ASX Announcement
17 June 2016

BLACKHAM
Resources Limited

ASX CODE
BLK

CORPORATE INFORMATION
253.3M Ordinary Shares
33.6M Unlisted Options
8.5M Performance Rights

ABN: 18 119 887 606

PRINCIPAL AND REGISTERED OFFICE
Blackham Resources Ltd
L2, 38 Richardson Street
West Perth WA 6005

POSTAL ADDRESS
PO Box 1412
West Perth WA 6872

www.blackhamresources.com.au

E: info@blackhamresources.com.au

P: +61 8 93226418
F: +61 8 93226398

Matilda reserves continue to grow ahead of first gold pour

- **Matilda Gold Project Ore Reserves grow to 7.0Mt @ 2.5g/t for 560,000oz (up 17% since DFS)**
- **Mining Inventory grows to 9.3Mt @ 2.9g/t for 873,000oz (up 14% since DFS)**
- **Strong conversion of Mining Inventory to Reserves continues**
- **Currently 5 drill rigs completing infill and extensional drill programmes**

Blackham Resources Ltd (ASX Code: BLK) is pleased to provide a revised Ore Reserve estimate for the Matilda Gold Project. **Recent successful drilling, resource upgrades and open pit and underground mine design optimisations have added a further 43,000oz** to the free milling reserves at the Matilda Gold Project since the publishing of the Definitive Feasibility (DFS) on 24 Feb 2016. Blackham has added **1Mt @ 3.3g/t for 106,000oz in Mining Inventory** in the 4 months since the DFS and mining studies are ongoing on additional deposits not currently in the mine plan.

Now that Blackham has all its Matilda Gold Project approvals in place, the management team are focused on preparations for the commencement of open pit mining at the Matilda Mine and underground mining at the high grade Golden Age orebody.

Ongoing mining optimisation work by Blackham's mining team, mining contractors and consultants has resulted in the latest reserve estimate which was undertaken by Entech Pty Ltd (Entech) and Intermine Engineering Consultants (Intermine), based on a review of the latest Matilda, Galaxy and Golden Age gold Resources. Entech focussed on the design of the Golden Age Underground with Intermine focusing on the open pit. The designs have been refined from the DFS for integration into the new production plan for the start-up of operations. The Ore Reserve estimate is based on financials and modifying factors determined as part of the DFS and announced in this updated Reserve estimate.

Blackham's Executive Director, Alan Thom commented:
"Matilda gold production is now imminent. This announcement is a great result in both strengthening our reserves and lengthening the project life. The expansion of the free milling reserves gives us confidence that we can keep growing the size of the Matilda Gold Project."

Blackham Resources Ltd plans to commence mining within 3 weeks and has 4.8 million ounces of gold resource within an 860km2 exploration tenement package which has historically produced over 4.3 million ounces. The Matilda Gold Project is located in Australia's largest gold belt which stretches from Norseman and Kalgoorlie to Wiluna. Blackham's 100% owned Wiluna gold plant, which operated up until 2013, is located in the centre of the Matilda Gold Project and can process up to 1.7Mtpa or ~100,000ozpa as confirmed by the published DFS. The expanded Matilda Gold Project now includes combined resources of 46Mt @ 3.3g/t for 4.8Moz Au (Table 6).

Blackham is initially focused on the free-milling resources which it intends to process through the established low risk circuit of crushing, grinding, gravity and carbon in leach. The free-milling open pit Matilda deposits are planned to provide a base load feed stock for the Wiluna gold plant which will be supplemented with the high grade quartz reef deposits and shallow underground deposits.

Table 1: Quality of Mine Plan and Economics continue to improve

	DFS	Revised Mine Plan
· **Mining Inventory**	8.3Mt @ 2.9g/t for 767,000oz	**9.3Mt @ 2.9g/t for 873,000oz**
· **Reserves**	6.1Mt @ 2.5g/t for 481,000oz	**7.0Mt @ 2.5g/t for 560,000oz**
· **Initial Life of Mine**	7.3 years	**8.3 years**
· **Average Annual Production**	101,000ozpa (over 1st 5 years)	**104,000ozpa (over 1st 5 years)**
· **LOM C1 Cash Costs**	A$850/oz	**A$840/oz**
· **LOM ASIC Costs**	A$1,160/oz	**A$1,130/oz**

Since finalising the DFS Resources, Blackham has continued drilling at Matilda, Golden Age, Galaxy and Bulletin with the aim of improving the quality and quantity of the reserve ounces.

Cautionary Statement

Blackham has concluded it has reasonable basis for providing the forward looking statements included in this announcement (see ASX Announcement 24 February 2016 - Appendix 1). The detailed reasons for that conclusion are outlined throughout this announcement and Material Assumptions are disclosed in ASX Announcement 24 February 2016 - Appendix 2. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. The Company advises that the DFS results, Production Targets and Forecast Financial Information contained in this announcement are based on detailed technical and economic assessments but are insufficient to support the estimation of Ore Reserves over all of the Production Targets particularly at the back of the mine plan. There is a lower level of geological confidence associated with Inferred Mineral Resources used in this report and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. Blackham over the last year has, however, demonstrated a high conversion of Inferred Resources into Reserves.

