

13<sup>th</sup> September 2018

## ASX Announcement

### Wiluna gold resources continue to grow

#### Highlights

- Total Resources now 96Mt @ 2.2g/t for 6.7Moz (58% Indicated Resource)
- Resources increase 9% (544,000oz) in 1 year after mining depletion
- Measured and Indicated Resources increase 25% (771,000oz) in 1 year after mining depletion
- Wiluna open pit resources now total 19Mt @ 2.5g/t for 1.5Moz which have been delineated at a cost of \$7/resource oz
- Resource continuity reinforced at Wiluna with pit designs stretching over 3.5kms

Blackham Resources Ltd (**ASX: BLK**) ("**Blackham**") is pleased to provide a revised Mineral Resource estimate for the Matilda-Wiluna Operation of 96Mt @ 2.2g/t for 6.7Moz of gold, which includes Indicated Resources of 69Mt @ 1.7g/t for 3.88Moz. Mineral Reserve calculation is currently underway and will be reported in the near future.

**Table 1: Matilda-Wiluna Gold Operation Resource Summary**

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OPEN PIT RESOURCES													Free Milling		
Mining Centre	Measured			Indicated			Inferred			Total 100%					
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	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	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	5.2	1.43	236
Williamson <sup>3</sup>	-	-	-	4.1	1.68	219	1.6	1.58	79	5.6	1.65	298	5.6	1.65	298
Regent	-	-	-	0.7	2.71	61	3.1	2.11	210	3.8	2.22	271	1.3	1.92	79
Tailings	-	-	-	34.0	0.62	680	-	-	-	34.0	0.62	680	-	-	-
Stockpiles	-	-	-	0.5	0.84	15	-	-	-	0.5	0.84	15	0.5	0.84	15
OP Total	0.1	1.14	4	61.2	1.25	2,464	11.4	2.08	763	72.7	1.38	3,231	22.7	1.49	1,091
UNDERGROUND RESOURCES													Free Milling		
Mining Centre	Measured			Indicated			Inferred			Total 100%					
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda <sup>1</sup>	-	-	-	0.1	2.51	10	0.5	3.66	61	0.6	3.44	71	0.6	3.45	70
Wiluna <sup>2</sup>	-	-	-	8.0	5.37	1,376	13.5	4.33	1,885	21.5	4.72	3,262	-	-	-
Williamson <sup>3</sup>	-	-	-	-	-	-	0.3	2.61	23	0.3	2.61	23	0.3	2.61	23
Golden Age <sup>4</sup>	0.02	6.80	4	0.1	7.66	24	0.5	3.77	63	0.6	4.46	91	0.6	4.46	91
Galaxy <sup>5</sup>	-	-	-	0.1	3.70	6	0.2	2.80	16	0.2	2.98	22	0.2	2.98	22
UG Total	0.0	6.80	4	8.3	5.31	1,416	15.0	4.24	2,049	23.3	4.63	3,469	1.8	3.62	207
Grand Total	0.1	2.12	8	69.4	1.74	3,880	26.4	3.31	2,812	95.9	2.17	6,700	24.5	1.65	1,297

- 1 Matilda reported above 0.6g/t cut-off above 950mRL and 2.0g/t below 950mRL.
- 2 Wiluna open pit reported within A\$1800/oz shell above 0.5g/t cut-off for oxide and transitional and 1.0g/t cut-off for transitional and fresh. UG above 2.0g/t below A\$1800/oz shell.
- 3 Williamson reported at 0.6g/t cut-off above 1290mRL and above 2.0g/t below 1290mRL.
- 4 Golden Age underground reported above 3.0g/t cut-off.
- 5 Galaxy reported above 2.0g/t cut-off in fresh below open pit depletion.

#### BOARD OF DIRECTORS

Milan Jerkovic - Executive Chairman  
 Bryan Dixon - Managing Director  
 Greg Fitzgerald - Non-Executive Director  
 Tony James - Non-Executive Director  
 Geoff Jones - Non-Executive Director

#### ASX CODE

BLK

#### CORPORATE INFORMATION

1,266M Ordinary Shares  
 534M Quoted Options  
 3.6M Unquoted Options

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The changes in the resource results from the combined effects of successful further drill testing in some areas, mining depletions at Matilda, a change of resource modelling process for some deposits (ordinary kriging ('OK') to localised uniform conditioning ('LUC')), revised pit shells and the initial inclusion of the Wiluna Tailings mineralisation.

Approximately 1.3Moz of the resource base is free-milling and can be processed through the existing Wiluna CIP plant. Feasibility studies are currently being completed on Blackham's 620,000oz of tailings with a view to treating them through the existing free milling circuit. The remainder of the mineralisation is sulphide ore requiring treatment through the Wiluna sulphide circuit. Blackham is working towards the completion of the feasibility study to justify the capital to re-establish the sulphide circuit and treat the sulphide ores. Subject to a successful completion of the feasibility study and sourcing of the required funding, it is expected a decision to proceed will be made in 2019, enabling significantly higher gold production through exploiting the large and higher-grade feed sourced from both deeper pits and large scale underground mining.

## **Mineral Resource Estimate**

### **Wiluna Gold Deposit Summary**

The Wiluna and Matilda gold deposits are located within the Wiluna Goldfield, close to the town of Wiluna at latitude 26°38'S, longitude 120°15'E on the Wiluna (SG 51-9) 1:250 000 scale map. Perth, the nearest capital city, lies 750km to the southeast.

The gold deposits are categorised as orogenic gold deposits, with similarities to many other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna Greenstone Belt. Rocks in the Wiluna Domain have experienced greenschist-facies regional metamorphism and brittle deformation. The Wiluna Domain is comprised of a sequence of foliated basalts and high-magnesium basalts, with intercalated felsic intrusions, lamprophyre dykes, metasediments, and dolerites.

Wiluna ores are typically oxide, refractory or free milling quartz mineralisation. The refractory ore has most gold occurring in either solid solution or as sub-microscopic particles within fine-grained sulphides. Mineralisation at Wiluna is principally controlled by the shear zones which have variable strike and dip orientations and typically flex along strike and down dip. These flexures in conjunction with favourable host rock composition act to form the best ore zones.

### **Estimation Methodology**

The interpretation of the mineralisation was carried out using a methodical approach to ensure continuity of the geology and estimated mineral resource. For the open pit resources, a lower cut-off grade of 0.3g/t was used to wireframe the deposit and 0.5g/t bottom cut is used for reporting. Underground resources have been interpreted at a lower cut-off grade more suitable for longhole stoping mining methods.

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. Models have been estimated using OK with some open pit resources having LUC applied as a post processing step.

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 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.

### **Wiluna open pit resource update**

The 2018 Wiluna open pit resources (OP) were reported within a A\$1800/oz pit shell. The shells have been revised from 2017 based on new mining and cost parameters. Revised weathering/oxidation surfaces have also been applied to all resource models in 2018 to better reflect recent drilling and metallurgical test work. The free milling resources in the top 60-80m now totals 5.1Mt @ 1.43g/t for 236koz (96% indicated). Blackham is currently reviewing stand alone free-milling (oxide) pits at Wiluna in conjunction with the larger sulphide expansion study **Figure 1**.

Updated resource estimates were completed for the Moonlight/Adelaide Shear area. Cube Consulting were engaged to produce the gold grade estimate (LUC) based on a mineralisation interpretation completed by Blackham geologists. The Mineral Resource was peer reviewed and classified with guidance from Cube.

Further updates to the OP resources were completed at Golden Age North, Wiluna Queen, Magazine and Old Camp using OK. In 2017 these were only reported as an UG resource. In-line with the rest of the Wiluna resource reporting they have now been split between an OP and UG resource.

Previously reported resource estimates for Wiluna including the East and West Lode (*ASX Ann: 03/08/2017*) and Wiluna North (*ASX Ann: 12/10/2017*) remain unchanged aside from the updated weathering/oxidation surfaces and reporting from a revised pit shell. These resources still need to be updated for the 20,705m of drilling completed in 2018.

### **Wiluna underground resource update**

Wiluna underground resources are now 21.5Mt @ 4.72g/t for 3.26Moz (42% indicated). Revised underground (UG) models were completed for the Wiluna East and West lodes that has incorporated drilling done along the strike of the main shear zones from surface down to depths of up to 300m. This has resulted in an additional 40koz of indicated resources predominantly near existing UG infrastructure within 250m of the surface. The indicated resource for both the East and West lode combined now stands at 1.8Mt @ 5.03g/t for 285koz.

