

17<sup>th</sup> March 2020 ASX Announcement

## Wiluna Sulphides: Shallow Shoots drilling delivers further strong results

## **Highlights**

Blackham Resources Limited (ASX: BLK) New results from sulphide reserves expansion drilling include

WURC0804: 21m @ 7.04g/t from 196m

WURC0823: 16m @ 3.72g/t from 254m incl. 4m @ 8.23g/t, and 2m @ 6.51g/t

WURC0824: 8m @ 10.10g/t from 225m

Hole WURC0804 is <u>directly underneath</u> the intercept previously reported (refer ASX announcement 21<sup>st</sup>
 February 2020) from WURC0802 (26m @ 15.69g/t from 182m) and is <u>open at depth</u>

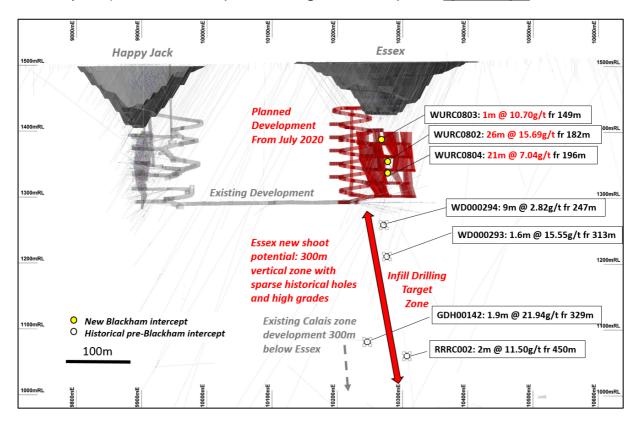


Figure 1: Essex high grade results, planned mine development, and shallow shoot infill drilling target.

Milan Jerkovic, Blackham's Executive Chairman commented "The future of the Wiluna Gold Mine is targeting high grade underground sulphide ounces. Its early days — we have drilled only 3,000m of 45,000m of a planned reserve and new shoot discovery program, which builds upon over 3,000km of historical drilling at the project and 100km of existing and adjacent underground development. We are targeting new shallow high-grade shoots 'under the headframe' for production from mid-2020".

## **BOARD OF DIRECTORS**

Milan Jerkovic – Executive Chairman Neil Meadows- Operations Director Greg Fitzgerald – Non-Executive Director Tony James – Non-Executive Director

## **ASX CODE**

BLK

#### **CORPORATE INFORMATION**

5,884M Ordinary Shares 674M Quoted Options 188M Unquoted Options

# PRINCIPAL AND REGISTERED OFFICE

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**Blackham Resources Limited** (Blackham or the Company) is pleased to report further strong results from resource and reserve development drilling designed to expand reserves ahead of Stage 1 Sulphide Expansion production at its 6.4 million ounce Wiluna Gold Mine from mid-2020.

Stage 1 sulphide production aims to ramp up through 2021 to 100-120,000oz per annum. Wiluna is endowed with a large underground sulphide resource that currently stands at 18.5Mt @ 4.82 g/t for 2.9Moz, including 1.7Moz (58%) in the inferred category, which presents the Company with substantial reserve conversion and life-of-mine extension opportunities.

Blackham's strategy is to target high-grade +5g/t shoots on the main East and West gold structures (Figure 2), which have a combined strike length of 7km. High-grade shoot discoveries within 300m of surface could be quickly brought into the mine plan as substantial mine development already exists including 5 access declines. The current program targeting infill of high grade inferred resources and new shallow shoot discoveries is part of a larger program of 45,000m planned over the next 18 months.

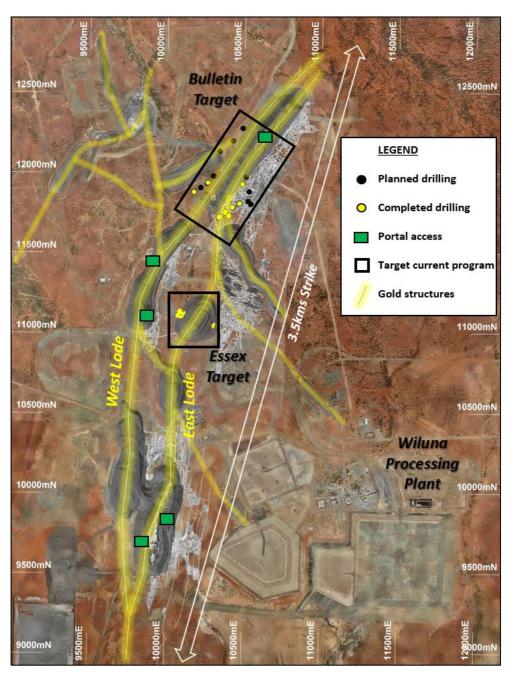


Figure 2: Plan of Wiluna mine and current program targeting a small part of the large gold system.