The Project's robust economics include imminent production, low capital requirement, fast payback and operating costs that are in line with its Western Australian peers. The very low capex required for the project is due to the substantial established plant and infrastructure at site and the minor plant refurbishments required to re-start the project.

Reserves

Mining studies based on resources reported in this announcement were completed for the Golden Age Underground, Matilda, Galaxy and Williamson open pit mines. Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. All Inferred material has had grade set to waste. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material.

Table 2: Matilda Gold Project Reserves June 2016

Mine	Category	Tonnes	Mined g/t	Reserve Oz
Matilda Mine	Proven	195,000	1.9	12,000
Matilda Mine	Probable	3,297,000	1.8	192,000
Golden Age	Probable	112,000	6.0	21,000
Galaxy	Probable	338,000	2.8	30,000
Williamson	Probable	1,517,000	1.4	69,000
Bulletin Sulphides	Probable	938,000	4.7	142,000
East-West Sulphides	Probable	516,000	5.2	87,000
Stockpiles	Probable	124,000	1.7	7,000
Total Proven Reserves		**195,000**	**1.9**	**12,000**
Total Probable Reserves		**6,842,000**	**2.5**	**548,000**
Total Reserves		**7,037,000**	**2.5**	**560,000**

Calculations have been rounded to the nearest 1,000 t of ore, 0. 1 g/t Au grade and 1,000 oz. Au metal.

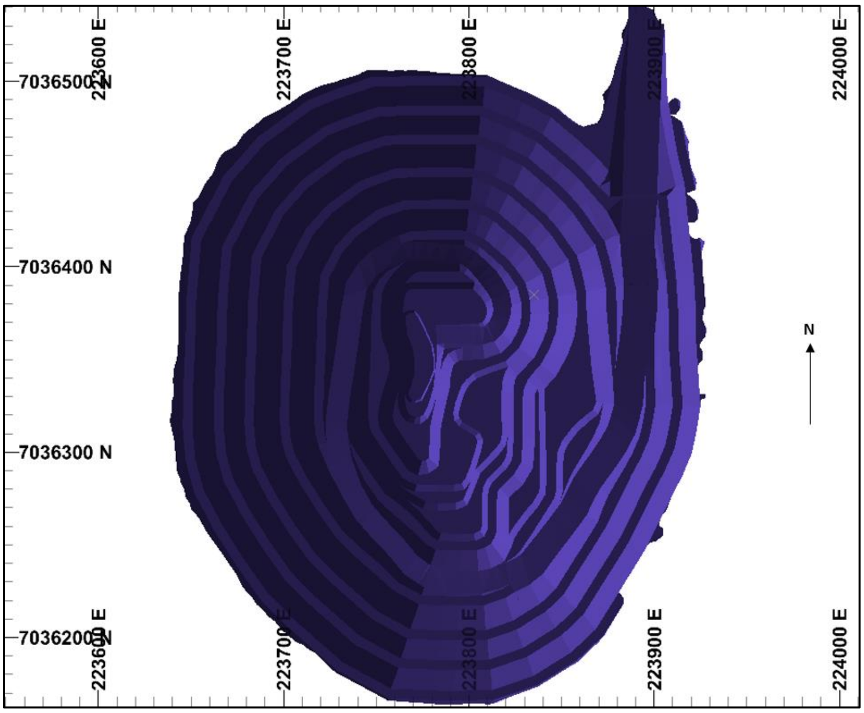
Open Pit Mining Inventory and Reserves

The **open pit mine plan consists of 5.8Mt @ 1.7g/t for 324,000oz** (including stockpiles) **of shallow free milling ore** to be mined over the first 4 years. The open pit Reserves comprise 5.5Mt @ 1.8g/t for 310,000oz. The open pit mine plan includes only 14,000oz of Inferred resource (approx 4%).

Table 3: Open Pit physicals and Costs

Open Pit Mining Data		LOM
Ore Mined - Surface	Tonnes	5,735,000
Waste Mined - Surface	Tonnes	53,020,000
Ore Mined - Surface	BCM	2,440,000
Waste Mined - Surface	BCM	24,260,000
Strip Ratio	(BCM / BCM)	9.9
Mining cost	$/BCM material	5.80
Mining cost	$/t material	2.60

Open cut operations are planned around using 250 t-class excavators and 140 t dump trucks for waste excavation where working area sizes allow and 120 t-class excavators with 90 t dump trucks for ore excavation and in cutback benches or deeper parts of the pits where working room is restricted. Fleet equipment types assumed have been confirmed in a detailed contract tendering process based on the Reserve pit designs. All material excluding existing in-pit backfill or historical waste dumps was assumed to require drilling and blasting using emulsion-type explosives for costing and scheduling purposes. Independent consultants prepared a geotechnical analysis to a suitable level of detail which formed the basis of pit wall design criteria. Open pit mining blocks were diluted by 10% and recovery was assumed at 95% based on detailed Selective Mining Unit analysis.