The Golden Age UG resource has been depleted with mining. A significant diamond drilling programme is underway targeting depth extensions to Golden Age (*ASX Ann: 12/06/2018*). The on-going drilling will also test zones at greater depth (a further 120m lower) to enable early assessment for a significant additional resource increase. The ongoing drilling is currently being assessed with resource model updates to follow.



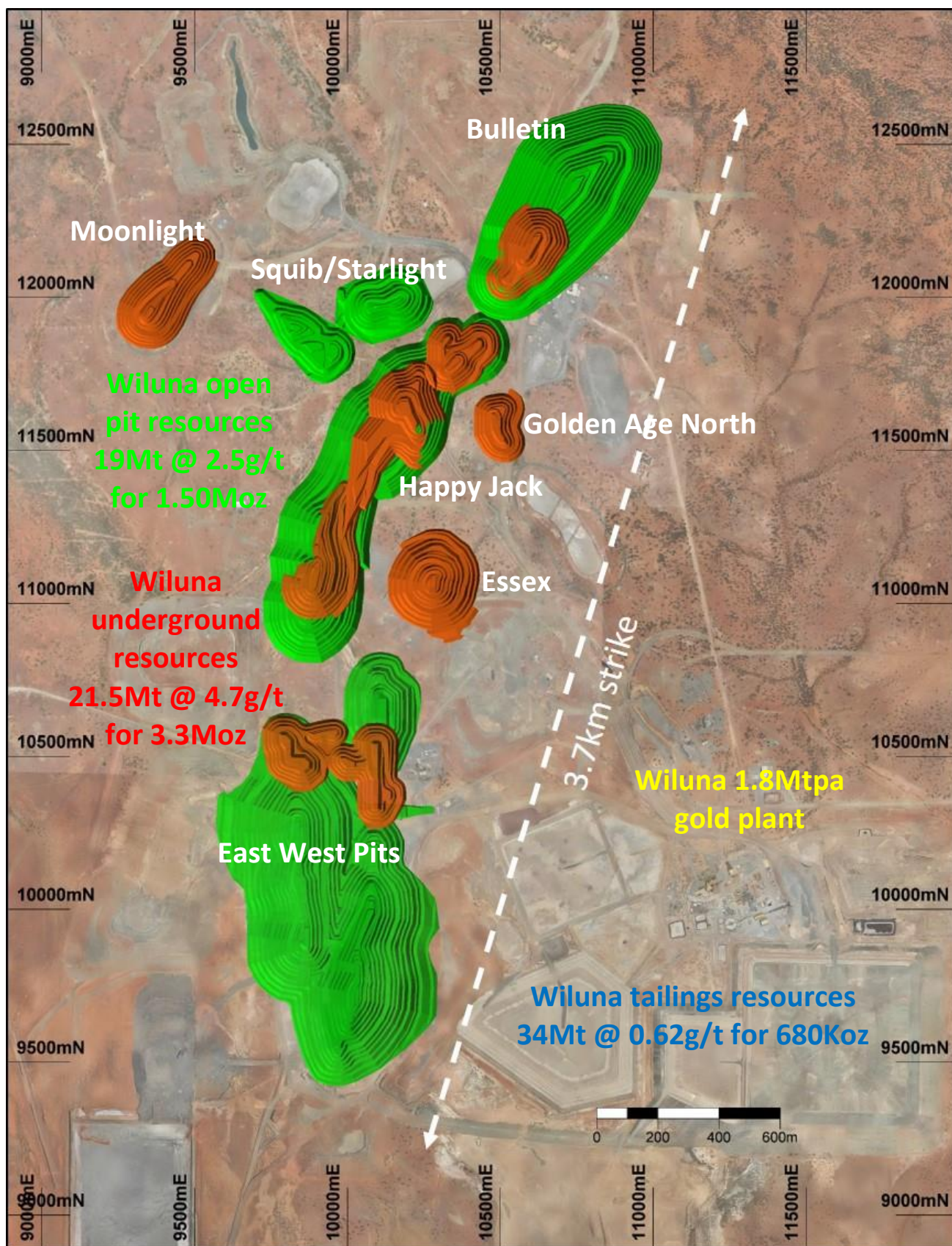


Figure 1. Wiluna - Plan view of planned oxide (orange) and sulphide (green) pits designs.

## Matilda open pit resource update

The resource models for M1 and M2 have been updated to include new resource definition drilling. Models have been estimated by Cube Consulting using LUC. For M1 additional mining depletions have been applied to the resource based on a comprehensive review of historical mining documentation. The M3 and M4 deposits have been depleted with final mining shapes with M3 having additional areas (compared to last update) depleted due to the backfilling of the pit.

## Williamson open pit resource update

The Williamson OP resource has been updated based on a mineralisation interpretation completed by Blackham geologists with Cube Consulting engaged to produce the gold grade estimate (LUC). The update was based on additional drilling, revised geological understanding of the mineralisation and a review of historical data.

This has resulted in an increase in the 2017 figure of 50koz of Indicated Resource falling within the OP resource. The Indicated OP resource now stands at 4.0Mt @ 1.68g/t for 219koz.

## Wiltails resource update

Further to the ASX announcement *Wiluna Tailings (Wiltails) – Maiden Resource* on the 24/06/2018, a sonic drilling and sampling program was completed in July. The program commenced in June with a total of 9 holes drilled for 231m. The aim of the program was to provide in situ density data, to confirm the recent AC drilling results and to improve the classification of Dam H from inferred to indicated. The programme also completed Standard Penetration Tests (SPT) periodically during drilling to obtain density, strength and consolidation characteristics for the tailings.

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## Competent Persons Statement

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

## Forward Looking Statements

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

# Appendix 1

## JORC Code, 2012 Edition – Table 1 (Wiluna Gold Operation)

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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 project had procedures in place in line with standard industry practice to ensure sample representivity.</li> <li>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.</li> <li>At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were crushed to &lt;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.</li> <li>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.</li> <li></li> </ul>



	<p><i>gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham data reported herein is RC 5.5" diameter holes. Diamond drilling is oriented NQ or HQ core</li> <li>• 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.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• All holes were logged in full.</li> </ul>

	<p><i>nature. Core (or costean, channel, etc) photography.</i></p> <ul style="list-style-type: none"> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core photography was taken for BLK diamond drilling.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias in the results</li> <li>• 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;</li> <li>• Boyd &lt;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, &gt;3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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</li> </ul>



		<p>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.</p> <ul style="list-style-type: none"> <li>• Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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%).</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.</li> <li>• There were 4 twin holes drilled within 10m of the original historical hole. Analysis of these did not indicate any bias between drill types or between historical and recent holes. Holes within 5m of each other generally show a good correlation between intercept grades. Holes with intercept pierce points up to 40m apart were also compared. Again there was no bias, however, correlation between intercepts was generally poor when intercepts were greater than 20m apart reflecting the short range variability expected in a gold orebody like Wiluna</li> <li>• Wiluna data represents a portion of a large drilling database compiled since the 1930's by various project owners.</li> <li>• 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 2017v2". Historical procedures are not documented.</li> <li>• The only adjustment of assay data is the conversion of lab non-numeric code to numeric for estimation.</li> </ul>

<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Blackham's exploration holes are generally drilled 25m apart on east-west sections, on sections spaced 50m apart north-south.</li> <li>• 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.</li> <li>• 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</li> <li>• 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.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation.</li> <li>• The perpendicular orientation of the drillholes to the structures minimises the potential for sample bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• No external audit has been completed for this resource estimate. For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located wholly within M53/6, M53/200, M53/44, M53/40, , M53/468, M53/96, M53/32. The tenements are owned 100% by Matilda Operations Pty Ltd, a wholly owned subsidiary of Blackham Resources Ltd. Blackham Resources Ltd own 94/96th's M53/30 of this tenement</li> <li>The tenements are in good standing and no impediments exist.</li> <li>Franco Nevada have royalty rights over the Wiluna Mine mining leases of 3.6% of net gold revenue.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and</li> </ul>	<ul style="list-style-type: none"> <li>There is no new drilling information included in this release</li> </ul>