## **Stage 1 Sulphide Reserve Development**

Blackham's initial drilling is aimed at infill and extension of Stage 1 sulphide reserves ahead of the commencement of mining in mid-2020 (see ASX releases dated 21<sup>st</sup> February 2020 and 23<sup>rd</sup> December 2019).

Drilling has targeted high-grade inferred zones and new shoot discoveries at shallow levels and close to existing underground infrastructure for early development. Results are reported here for further 7 holes for 1,940m. To date 3,448m has been completed of the first phase 7,000m RC program.

Drill programs are designed to:

- Expand and upgrade inferred and indicated resource areas
- Discover new high-grade shoots in modelled structural locations

Figure 3 shows latest results from drilling aimed at enhancing the grade and confidence of the category of resources within the current mining inventory at the Essex zone. Essex is to be developed early in the mine plan owing to its shallow depth and location close to existing infrastructure that requires minimal dewatering and rehabilitation to access high-grade ore. These results are located within 200m of surface and close to existing underground access, or a portal and decline may be developed off the existing Essex pit for early access to high grade ore.

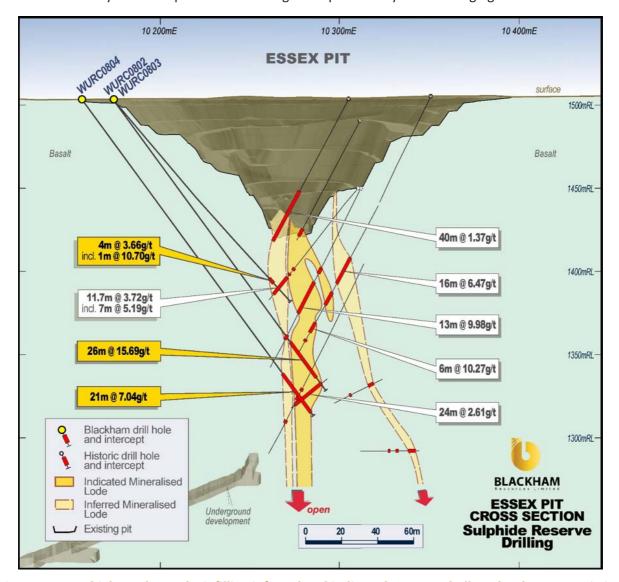


Figure 3: Essex high-grade results infilling inferred and indicated areas at shallow depths. Note existing underground access installed by previous operators to within 80m of the high-grade zone.



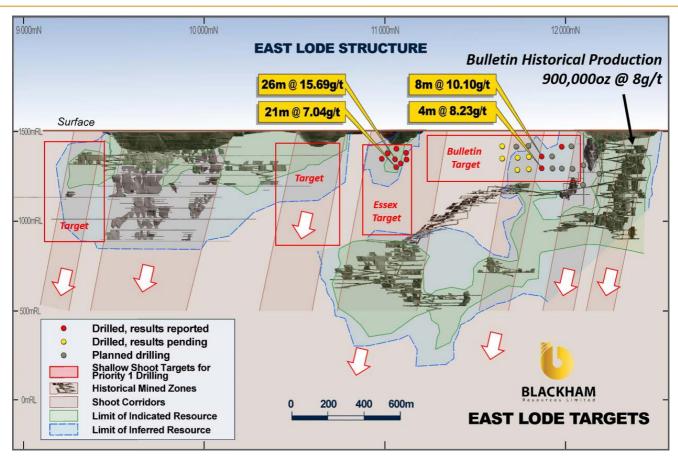


Figure 4: Long section showing recent and planned drill holes targeting inferred resource infill and new shoots.

