisture	• *Whether the tonnages are estimated on a*	• Tonnages are estimated on a dry basis.

	dry basis or with natural moisture, and the method of determination of the moisture content.	
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The nominal cut-off grade of applied for the individual resource areas appears to be a natural cut-off between mineralised veins and host rock as determined from analysis of log probability plots of all samples at each prospect. • The open pit resource was reported at 0.5g/t cut off in oxide and at 1.0g/t cut off in transitional and fresh in $1800 Shell while the underground was reported at 2.00g/t in fresh rock outside the shell. • A global reporting cut-off grade of 3.00g/t was applied to the Golden Age underground resource. This is based on the understanding that a variety of underground mining techniques (including but not exclusive to) air-legging may be used. • For the remaining resources a cut-off of 0.5g/t was applied in the in the oxide and 1.0g/t in transitional when relevant. In fresh rock less than 200m below the surface a 2.0g/t cut-off was applied for the remaining resources.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• No specific mining factors or assumptions have been applied.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for*	• Wiluna ores are typically extremely refractory, with most gold occurring in either solid solution or as submicroscopic particles within fine-grained sulphides. Historically Au recovery through the Wiluna BIOX plant averaged 83%. Any sulphide mineralisation would be treated through the same processing plant and therefore it is assumed that recoveries will be similar. • Golden Age mineralisation is free milling/oxide gold; this is located throughout the quartz but appears more

	eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	concentrated where there are stylolites. There is commonly a strong base metals signature with galena, chalcopyrite, sphalerite and pyrite being common. These areas also include higher grades but the gold is not associated with the sulphides as with the refractory ore. The mineralization is mainly in the quartz reef but there are some splays of quartz, especially to the footwall which can contain gold.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant issues are known, that may affect the estimate.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements,*	• Bulk densities were assigned as 1.80 t/m3 for oxide, 2.40 t/m3 for transitional and 2.80 t/m3 • A total of 16,206 bulk density determinations have been collected by extensive sampling of diamond drill core in Calais – Henry 5, East Lode North and Calvert areas throughout the orebody and in wallrock adjacent to the mineralisation. All sections of the underground resource are in primary rock, and Bulk Density values are relatively uniform throughout. • Bulk Density determinations were completed by Apex staff for every assayed interval since the

	the nature, size and representativeness of the samples. • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	commencement of Apex's involvement with the Operation to the end of 2008. In addition, in areas where Apex bulk density determinations are considered too sparse, pre-Apex diamond core has been used for determinations.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate.
		  • Geological continuity and volume models;
		  • Drill spacing and available mining information;
		  • Modelling technique
		  • Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters.
		  • The classification for this model was predominantly based on the estimation pass. With the first pass relating to an indicated resource and the second pass being inferred.
		  • The classification of the blocks was also visually checked and adjusted to remove any "spotted dog" effects. No measured resources were calculated.
		• Estimated blocks that have been informed by predominantly historical drilling where QA/QC data has not been reviewed were assigned as inferred.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Audits have been undertaken on the resource estimates completed by Apex Minerals in 2012. No major issues were discovered and recommendations made from those audits have been assessed and included where required in subsequent estimates.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the*	• This resource estimate is intended for both underground and open pit mining assessment and reports global estimates.

	application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	