	<i>this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>In the significant intercepts are reported as length-weighted averages, above a 1m @ 0.6g/t cut-off, or &gt; 1.2 gram x metre cut off (to include narrow higher-grade zones) using a maximum 2m contiguous internal dilution. For the body of the report and in Figures, wider zones of internal dilution are included for clearer presentation. AC intercepts are based on 4m composites.</li> <li>High-grade internal zones are reported at a 5g/t envelope, e.g. MADD0018 contains 14.45m @ 6.74g/t from 162.55m including 4.4m @ 15.6g/t from 162.55m.</li> <li>No metal equivalent grades are reported because only Au is of economic interest.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See body of this report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should</i></li> </ul>	<ul style="list-style-type: none"> <li>Full reporting of the historical drill hole database of over 80,000 holes is not feasible.</li> </ul>



	<i>be practiced to avoid misleading reporting of Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Other exploration tests are not the subject of this report.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> <li>Diagrams are provided in the body of this report.</li> </ul>

### 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>All data has been uploaded using Datashed which incorporates a series of internal checks.</li> <li>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: <ul style="list-style-type: none"> <li>Intervals beyond EOH depth</li> <li>Overlapping intervals</li> <li>Missing intervals</li> <li>Holes with duplicate collar co-ordinates (i.e. same hole with different names)</li> <li>Missing dip / azimuth</li> <li>Holes missing assays</li> <li>Holes missing geology</li> </ul> </li> </ul>

<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The site is regularly visited by the Competent Person, and no problems were identified.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>OPEN PIT</p> <ul style="list-style-type: none"> <li>• The model for the East and West Lode orebody was created by geological interpretation on 10m sections between 8,500mN and 11,000mN (0m to 680m vertical depth). The model was interpreted using surface drill hole data, historic underground and surface drill hole data, existing pit and surface mapping and underground void wireframes. A 0.30 g/t cut-off was applied with a minimum mining width of 2m was applied.</li> <li>• The model for the Happy Jack and Creekshear orebodies was created by geological interpretation on 10m sections between 10,870mN and 12,350mN (0m to 500m vertical depth). The model was interpreted using surface drill hole data, historic underground and surface drill hole data, existing pit and surface mapping and underground void wireframes. A 0.30 g/t cut-off was applied with a minimum mining width of 2m was applied.</li> <li>• The model for the Bulletin orebodies was created in Surpac using a nominal 0.3g/t lower cut-off, in the oxide and transitional zones and 3.5g/t in fresh. A minimum interval length of 2m, with maximum 2m of contiguous internal dilution.</li> <li>• The model for the Moonlight Shear orebodies was created in Surpac using a nominal 0.3g/t lower cut-off, in the oxide and transitional zones and 3.0g/t in fresh. A minimum interval length of 2m, with maximum 2m of contiguous internal dilution.</li> <li>• The Golden Age North, Old Camp, Magazine and Wiluna Queen lodes were updated using a 0.3 g/t edge cut off for the mineralisation to facilitate the assessment of the deposit for open pit exploitation.</li> </ul> <p>UNDERGROUND</p> <ul style="list-style-type: none"> <li>• The underground interpretations of e mineralisation was carried out with Surpac software using a methodical approach to ensure continuity of the geology and estimated mineral resource. The confidence in the geology and the associated mineralisation is high. Underground mineralisation was modelled to a 3.5g/t lower cut.</li> <li>• No alternate interpretations have been completed. The current interpretation follows similar methodology to that used historically.</li> <li>• 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</li> <li>• Drill logging has been used to constrain the 3D wireframes.</li> <li>• 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.</li> </ul>

<b>Dimensions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Wiluna mine comprises a number of separate ore bodies. Individual ore bodies range in strike length up to 1500m and extends to ~1000m below surface and remains open. Widths vary for individual lodes between 1m and 60m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>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 chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	<p>OPEN PIT</p> <ul style="list-style-type: none"> <li>The sample domains were flagged into an Access database from a validated wireframe. Samples that fell within previously mined (stoped) wireframes were excluded to minimise any bias.</li> <li>A composites string-file was then created in Surpac with a 2.0 m composite length and a minimum percentage of sample to include at 50%.</li> <li>Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate.</li> <li>Open Pit resource estimation for Bulletin, Essex, Happyjack, Squib, Starlight, East Lode, West Lode and the Adelaide/Moonlight Shear was completed using Localised Uniform Conditioning (LUC) for Gold (Au) and Inverse Distance and Regression Analysis for Sulphur (S) and Arsenic (As). Blockmodel field coding was used to constrain the estimate. All other open pit Wiluna estimates were completed using Ordinary Kriging.</li> <li>Soft boundaries were utilised between the oxidation surfaces. Only samples contained within each individual ore wireframe were used for the estimate of that lode.</li> <li>Check estimates were completed using Ordinary Kriging (OK) and Inverse Distance methods.</li> <li>The modelled wireframes were used to create a blockmodel. The Panel OK estimate for gold for each domain was implemented in Isatis using the search neighbourhood parameters defined by QKNA analysis. The Panel block estimation size used was 6mE x 15mN x 10mRL. The OK search and variogram rotations were varied locally using a set of guiding 'trend' surfaces to best mimic the interpreted orientation of the lodes. The final LUC model, after post-processing steps have been applied has a user block 3mE by 5mN by 2.5mRL which relates to an SMU. No sub-blocking was applied.</li> <li>The OK open pit models used varying block sizes with a parent cell generally reflecting half the drill hole spacing while honouring the width and vertical extents of the lodes. The block size relates to an assumed SMU.</li> <li>The shape of the search ellipsoid was determined with due consideration given to the anisotropy in the variogram models. In addition, some visual inspections, using tools available in Isatis and Surpac, were undertaken to assess the pattern of informing sample selection. The search ellipsoid radii ratios were then chosen to provide an optimal sample neighbour selection for estimation.</li> <li>The minimum and maximum allowable number of samples were chosen using Quantitative Kriging Neighbourhood Analysis ("QKNA"). QKNA makes use of kriging quality statistics, in this case the Slope of Regression, Weight of the Mean and Negative Weights statistics, to select optimal minimum and maximum values for estimation.</li> <li>The search neighbourhood radii were chosen to be as small as possible while still fulfilling the requirement of filling all blocks in the estimation domains with estimates.</li> <li>Topcuts were determined from statistical analysis. A number of factors were taken into consideration when</li> </ul>

- *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.*

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, eastings and RL.

#### UNDERGROUND

- 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.
- 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.
- Other UG models used varying block sizes with a parent cell generally reflecting half the drill hole spacing while honouring the width and vertical extents of the lodes.
- The shape of the search ellipsoid was determined with due consideration given to the anisotropy in the variogram models. In addition, some visual inspections, using tools available in Surpac, were undertaken to assess the pattern of informing sample selection. The search ellipsoid radii ratios were then chosen to provide an optimal sample neighbour selection for estimation.
- The minimum and maximum allowable number of samples were chosen using Quantitative Kriging Neighbourhood Analysis ("QKNA"). QKNA makes use of kriging quality statistics, in this case the Slope of Regression, Weight of the Mean and Negative Weights statistics, to select optimal minimum and maximum values for estimation.
- The search neighbourhood radii were chosen to be as small as possible while still fulfilling the requirement of filling all blocks in the estimation domains with estimates.
- Topcuts 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.



		<ul style="list-style-type: none"> <li>The estimate was validated using a number of techniques including but not limited to: <ul style="list-style-type: none"> <li>A visual comparison of block grade estimates and the drill hole data;</li> <li>A comparison of the composite and estimated block grades;</li> <li>A comparison of the estimated block grades for the ordinary kriged model against an inverse distance model.</li> <li>A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.</li> <li>A comparison of the estimated block grades against the composite grades along northings, eastings and RL.</li> </ul> </li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The open pit resource was reported at 0.5g/t cutoff in oxide and at 0.5g/t cutoff in transitional and fresh in A\$1,800/oz Shell while the underground was reported at 2.00g/t in fresh rock outside the shell.</li> <li>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.</li> <li>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.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>No specific mining factors or assumptions have been applied.</li> </ul>

	<i>be reported with an explanation of the basis of the mining assumptions made.</i>	
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Wiluna ore in Fresh is 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.</li> <li>Generally oxide and transitional ore in the top 60-80m has been oxidised and is free milling. Metallurgical results averaged leach recoveries on the oxide and transitional ores of 90.8% and 84.3% after 24 hours.</li> <li>Golden Age mineralisation is free milling/oxide gold; this is located throughout the quartz but appears more 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.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant issues are known, that may affect the estimate.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If</i></li> </ul>	<ul style="list-style-type: none"> <li>Bulk densities were assigned as 2.10 t/m<sup>3</sup> for oxide, 2.40 t/m<sup>3</sup> for transitional and 2.80 t/m<sup>3</sup></li> <li>A total of 16,206 bulk density determinations have been collected by extensive sampling of diamond drill core in</li> </ul>