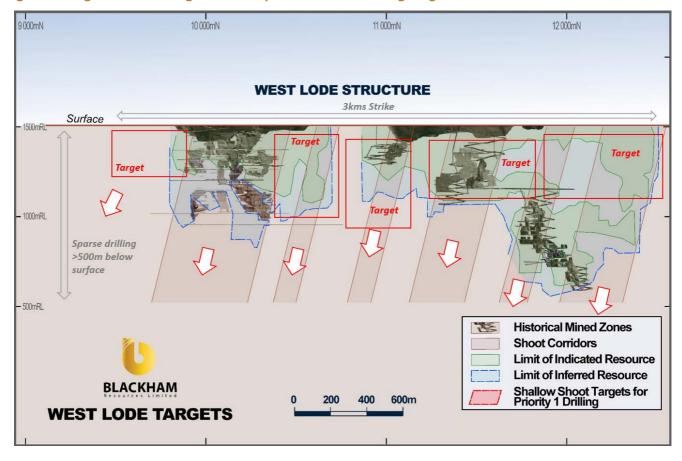


Figure 5: Long section showing high priority shoot targets near existing development on the West structure.



Table 1. Significant intercepts table.

Hole ID	East	North	RL	EOH	Dip	Azi	From	То	Interval	Au	True
WURC0804	225310	7052491	504	227	-52.7	110	196.0	217.0	21.0	7.04	15
WURC0804							225.0	226.0	1.0	1.23	0.7
WURC0805	225534	7052406	502	191	-60.6	322	132.0	136.0	4.0	2.74	2.7
WURC0805							163.0	172.0	9.0	0.94	6
WURC0806	225534	7052406	502	179	-55.9	321	124.0	128.0	4.0	0.61	2.7
WURC0806							132.0	142.0	10.0	1.70	0.7
WURC0806							149.0	152.0	3.0	2.74	2
WURC0806							157.0	164.0	7.0	1.89	4.7
WURC0807	225534	7052406	502	191	-60.4	301	171.0	179.0	8.0	1.71	7
WURC0807						incl.	172.0	173.0	1.0	7.01	1
WURC0822	225694	7053294	510	317	-60.3	315	145.0	151.0	6.0	1.10	5
WURC0822							294.0	295.0	1.0	1.49	1
WURC0823	225676	7053173	509	425	-69.3	311	231.0	232.0	1.0	1.36	0.5
WURC0823							235.0	236.0	1.0	2.44	0.5
WURC0823							242.0	244.0	2.0	0.77	1
WURC0823							254.0	270.0	16.0	3.72	8
WURC0823						incl.	257.0	261.0	4.0	8.23	2
WURC0823						and	268.0	270.0	2.0	6.51	1
WURC0823							292.0	293.0	1.0	2.12	0.5
WURC0823							307.0	308.0	1.0	1.69	0.5
WURC0823							383.0	388.0	5.0	3.33	2.5
WURC0823						incl.	385.0	387.0	2.0	5.79	1
WURC0823							411.0	413.0	2.0	1.03	1
WURC0823							416.0	417.0	1.0	1.66	0.5
WURC0824	225670	7053172	509	410	-60	315	149.0	150.0	1.0	1.45	0.7
WURC0824							160.0	165.0	5.0	4.38	3.5
WURC0824						incl.	162.0	164.0	2.0	6.53	1.5
WURC0824							225.0	233.0	8.0	10.10	5.5

<sup>\*</sup>Grid MGA91\_Zone51S; RL = AHD + 1,000m. Minimum intercept 2m @ 0.6g/t or 1.2 gram x metres. NSI = No significant intercept. Results >5g/t highlighted red.

This announcement has been approved for release by the Board of Blackham Resources Limited.

## For further information on Blackham please contact:

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## Measured, Indicated & Inferred Resources (JORC 2012) at 30 June 2019.

	Matilda-Wiluna Gold Operation Resource Summary												
	OPEN PIT RESOURCES												
Mining Centre	I	Measure	ed	li	ndicated			Inferred		To	Total 100%		
Milling Cerline	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>	-	-	-	6.1	1.45	285	3.6	1.30	149	9.7	1.40	435	
Wiluna Sulphide <sup>2</sup>	-	-	-	12.0	2.80	1,079	5.0	3.10	499	17.0	2.89	1,579	
Wiluna Free Milling <sup>3</sup>		-		3.6	1.42	166	0.3	1.14	10	3.9	1.40	176	
Williamson <sup>3</sup>	-	-	-	2.6	1.30	108	1.5	1.40	66	4.1	1.34	174	
Regent	-	-	-	0.7	2.71	61	3.1	2.11	210	3.8	2.22	271	
Tailings	-	-	-	34.0	0.62	680	-	-	-	34.0	0.62	680	
Stockpiles	0.6	0.80	15	-	-	-	-	-	-	0.6	0.80	15	
OP Total	0.6	0.80	15	59.0	1.25	2,379	13.4	2.16	935	73.0	1.42	3,330	
				UNI	DERGROU	JND RESO	URCES						
Mining Centre		Measure			ndicated			Inferred			tal 100%		
maning centre	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au		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	
Wiluna Sulphide <sup>2</sup>	-	-	-	6.9	5.49	1,210	11.7	4.42	1,664	18.5	4.82	2,874	
Wiluna Free Milling <sup>4</sup>	0.02	6.80	4	0.2	4.91	28	0.3	3.20	28	0.5	4.01	61	
Williamson <sup>3</sup>	-	-	-	-	-	-	0.3	2.61	23	0.3	2.61	23	
Galaxy⁵	-	-	-	0.1	3.70	6	0.2	2.80	16	0.2	2.98	22	
UG Total	0.02	6.80	4	7.3	5.38	1,254	12.9	4.31	1,793	20.2	4.71	3,051	
<b>Grand Total</b>	0.6	0.99	20	66.2	1.71	3,633	26.4	3.22	2,728	93.2	2.13	6,381	