	<p><i>determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>BLK has now collected &gt; 600 samples for bulk density test work in a variety of material types. The results generally match the historic values and the values used in previous resource estimates.</li> <li>Bulk Density determinations were also completed by Apex staff for every assayed interval since the commencement of Apex's involvement with the project 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.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>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).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. <ul style="list-style-type: none"> <li>Geological continuity and volume models;</li> <li>Drill spacing and available mining information;</li> <li>Modelling technique</li> <li>Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters.</li> <li>The classification of the blocks was also visually checked and adjusted to remove any "spotted dog" effects. No measured resources were calculated.</li> <li>For OPEN PIT resources a "skin" surrounding existing stope voids (equal to the volume of the voids) has been classified as inferred to highlight the associated mining risk.</li> <li>For UNDERGROUND resources a "sterilised" area around existing stope voids has been set as unclassified as it is expected that the mineralisation cannot be mined due to geotechnical considerations.</li> </ul> </li> <li>Estimated blocks that have been informed by predominantly historical drilling where QA/QC data has not been reviewed were assigned as inferred.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>This resource estimate is intended for both underground and open pit mining assessment and reports global estimates.</li> </ul>

	<p><i>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.</i></p> <ul style="list-style-type: none"> <li><i>• 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.</i></li> <li><i>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	
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## JORC Code, 2012 Edition – Table 1 (Matilda)

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>• 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).</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> </ul>



	<p><i>These examples should not be taken as limiting the broad meaning of sampling.</i></p> <ul style="list-style-type: none"> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p>assumed that previous owners of the project had procedures in place in line with standard industry practice to ensure sample representivity.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were crushed to &lt;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.</li> <li>• Blackham Resources analysed samples using ALS and SGS 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</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham data reported herein is RC 5.5” diameter holes. Diamond drilling is oriented NQ or HQ core. Core is orientated where possible using a Reflex ACT III tool or similar</li> <li>• 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.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>• For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill samples have been logged for geology, alteration, mineralisation, weathering, and other features to a level of detail considered appropriate for geological and resource modelling.</li> <li>• Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• All holes were logged in full.</li> <li>• Core photography was taken for BLK diamond drilling.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias</li> </ul>

	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>in the results</p> <ul style="list-style-type: none"> <li>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;</li> <li>Boyd &lt;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, &gt;3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.</li> <li>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.</li> <li>Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> <li>Chevron collected field duplicates at 1:20 ratio for the majority of historical RC drilling; samples showed good repeatability above 5g/t, though sample pairs show notable scatter at lower grades owing to the nugget effect. It is not clear how the historical field duplicates were taken for RC drilling.</li> <li>Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been</li> </ul>	<ul style="list-style-type: none"> <li>Fire assay is a total digestion method. The lower detection limits of 0.01ppm is considered fit for purpose. For Blackham drilling, SGS completed the analyses using industry best-practice protocols. SGS 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.</li> <li>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.</li> <li>Comprehensive programs of QAQC have been adopted since the 1980's. For Blackham drilling certified reference material, blanks and duplicates were submitted at approximately 1:40. 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%).</li> </ul>

	<i>established.</i>	
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.</li> <li>There were no twinned holes drilled in this program. Drilling has been designed at different orientations, to help correctly model the mineralisation orientation.</li> <li>Wiluna data represents a portion of a large drilling database compiled since the 1930's by various project owners.</li> <li>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.</li> <li>The only adjustment of assay data is the conversion of lab non-numeric code to numeric for estimation.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Downhole surveys are taken every ~5 or 10m using a gyro tool for RC drilling.</li> <li>All historical holes appear to have been accurately surveyed to centimetre accuracy.</li> <li>Blackham's drill collars are routinely surveyed using a DGPS with centimetre accuracy, though coordinates reported herein are GPS surveyed to metre-scale accuracy. All historical drill holes at Matilda appear to have been accurately surveyed.</li> <li>MGA Zone 51 South.</li> <li>Height data (Australian height datum) is collected with DGPS and converted to local relative level using a factor. Prior to DGPS surveys, relative levels are estimated based on data for nearby historical holes.</li> <li>A topographical survey has been flown with 30cm vertical accuracy, which has been used to determine historical pre-Blackham collar RL's.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham's exploration holes are generally drilled 25m apart on east-west sections, on sections spaced 50m apart north-south.</li> <li>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.</li> <li>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</li> <li>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.</li> </ul>



<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation. However, around the historical pits optimal drill sites were not always available, so alternative orientations were used</li> <li>The perpendicular orientation of the drillholes to the structures minimises the potential for sample bias</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No such audits or reviews have been undertaken as they are not considered routinely required; review will be conducted by external resource consultants when resource estimates are updated.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located wholly within M53/34. The tenements are owned 100% by Kimba Resources Ltd, a wholly owned subsidiary of Blackham Resources Ltd. The tenement sits within the Wiluna Native Title area, and a mining heritage agreement is in place with the Native Title holders.</li> <li>The tenement is in good standing and no impediments exist.</li> <li>Franco Nevada have royalty rights over the Matilda Mine mining leases. On the Matilda Mining Leases, a royalty of between 3 to 5% of gold revenue of is payable.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Historical artisanal mining was conducted on the M53/34 tenement and most historical workings have now been incorporated into the modern open pits. 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</li> </ul>

		and opportunities remain to find extensions to the known potentially economic mineralisation.
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>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 Matilda Domain of the Wiluna greenstone belt. Rocks in the Matilda Domain have experienced Amphibolite-grade regional metamorphism. At the location of this drilling, the Matilda Domain is comprised of a fairly monotonous sequence of highly sheared basalts. Gold mineralisation is related to early deformation events, and it appears the lodes have also been disrupted by later shearing / faulting on the nearby Erawalla Fault, as well as later cross-faults.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>There is no new drilling information included in this release</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>No significant intercepts reported</li> </ul>

	<p><i>detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>Various lode geometries are observed at Matilda, including east-dipping, west-dipping and flat-lying geometries. 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. Blackham's drill holes are not always drilled at optimal drill angles, i.e. perpendicular to mineralisation, owing to these various geometries, limitations of the rig to drilling &gt;35° angled holes, and difficulty in positioning the rig close to remnant mineralisation around open pits. See significant intercepts Table 1 for estimates of mineralisation true widths.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See body of this report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Full reporting of the historical drill hole database of over 40,000 holes is not feasible.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Other exploration tests are not the subject of this report.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or</i></li> </ul>	<ul style="list-style-type: none"> <li>Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> </ul>

	<p><i>large-scale step-out drilling).</i></p> <ul style="list-style-type: none"> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diagrams are provided in the body of this report.</li> </ul>
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### 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All data has been uploaded using Datashed which incorporates a series of internal checks.</li> <li>• 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: <ul style="list-style-type: none"> <li>• Intervals beyond EOH depth</li> <li>• Overlapping intervals</li> <li>• Missing intervals</li> <li>• Holes with duplicate collar co-ordinates (i.e. same hole with different names)</li> <li>• Missing dip / azimuth</li> <li>• Holes missing assays</li> <li>• Holes missing geology</li> </ul> </li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The site is regularly visited by the Competent Person, and no problems were identified.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions</i></li> </ul>	<ul style="list-style-type: none"> <li>• The deposit has previously been mined, which has confirmed the geological interpretation.</li> <li>• Geological data used includes lithology, mineral percentages (such as quartz veining and sulphides) to identify lode positions, and weathering codes and rock colour to model the weathering domains. Gold mineralisation is known to relate to quartz and sulphide content. Weathering codes are assumed to have been logged</li> </ul>

	<p>made.</p> <ul style="list-style-type: none"> <li>• The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>• The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>• The factors affecting continuity both of grade and geology.</li> </ul>	<p>consistently by various geologists, though it is likely that some of the variations between drill holes are due to different logging styles or interpretations.</p> <ul style="list-style-type: none"> <li>• A high degree of confidence is placed on the geological model, owing to the tight drill spacing. Any alternative model interpretations are unlikely to have a significant impact on the resource classification.</li> <li>• At Matilda, the host rocks are a fairly monotonous sequence of basalts, thus geology is not the primary control on the location of mineralisation. Mineral percentages (such as quartz veining and sulphides) are used as a proxy for interpreting lode positions, as are weathering codes to model the weathering domains.</li> <li>• Significant mineralisation is hosted within moderately north-plunging shoots, which may represent boudinaged older tabular lodes. Thus lodes are continuous down-plunge, with lesser up-dip continuity.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The Matilda deposit is comprised of a number of domains; M1, M2, M3, M4, M5, M6, M8, M10 and Coles Find. These combined zones extend almost 5km along a strike of 330° and cover a width of approximately 1km. The deepest vertical interval is 395m at the M1 prospect.</li> </ul>
<b>Estimation and modeling techniques</b>	<ul style="list-style-type: none"> <li>• 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 chosen include a description of computer software and parameters used.</li> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	<ul style="list-style-type: none"> <li>• The sample domains were flagged into an Access database from a validated wireframe.</li> <li>• Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate.</li> <li>• A composites string-file is created in Surpac with either 2.0m or 1.0 m composite length and a minimum percentage of sample to include at 30%.</li> <li>• The M1 and M2 OPEN PIT deposits were estimated using localised uniform conditioning (LUC). All other deposits were estimated by ordinary kriging (OK).</li> <li>• Soft boundaries was utilised between the oxidation surfaces. The majority of the deposit is currently situated within oxide.</li> <li>• Only samples contained within each individual ore wireframe were used for the estimate of that lode.</li> <li>• Incomplete historical production figures are available at a couple of the Matilda prospects. Blackham did not reconcile the current in-pit resource to the historical figures as not all grade control data was available, and the current interpretations may not match the mined lodes.</li> <li>• The production figures at the time mining operations were halted are not known. This estimation is comparable to that completed by Runge in 2013/14 and any significant differences have been accounted for through depletions, change in interpretation and additional drilling information.</li> <li>• Blackham has not made assumptions regarding recovery of by-products from the mining and processing of the Matilda Au resource.</li> <li>• No estimation of deleterious elements was carried out. Only Au was interpolated into the block model.</li> <li>• For M1 and M2 LUC models a user block of 4mN by 4mE by 2.5mRL was used which relates to an SMU. No sub-blocking was applied.</li> </ul>

- Any assumptions behind modeling 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.

- The parent block dimensions used for the remaining OK models was 10mN by 2.5mE by 5m vertical with sub-cells of 2.5m by 0.625m by 1.25m. The parent block size was selected on the basis of being approximately 50% of the average drill hole spacing immediately below the existing pits.
- For M1 and M2 LUC models the selective mining units (SMU) relates to the blocksize. The Panel OK estimate for gold for each domain was implemented in Isatis using the search neighbourhood parameters defined by QKNA analysis. The Panel block estimation size used was 10mE x 20mN x 5mRL. The OK search and variogram rotations were varied locally using a set of guiding 'trend' surfaces to best mimic the interpreted orientation of the lodes. The final LUC model, after post-processing steps have been applied has a user block 4mE by 4mN by 2.5mRL which relates to an SMU. No sub-blocking was applied.
- No assumptions were made on the SMU for the OK models.
- Only Au assay data was available, therefore correlation analysis was not carried out.
- The deposit mineralisation was constrained by wireframes constructed using a 0.5g/t Au lower cut-off grade. A minimum intercept of 2m was required with a maximum of 2m of internal dilution. The wireframes were applied as hard boundaries in the estimate.
- The search ellipse for LUC models was 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 also supported by the variogram analysis.
- For the OK models search passes were utilised to populate blocks using search ellipse ranges from 30 m to 60m. Each pass incorporated a different set of sample selection criteria to ensure blocks were filled with an appropriate level of statistical confidence. A final pass of 120m was used to fill remaining blocks.
- The relatively short search ranges for the first pass were applied to limit grade smoothing within the very close (less than 20m) spaced drill holes.
- Topcuts 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;
  - Use of SWATH plots.
- A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.



<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The nominal cut-off grade of 0.5g/t 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. This cut-off was used to define the mineralised wireframes. The Mineral Resource has been reported at a 0.6g/t Au cut-off above the 950mRL (which is currently the depth of the M1 pit design) and at a 2g/t cut-off below the 950mRL for M1, M2, M3, M4, M5, M6, M8 and Coles Find were reported at a 0.75g/t cut-off above the 900mRL as the estimation for these areas have remained unchanged. These values are based on BLK assumptions about economic cut-off grades for open pit and underground mining. BLK has access to previous mining reports from across all prospects at the Matilda deposit.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Blackham believes that a significant portion of the Matilda and Wiluna Deposit defined as Mineral Resources have reasonable prospects for eventual economic extraction by medium to large-scale open pit mining methods, taking into account current mining costs and metal prices and allowing for potential economic variations. Historical economic mining of similar deposits has occurred in the area.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit has previously been mined and successfully processed for gold extraction. Blackham's DFS metallurgical testwork has shown the resource could be economically treated using standard gravity concentration / carbon-in-leach cyanidation technology. An average recovery of 93% is expected across the oxide+transitional+fresh material.</li> </ul>

<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Blackham Resources has submitted a detailed Mine Closure Plan to the Department of Mines and Petroleum.</li> <li>No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant issues are known, that may affect the estimate.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>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, the nature, size and representativeness of the samples.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>BLK has now collected 564 samples for bulk density test work. The results generally match the historic values and the values used in previous resource estimates including the work completed by RPM.</li> <li>Values of 2.1 t/m<sup>3</sup> for oxide, 2.4t/m<sup>3</sup> for transitional and 2.8t/m<sup>3</sup> for fresh material were used.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. <ul style="list-style-type: none"> <li>Geological continuity and volume models;</li> <li>Drill spacing and available mining information;</li> <li>Modelling technique</li> <li>Estimation properties including search strategy, number of informing composites, average</li> </ul> </li> </ul>

	<p><i>metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>distance of composites from blocks, number of drillholes used and kriging quality parameters</p> <ul style="list-style-type: none"> <li>• Typically the Measured portion of the resource was defined where the drill spacing was predominantly at 10m by 10m immediately below the existing pits, and continuity of mineralisation was robust or where Blackham has completed grade control models. The Indicated portion of the resource was defined where the drill spacing was predominantly at 25m by 25m and in some areas up to 40m by 40m, and continuity of mineralisation was strong. The Inferred Resource included the down depth lode extensions or minor lodes defined by sparse drilling.</li> <li>• Historical documents (including annual reports) provide detailed information on drilling and mining at the various prospects. A large proportion of the digital input data has been transcribed from historical written logs and validation checks have confirmed the accuracy of this transcription. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The continuity of geology is well understood as existing pits and historical mining reports provide substantial information on mineralisation controls and lode geometry. Recent BLK infill drilling has supported the interpretations. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• External audits have been completed and a comparison has been made with the previous resource estimate completed by RPM.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>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 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.</i></li> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• This resource estimate is considered appropriate for a definitive study into the mining of the Matilda deposit and reports global estimates.</li> <li>• The lode geometry has been verified through direct observation of existing open pit walls and from historical mining reports. Current targeted drilling has confirmed the down dip extensions of the main lodes across the deposit. BLK has a good understanding of the geology and mineralisation controls gained through study of all historical mining data.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• The deposit is currently being mined. Historical production figures supplied to Blackham relate to individual prospects at various stages of the mine life and no final production figures were available. Reconciliation of the current Mineral resource with historical production is not possible.</li> </ul>

	<p>and the procedures used.</p> <ul style="list-style-type: none"> <li>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	
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## JORC Code, 2012 Edition – Table 1 (Wiluna TSF Resource Definition)

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>• Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>• In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or</li> </ul>	<p>Drill Programme 1 – 475.5 m of drilling in 2017</p> <ul style="list-style-type: none"> <li>• Rotary auger drill sampling completed in 2017 on two tailings storage facilities (TSF) and in 5 pit voids</li> <li>• Holes sampled at 5 m intervals by scraping samples from auger and subsampled with a trowel to produce a nominal 3kg sample for assay. Remaining sample bagged for metallurgical test work.</li> <li>• Holes drilled vertically to base of tailings dam or pit void to a maximum depth of 20m</li> </ul> <p>Drill Programme 2 - 1576 m of drilling</p> <ul style="list-style-type: none"> <li>• Air Core drilling completed in 2018</li> <li>• Holes sampled at 1m intervals from which two ~3kg samples were collected from bulk sample by spear, for fire assay and metallurgical testing.</li> <li>• Sampling procedures are in line with standard industry practice to ensure sample representivity.</li> <li>• At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay.</li> <li>• Blackham Resources analysed samples using Intertek Genalysis and ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS or Inductively coupled plasma optical emission spectrometry finish.</li> <li>• Blackham Resources analysed samples using IMO laboratories in Perth for metallurgical testing of gold recovery.</li> </ul>