See ASX release dated 26<sup>th</sup> September 2019 for further details. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location shape and continuity of the occurrence and on the available sampling results. Note rounding errors may occur.

		OP	EN PIT R	ESERVE	S				
Mining Centre		Proved			Probabl	е	To	otal 100%	7
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda	-	-	-	0.30	2.2	21	0.30	2.2	21
Williamson	-	-	-	1.05	1.6	53	1.05	1.6	53
Wiluna Free Milling	-	-	-	2.05	1.8	116	2.05	1.8	116
Wiluna Sulphide	-	-	-	7.71	2.5	669	7.71	2.5	669
Stockpiles	0.6	8.0	15	-	-	-	0.60	0.8	15
OP Total	0.55	8.0	15	11.11	2.4	859	11.70	2.3	874
		UNDER	RGROUN	ID RESE	RVES				
Mining Centre		Proved			Probabl		To	otal 100%	6
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Wiluna Free Milling	-	-	-	0.03	4.2	3	0.03	4.2	3
Wiluna Sulphide	-	-	-	1.75	4.8	270	1.75	<b>4.</b> 8	270
UG Total				1.78	4.8	273	1.78	4.8	273
		W	ILUNA T	AILING:	S				
Mining Centre		Proved			Probabl	е	To	otal 100%	7
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Tailings Total	-		-	11.2	0.7	234	11.2	0.7	234
Grand Total	0.55	8.0	15	24.1	1.8	1,366	24.7	1.7	1,381

See ASX release dated 26<sup>th</sup> September 2019 for further details. Note rounding errors may occur.



#### **Competent Persons Statement**

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

The information contained in the report that relates to all other Mineral Resources is based on information compiled or reviewed by Mr Marcus Osiejak, who is a full-time employee of the Company. Mr Osiejak, is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Osiejak has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears. With regard to the Matilda-Wiluna Gold Operation Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcement dated 26<sup>th</sup> September 2019 continue to apply and have not materially changed.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and the form and context of the announcement has not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.

#### **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.

## 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
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <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, ii) NQ2 with ½ core sampling or LTK60 with full core sampling, and iii) face 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. Face samples are taken across the quartz vein, with sample intervals matched to varying intensity of mineralisation as indicated by shearing and sulphides.</li> <li>Historically (pre-Blackham Resources), drill samples were taken</li> </ul>
	<ul> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation</li> </ul>	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



Drilling techniques	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.	<ul> <li>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 analysed RC samples, GAGC* and GARD* holes using ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish. GAGC* holes and face samples were also analysed at the Wiluna Mine site laboratory for preliminary results, pulverized in an LM5 bowl to produce a 30g charge for assay by Fire Assay with AAS finish.</li> <li>Plackham data reported herein is RC 5.5" diameter holes.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Blackham data reported herein is RC 5.5" diameter holes. Diamond drilling is oriented NQ or LTK60 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 openhole 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>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>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 in RC holes. 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).</li> <li>For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent. Face sampling is generally prone to higher-grade bias, t</li></ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul> <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</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>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>



#### Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.
- For core samples, Blackham uses half core cut with an automatic core saw. Samples have a minimum sample width of 0.1m and maximum of 1.2m, though typically 1m intervals were selected. A cut line is routinely drawn at an angle 10 degrees to the right of the orientation line. Where no orientation line can be drawn, where possible samples are cut down the axis of planar features such as veins, such that the two halves of core are mirror images.
- For historical drilling sampling techniques and preparation are not known. Historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies. Holes have been selectively sampled (visibly barren zones not sampled, though some quartz vein intervals have been left un-sampled), with a minimum sample width of 0.3m and maximum of 1.2m, though typically 1m intervals were selected.
- RC sampling with cone splitting with 1m samples collected. 4m scoop composites compiled from individual 1m samples. RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice.
- For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias in the results.
- Blackham drilling, 1m RC samples were split using a cone splitter. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure. AC samples were 4m composites.
- Boyd <2mm crushing and splitting is considered to be standard industry practice; each sample particle has an equal chance of entering the split chute. At the laboratory, >3kg samples are split so they can fit into a LM5 pulveriser bowl. At the laboratory, >3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.
- Field duplicates were collected approximately every 20m down hole for Blackham holes. With a minimum of one duplicate sample per hole. Analysis of results indicated good correlation between primary and duplicate samples. RC duplicates are taken using the secondary sample chute on the cone splitter. AC duplicates were scooped in the field. It is not clear how the historical field duplicates were taken for RC drilling.
- Riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. Note comments above about samples through 'stope' intervals; these samples don't represent the pre-mined grade in localized areas.
- For historical drilling, field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Investigation revealed sufficient quality control performance. No field duplicate data has been located or evaluated in earlier drilling. Field duplicates were collected every 20m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples.
- Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.

## Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.
- Fire assay is a total digestion method. The lower detection limits
  of 0.01ppm is considered fit for purpose. For Blackham
  Exploration drilling, ALS completed the analyses using industry
  best-practice protocols. ALS is globally-recognized and highlyregarded 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.
   Samples analysed at ALS and with Au > 0.3g/t are also assayed
  - Samples analysed at ALS and with Au > 0.3g/t are also assayed for As, S and Sb using ICPAES analysis ("ME-ICP41")
- 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



Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>drilling program and every two weeks.</li> <li>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. Blanks and quartz flushes are inserted after logged high grade core samples to minimise and check for smearing, analyses of these results typically shows no smearing has occurred. 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> <li>Blackham's significant intercepts have been verified by several company personnel, including the database manager and geologists.</li> <li>Twinned holes were not drilled in this program, 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 2018". Historical procedures are not documented.</li> <li>The only adjustment of assay data is the conversion of lab nonnumeric code to numeric for estimation.</li> </ul>
Location of data points	<ul> <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> <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</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Blackham's exploration holes are generally drilled 25m apart on on sections spaced 25m apart along strike.</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>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	RC drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation, though underground DD holes were in places drilled obliquely; true widths are shown in the significant intercepts table.      The perpendicular orientation of the drill holes to the structures minimises the potential for sample bias.
Sample security	The measures taken to ensure sample security.	It is not known what measures were taken historically. For Blackham drilling, samples are stored in a gated yard until transported by truck to the laboratory in Perth. In Perth the



		samples are likewise held in a secure compound.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <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
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The drilling is located wholly within M53/200 and M53/32. The tenements are owned 100% by Matilda Operations Pty Ltd., a wholly owned subsidiary of Blackham Resources Ltd.</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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Modern exploration has been conducted on the tenement intermittently since the mid-1980's by various parties as tenure changed hands many times. This work has included mapping and rock chip sampling, geophysical surveys and extensive RAB, RC and core drilling for exploration, resource definition and grade control purposes. This exploration is considered to have been successful as it led to the eventual economic exploitation of several open pits during the late 1980's / early 1990's, and underground mining until 2013. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation. In 2010, Apex Minerals drilled and confirmed the depth extensions of "Golden Age Deeps".
Geology	Deposit type, geological setting and style of mineralisation.	The gold deposits are categorized as orogenic gold deposits, with similarities to most other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna greenstone belt.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <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 this exclusion does not detract from the understanding of the report, the Competent</li> </ul>	See Appendix 1.
Data aggregation methods	<ul> <li>Person should clearly explain why this is the case.</li> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>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.</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>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Lode geometries at Wiluna are generally steeply east or steeply west dipping. Generally the lodes strike northnortheast to northwest-southeast. 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. True widths are included in the significant intercepts table.



Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	See body of this report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>For Blackham drilling, either all significant assay results are reported or the hole is listed as 'no significant intercepts'. Full reporting of the historical drill hole database of over 80,000 holes is not feasible; the Apex results at GA Deeps are from adjacent holes with no low grades in between.</li> </ul>
Other substantive exploration data	<ul> <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>	Other exploration tests are not the subject of this report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>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>