	<i>mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Programme 1- rotary auger drilling - hole diameter not recorded</li> <li>• Programme 2 - AC 4.5" diameter holes with specialised 'vacuum bit' used to maximise sample recovery on TSF.</li> <li>• All holes vertical and not surveyed</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The auger drilling of tailings with short holes resulted in very high recovery of drilled material. No specific measurement of recovery was completed.</li> <li>• For AC drilling, sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. Recoveries were typically 100%, however less-compacted zones near the top of the hole sometimes had a reduced recovery.</li> <li>• In order to maximise recovery a specialised 'vacuum bit' was used while AC drilling.</li> <li>• Preliminary metallurgical test work suggests there is no significant segregation of grade between coarser and finer fractions mitigating against any significant sampling bias.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No geological or geotechnical logging was completed</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-</i></li> </ul>	<ul style="list-style-type: none"> <li>• Auger drilling sampled wet with a trowel. No further sampling detail captured</li> <li>• AC samples were split on 1m intervals using a cone splitter and spear sampled from bulk sample. Most samples were moist; 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.</li> <li>• At the laboratory, &gt;3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.</li> <li>• AC drilling field duplicates were collected approximately every 40m down hole for Blackham holes. Analysis of</li> </ul>

	<p>sampling stages to maximise representivity of samples.</p> <ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>results indicated good correlation between primary and duplicate samples. AC duplicates were speared in the field.</p> <ul style="list-style-type: none"> <li>Sample sizes are considered appropriate for homogenised fine grain-size tailings.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>50g charge fire assay used for both drilling programmes, through Intertek Genalysis (Welshpool) for programme 1 and ALS laboratories in Perth for programme 2.</li> <li>Intertek applies a 0.005ppm detection limit and ALS 0.01ppm both considered fit for purpose.</li> <li>Fire assay is a total digestion method. The certified laboratories both completed the analyses using industry best-practice protocols.</li> <li>For the auger drilling laboratory inserted standards and blanks were inserted and duplicate assays made</li> <li>For the AC 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</li> <li>Results show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%).</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.</li> <li>Twinned holes were not drilled owing to the preliminary stage of drilling.</li> <li>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 2017v2". Historical procedures are not documented.</li> <li>The only adjustment of assay data is the conversion of lab non-numeric code to numeric for estimation.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Auger drill collars were surveyed using a GPS to metre-scale accuracy with nominal RL applied</li> <li>AC drill collars were surveyed using a GPS to metre-scale accuracy including height</li> <li>Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S.</li> <li>An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely</li> </ul>



	<ul style="list-style-type: none"> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• AC holes generally drilled 100m apart on a square pattern.</li> <li>• Spacing of 100m is considered appropriate to establish grade continuity given the nature of mine tailings.</li> <li>• The mineralisation shows sufficient continuity of both geology and grade down and between holes to support the estimation of resources which comply with the 2012 JORC guidelines</li> <li>• Samples have been composited to 5m for auger samples and 2m for AC samples</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Auger/AC drill holes have been drilled vertically to base of TSF/pit or to 20m deep maximum for auger holes</li> <li>• With the sub horizontal layering resulting from the progressive deposition of TSF material the drilling direction is optimal to prevent any sampling bias</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 laboratories in Perth. In Perth the samples are likewise held in a secure compound.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No external audit has been completed. The drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and</b>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures,</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling is located wholly within M53/200 and M53/96. The tenements are owned 100% by Blackham Resources Ltd.</li> <li>• The tenements are in good standing and no impediments exist.</li> </ul>

<b>land tenure status</b>	<p><i>partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Minor royalty payments accrue to third parties based on gold production.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No previous drilling has been completed on the TSF tailings or pit void tailings.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The tailings material has been derived from the treatment of the ores around the Wiluna mine area. The mineralisation is shear hosted typical of Archean gold deposits. Rock types range from sedimentary rocks and Felsic to Mafic volcanics.</li> <li>• Gold is contained in quartz vein and in alteration zones. In un-weathered rock the mineralisation is commonly associated with sulphides such as pyrite and arsenopyrite.</li> <li>• TSF and pit voids containing tailings typically exhibit sub horizontal layering resulting from the progressive deposition of tailings</li> <li>• All tailings areas tested (excepting Dam C) are reported to have been filled during the treatment of fresh sulphidic ores and have no discernible structure or layering</li> <li>• Dam C contains sulphidic ores in the upper 405 of volume and primarily oxide ore residues in the lower part of the Dam.</li> <li>• Gold mineralisation is expected and metallurgical testing is being used to determine the ore type and recovery</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• See tables appended to this report.</li> </ul>

	<ul style="list-style-type: none"> <li>○ hole length.</li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• See tables and commentary appended to this report.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').z</li> </ul>	<ul style="list-style-type: none"> <li>• No relationships exist between mineralisation widths and intercepted lengths.</li> <li>• Drilled width is true width.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• See body of this report.</li> </ul>

<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>See body of this report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Further metallurgical assessment of treatment characteristics ongoing.</li> <li>IMO Project Services completed the “Wiluna Tailings Retreatment Project” scoping study report in 2016 that provided indicating gold recovery data and assessed methods for reclaiming the tailings.</li> <li>Further test work commenced using the AC drilling samples, again through IMO</li> </ul> <p>A small third drilling campaign using Sonic core drilling was completed in July 2018. Main purpose was to use Standard Penetration Tests periodically during drilling to obtain density, strength and consolidation characteristics for the tailings. The analysis of the data indicated a range of dry bulk density for the tailings of 1.4-2.0. For the current Mineral Resource Estimate a figure of 1.6t/m<sup>3</sup> was assigned as the global dry bulk density</p>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>All tailings areas have now been tested with the exception of two small pits further north of those tested at the Gunbarrel North and South pits.</li> </ul>

### 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All data has been uploaded using Datashed which incorporates a series of internal checks. The Wiluna Tailings dataset has been validated in Datashed and Surpac using internal validation macros and checks. Holes have been checked and corrected where necessary for: <ul style="list-style-type: none"> <li>Intervals beyond EOH depth</li> <li>Overlapping intervals</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Missing intervals</li> <li>• Holes with duplicate collar co-ordinates (i.e. same hole with different names)</li> <li>• Missing dip / azimuth</li> <li>• Holes missing assays</li> <li>• Holes missing geology</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Site visits are regularly undertaken by the competent person, who is a full-time employee of BLK.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The deposit is historic tailings, comprised of sediments pumped into either a purpose-built tailings storage facility (TSF) or an existing open pit. The tailings material has been derived from the treatment of the ores around the Wiluna mine area.</li> <li>• The confidence in the geology and the associated mineralisation is high.</li> <li>• The tails are constrained within either an existing open pit or a TSF. Digital terrain models (DTMs) based on surveys conducted prior to the tails deposition were constructed for the open pits with current topographic models being used for the TSF taking into account any material being used for building bunds and/or walls of the TSF.</li> <li>• Drill hole data was used to locate the positions of the sample data.</li> <li>• No alternate interpretations have been considered</li> <li>• Some stratification of the tails sediments was observed in the drilling and the grade interpolation attempted to honour this stratification.</li> <li>• Tails were deposited according to the location of the discharge points resulting in varying grades of metal over time, based upon the performance of the processing facility (recoveries of ore).</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The tails are constrained within either an existing open pit or a TSF.</li> <li>• The open pits are irregular DTMs based on surveys conducted prior to the tails deposition. They range in size from between 250 and 360 metres long and between 90 and 195 metres wide. Depth is variable between 40 and 55 metres</li> <li>• Current topographic models were being used to define the TSF taking into account any material being used for building bunds and/or walls. Dam C is the largest being approximately 660 metres by 710 metres with a depth of 40 metres.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample domains (the individual open pits and TSF's) were flagged into an Access database from a validated wireframe.</li> <li>• A composites string-file was then created in Surpac with a 4.0 m composite length. Although drill sampling occurred predominantly at 1m intervals the 4m composite length was deemed appropriate due to the low variance of the data.</li> </ul>

	<p><i>interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p> <ul style="list-style-type: none"> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Gold grades were estimated into the model by inverse distance squared using the blockmodel field coding to constrain the estimate.</li> <li>• Only samples contained within each individual domain were used for the estimate of that domain.</li> <li>• Top cuts were used to cap high grade data that had possibly occurred due to contamination. All high-grade metal was recovered during processing of the primary ore prior to tails deposition any assays that appeared as outliers from the median grade were cut.</li> <li>• No previous mining has occurred so no reconciliation data is available for comparison.</li> <li>• A block model with parent cell sizes 25 m (E) by 25 m (N) by 5 m (RL) was employed, with sub-celling to 6.25 m E by 6.25 m N by 2.5 m RL.</li> <li>• The blockmodel was not rotated.</li> <li>• The search ellipse was based on considerations of the drillhole spacing and domain geometry.</li> <li>• In addition, visual inspection, using tools available in Surpac, were undertaken to assess the pattern of informing sample selection. The search ellipsoid radii ratios were then chosen to provide an optimal sample neighbour selection for estimation. The search neighbourhood radii were chosen to be as small as possible while still fulfilling the requirement of filling all blocks in the estimation domains with estimates. Search ellipse orientations were flat.</li> <li>• One search pass was used to populate blocks allowing for a maximum of 2 samples per drill hole with a maximum of 8 samples per block estimate.</li> <li>• No assumptions have been made regarding the recovery of by-products.</li> <li>• The block size is approximately half the typical drill spacing of the well drilled areas.</li> <li>• No assumptions were made regarding selective mining units.</li> <li>• The flat nature of the tails strata required a flat search ellipse to be used to interpolate the block grades.</li> <li>• The estimate was validated using a number of techniques including but not limited to: <ul style="list-style-type: none"> <li>• A visual comparison of block grade estimates and the drill hole data;</li> <li>• A comparison of the composite and estimated block grades;</li> <li>• SWATH Plots</li> </ul> </li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages are estimated on a dry basis.</li> </ul>



	content.	
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>No cut-off grade is used to report the resource. All blocks within the block model are reported.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No mining factors or assumptions have been.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.</li> </ul>	<ul style="list-style-type: none"> <li>A scoping study was completed for the Wiluna tailings retreatment in 2016 by independent consultant group IMO Project Services. The study comprised of preliminary metallurgical test work using Dam H tailings data and a review of potential recovery and treatment options for all storage facilities and pits. The options considered produced acceptable financial returns and indicated a potential metallurgical recovery of 40-50% for gold.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for</li> </ul>	<ul style="list-style-type: none"> <li>A full feasibility study is yet to be completed.</li> </ul>

	<p>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.</p>	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• 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, the nature, size and representativeness of the samples.</li> <li>• 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.</li> <li>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling completed in July 2018 using sonic core drilling aimed at providing additional samples for test work. The programme completed Standard Penetration Tests (SPT) periodically during drilling to obtain density, strength and consolidation characteristics for the tailings.</li> <li>• The analysis of the data indicated a range of dry bulk density for the tailings of 1.4-2.0. For the current Mineral Resource Estimate a figure of 1.6t/m<sup>3</sup> was assigned as the global dry bulk density.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• 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,</li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource is classified as Measured, Indicated and Inferred, in accordance with the JORC Code (2012 Edition).</li> <li>• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate including:</li> <li>• Drill hole spacing;</li> <li>• Quality of drill hole information accounting for type, and sampling technique; and</li> <li>• Available mining information.</li> </ul>

	<p><i>quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The classification for this model has predominantly being based on the drill hole type and spacing. In resources drilled by Air Core with 4.5" diameter holes with the specialised 'vacuum bit' with at least 100m x 100m on the TSF and 50m by 50m in the open pits an indicated classification was given.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>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 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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.</li> <li>• The Mineral Resource statement is a global estimate. No domaining of grade has taken place and all classified blocks in the tails model are reported.</li> </ul>

## JORC Code, 2012 Edition – Table 1 (Williamson)

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Williamson data represents a portion of a large drilling database compiled since the 1980’s by various project owners. 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. 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) both PQ core with ¼ core sampling and HQ3 core with ½ core sampling.</li> <li>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 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 project had procedures in place in line with standard industry practice to ensure sample representivity.</li> <li>At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were crushed to &lt;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.</li> <li>Blackham Resources analysed samples using SGS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish. Historically, Great Central Mines 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.</li> <li></li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li><i>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-</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham data reported herein is RC 5 5/8” and DD PQ and HQ3 diameter holes. Downhole surveys are taken every ~5 or 10m using a gyro tool. 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</li> </ul>

	<i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	face-sampling bit.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• </li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill samples have been logged for geology, alteration, mineralisation, weathering, and other features to a level of detail considered appropriate for geological and resource modelling.</li> <li>• Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• All holes were logged in full.</li> <li>• </li> </ul>

<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC sampling with cone splitting, and either ¼ or ½ cut core.</li> <li>• Sampling is RC. Mention is made in historical reports of 1m and 2m or 4m composites for Agincourt drilling. For Blackham drilling, 1m 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.</li> <li>• RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice.</li> <li>• Boyd &lt;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, &gt;3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.</li> <li>• Field duplicates were collected approximately every 40m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples. RC duplicates are taken using the secondary sample chute on the cone splitter. Core duplicates are taken at the laboratory after coarse crushing using the Boyd crusher / splitter. It is not clear how the historical field duplicates were taken for RC drilling.</li> <li>• Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Fire assay is a total digestion method. The lower detection limits of 0.01ppm is considered fit for purpose. For Blackham drilling, SGS completed the analyses using industry best-practice protocols. SGS 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.</li> <li>• 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.</li> <li>• Comprehensive programs of QAQC have been adopted since the 1980's. For Blackham drilling certified reference material, blanks and duplicates were submitted at approximately 1:40. 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%).</li> </ul>



<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.</li> <li>• Twinned holes are not reported herein, as twinning is not considered routinely necessary. However, historical drilling has been designed at different orientations, to help correctly model the mineralisation orientation.</li> <li>• 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 "BLK Assay QAQC Protocol 2015.doc". Historical procedures are not documented.</li> <li>• Assay results were not adjusted.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham's drill collars are routinely surveyed using a DGPS with centimetre accuracy. All historical drill holes at Matilda appear to have been accurately surveyed.</li> <li>• MGA Zone 51 South.</li> <li>• Height data (Australian height datum) is collected with DGPS and converted to local relative level using a factor. Prior to DGPS surveys, relative levels are estimated based on data for nearby historical holes.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham's exploration holes are generally drilled 20m apart on east-west sections, on sections spaced 20m apart north-south.</li> <li>• Using Blackham's drilling and historical drilling, a spacing of approximately 20m (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.</li> <li>• Samples have not been composited because discrete assay intervals are considered appropriate for this report.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were generally orientated towards the west to intersect predominantly steeply east-dipping mineralisation. For the western footwall mineralisation and Western Shear zone, holes were oriented towards the east to intersect the west-dipping mineralisation. Thus true thickness is approximately 2/3 of drilled thickness.</li> <li>• Such a sampling bias is not considered to be a factor as the RC technique utilizes the entire 1m sample.</li> </ul>

<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Drill samples are delivered to Toll Ipec 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.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No such audits or reviews have been undertaken as they are not considered routinely required; review will be conducted by external resource consultants when resource estimates are updated.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located wholly within M53/797. The tenement is owned 100% by Kimba Resources Ltd, a wholly owned subsidiary of Blackham Resources Ltd. The tenement sits within the Tarlpa Native Title area, and no exploration heritage agreement is in place with the Native Title holders.</li> <li>The tenement is in good standing and no impediments exist.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration activities have been conducted at the Williamson deposit since the mid-1980s. This work has included auger and RAB exploration drilling, regional geophysical surveys and extensive AC, RC and DD drilling for exploration, resource definition and grade control purposes. Subsequently, extensive resource definition drilling including AC, RC and DD drilling by Agincourt led to definition of a significant resource base in the late 1990s.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The gold deposit is categorized as an orogenic gold deposits, with similarities to many other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna greenstone belt. Rocks in the Wiluna Domain have experienced greenschist-grade regional metamorphism. At the location of this drilling, the Wiluna Domain is comprised of 'Mines Sequence' dolerite and basalt, intruded by felsic and intermediate dykes and cross-cut by north-south structures.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including</li> </ul>	<ul style="list-style-type: none"> <li>All Drill hole information is contained within the Access database used to define the resource.</li> </ul>

	<p><i>a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <p>• <i>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.</i></p>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole intercepts are reported as length-weighted averages, above a 1m @ 0.6g/t cut-off, or &gt; 1.2 gram x metre cut off (to include narrow higher-grade zones) using a maximum 2m contiguous internal dilution.</li> <li>• High-grade internal zones are reported at a 5g/t envelope, e.g. MADD0018 contains 14.45m @ 6.74g/t from 162.55m including 4.4m @ 15.6g/t from 162.55m.</li> <li>• No metal equivalent grades are reported because only Au is of economic interest.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were generally orientated towards the west to intersect predominantly steeply east-dipping mineralisation. Thus true thickness is generally approximately 2/3 of drilled thickness.</li> </ul>

	are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• See body of this report.</li> <li>•</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• A full list of significant results from the current drilling program is included with the report. Full reporting of the historical drill hole database of over 40,000 holes is not feasible.</li> <li>•</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Other exploration tests are not the subject of this report.</li> <li>•</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> <li>• Diagrams are provided in the body of this report.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>All data has been uploaded using Datashed which incorporates a series of internal checks.</li> <li>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: <ul style="list-style-type: none"> <li>Intervals beyond EOH depth</li> <li>Overlapping intervals</li> <li>Missing intervals</li> </ul> </li> </ul> <p>Holes with duplicate collar co-ordinates (i.e. same hole with different names)</p> <ul style="list-style-type: none"> <li>Missing dip / azimuth</li> <li>Holes missing assays</li> <li>Holes missing geology</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit has been undertaken and no concerns or issues were discovered.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>No alternate interpretations have been completed. The current interpretation follows similar methodology to that used historically.</li> <li>Drill logging has been used to constrain the 3D wireframes.</li> <li>Mineralisation occurs as weakly disseminated sulphides within a broad anomalous envelope around the north striking/east dipping monzogranite. Higher grade sulphide and visible gold mineralisation is associated with the shearing on the contacts of the granite and also within the main west dipping shear that intersects the monzogranite. Mineralisation within the monzogranite body varies from</li> </ul>

		<p>broad low grade disseminated sulphides in the monzogranite to high grade veins formed within fractures (possibly conjugate) containing visible gold. Alteration ranges from weak carbonate chlorite alteration distal to the main structure to strong hematite carbonate silica pyrite alteration associated with high grade mineralisation.</p>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Strike length = ~ 2000 m</li> <li>Width (total of combined parallel lodes) = ~ 200 m</li> <li>Depth (from surface) = 400 m</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>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 chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sample domains were flagged into an Access database from a validated wireframe.</li> <li>A composites string-file was then created in Surpac with a 2.0 m composite length and a minimum percentage of sample to include at 30%.</li> <li>Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate.</li> <li>Resource estimation for the Williamson mineralisation was completed using localised uniform conditioning (LUC) with for Gold (Au). Blockmodel field coding was used to constrain the estimate.</li> <li>Soft boundaries were utilised between the oxidation surfaces.</li> <li>Only samples contained within each individual ore wireframe were used for the estimate of that lode.</li> <li>A number of previous resource estimates and studies have been undertaken and were reviewed to assist in the development of this resource estimate.</li> <li>The modelled wireframes were used to create a blockmodel. The Panel OK estimate for gold for each domain was implemented in Isatis using the search neighbourhood parameters defined by QKNA analysis. The Panel block estimation size used was 12mX x 20mY x 5mZ. The OK search and variogram rotations were varied locally using a set of guiding surfaces to best mimic the interpreted orientation of the lodes. The final LUC model, after post-processing steps have been applied has a user block 2mE by 4mN by 2.5mRL which relates to an SMU. No sub-blocking was applied.</li> <li>The parent block size was selected on the basis of being approximately 50% of the closest drill hole spacing in the deposit (excluding the grade control 5m by 5m grid data).</li> <li>The search ellipse 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.</li> <li>Ordinary kriging parameters were also checked against those used in previous resource estimates and variography studies. No significant differences were discovered.</li> </ul>



	<ul style="list-style-type: none"> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The final LUC model, after post-processing steps have been applied has a user block 2mE by 4mN by 2.5mRL which relates to an SMU.</li> <li>• No assumptions are made regarding correlation between variables.</li> <li>• Wireframes were used as hard boundaries to constrain the interpolation.</li> <li>• Topcuts were determined from statistical analysis. A number of factors were taken into consideration when determining the top-cuts including: <ul style="list-style-type: none"> <li>• The disintegration point of the data on the probability plots;</li> <li>• Having a coefficient of variance (CV) under 2.0; and</li> <li>• Reviewing the model (block) grades against the composites.</li> </ul> </li> <li>• The estimate was validated using a number of techniques including but not limited to: <ul style="list-style-type: none"> <li>• A visual comparison of block grade estimates and the drill hole data;</li> <li>• A comparison of the composite and estimated block grades;</li> <li>• A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.</li> <li>• A comparison of the estimated block grades against the composite grades along Northings and RL (SWATH Plots).</li> </ul> </li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages are estimated on a dry basis. No moisture values were reviewed.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Williamson has been reported with a 0.6g/t bottom cut above the 1290RL and 2.0g/t below the 1290RL. Blackham believes this approximates appropriate cut-offs for open pit and underground mining.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Agincourt mined the Williamson pit from August 2005 to September 2006 producing a total of 663,871 tonnes at 1.98g/t for 42,353 ounces. BLK believes that a significant portion of the Williamson Deposit defined Mineral Resource has reasonable prospects for eventual economic extraction by medium-scale open pit mining methods, taking into account current mining costs and metal prices and allowing for potential economic variations.</li> </ul>

	<i>an explanation of the basis of the mining assumptions made.</i>	
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Initial oxide gravity results in the Williamson oxide has confirmed 65 to 71% gravity recoveries and total recoveries of 98.3 to 99.5% after 24 hours of leaching. Previous feasibility work at Williamson by the prior operator saw Williamson gravity recoveries of 31 to 65%. Blackham's processing flowsheet for the Wiluna Gold Plant will see the addition of a gravity circuit which should add significantly to the Williamson total process recovery.</li> <li>A diamond core program of 5 holes has been completed to provide metallurgical and geotechnical samples to support the current DFS metallurgical test work. Williamson pit was previously mined by Agincourt Resources over 15 months during 2005 and 2006 for 660,000t @ 2.0g/t Au and a significant body of data is therefore available for use in the recently completed PFS and current DFS. The Williamson ore was previously processed through the Wiluna Plant without the benefit of a gravity circuit which is expected to enhance total recovery.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>A full pit feasibility study is yet to be completed.</li> <li>It is assumed that environmental practices concerning waste rock and process residual material will meet accepted industry standards, similarly to other operating mines in the district.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>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, the nature, size and representativeness of the samples.</i></li> </ul>	<ul style="list-style-type: none"> <li>Bulk densities were assigned as 2.20 t/m<sup>3</sup> for alluvial, 1.80 t/m<sup>3</sup> for oxide, 2.00 t/m<sup>3</sup> for transitional 2.60 t/m<sup>3</sup> for saprock and 2.80 t/m<sup>3</sup> fresh.</li> <li>Bulk density values for alluvial cover, oxide, transitional and fresh material were adopted from those used by Agincourt Resources in their 2006 model. The values are in line with other similar deposits elsewhere in the Yilgarn region.</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. <ul style="list-style-type: none"> <li>• Geological continuity and volume models;</li> <li>• Drill spacing and available mining information;</li> <li>• Modelling technique</li> <li>• Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters.</li> <li>• The classification for this model was predominantly based on the slope of regression which is a measure of the quality of the estimate.</li> <li>• The classification of the blocks was also visually checked and adjusted to remove any “spotted dog” effects. No measured resources were calculated.</li> </ul> </li> <li>• Historical documents (including annual reports) provide detailed information on drilling and mining at the various prospects. A large proportion of the digital input data has been transcribed from historical written logs and validation checks have confirmed the accuracy of this transcription. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The continuity of geology is well understood and existing pits and historical mining reports provide substantial information on mineralisation controls and lode geometry.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This resource was completed by RESEval in conjunction with BLK staff. Internal audits have been completed by BLK which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> </ul>

	<p><i>deemed appropriate by the Competent Person. For example, the 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.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	
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