Blackham plans to commence mining at the Matilda M10 Pit in early July 2016. No previous mining has been undertaken on the M10 deposit which allows for mining of soft ore starting close to surface. The M10 pit is 450m long with a final pit depth 90m from surface. The M10 pit design is shown in Figure 1. The M10 pit has been cleared and grubbed. Grade control drilling is in progress.

Figure 1: Matilda M10 Pit Design June 2016

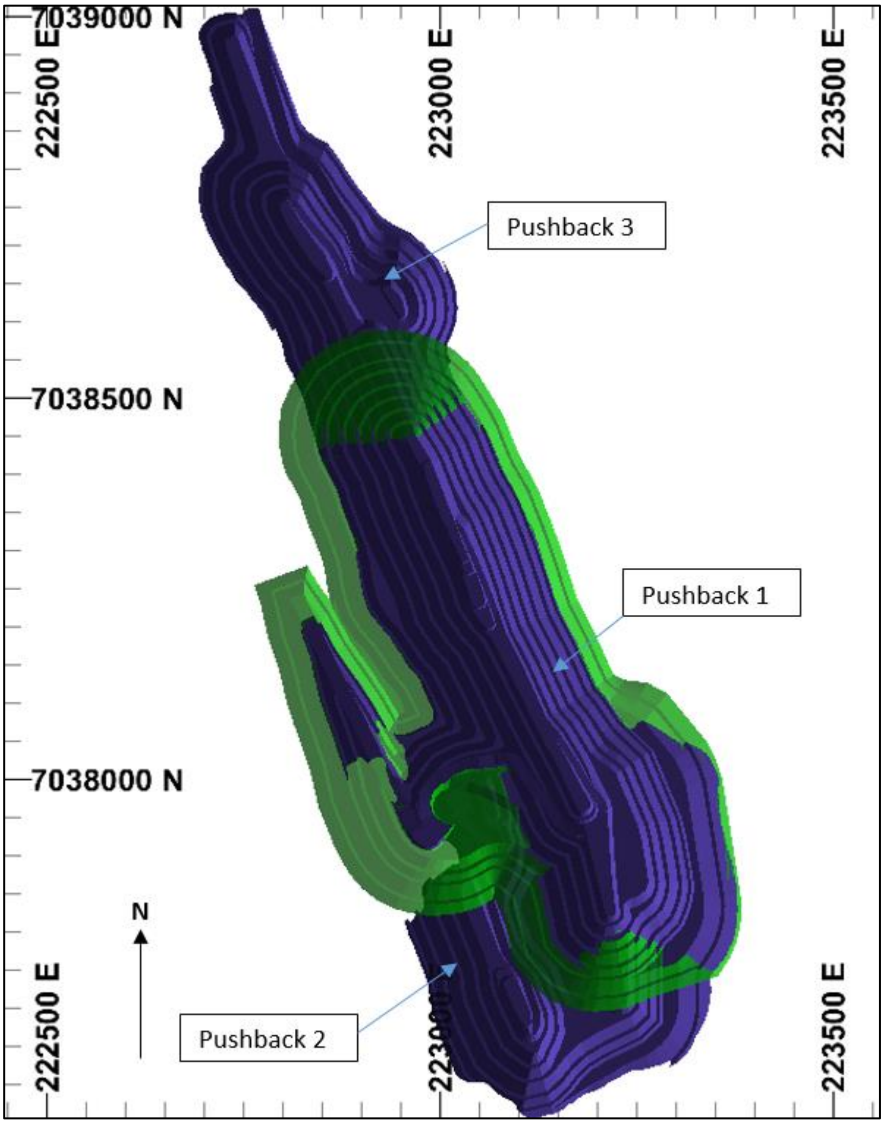


Figure 2: Matilda M3 and M4 Open pit design with Pushbacks

The second pit Blackham plans to mine is the main Matilda M3/M4 pit. The M3/M4 mine design cuts back a previously mined open pit. Three pushbacks have been designed as shown in Figure 2. Goodbye cuts have been designed in the pit floors. The M3/M4 pit is almost 2kms long with a final pit depth of approximately 105m.

The M3 pit has been dewatered and dewatering of the M4 pit is in progress.

Cut-off grade parameters were determined based on previous Feasibility Study work and quoted prices from contractors and suppliers. Cut-off grade sensitivity analysis has been carried out using the detailed financial model to check assumptions.

Matilda Resource Update

This JORC 2012 compliant resource update is based on reverse circulation (RC) and diamond drilling completed by Blackham, as well as extensive historical drilling and past mining information. Mineralised zones were interpreted using 0.5g/t grade envelopes and 2m maximum contiguous internal dilution, constrained within shallow (~30°NNE) plunging lodes within predominantly sheared and altered basalts and minor metasediments.

This conversion of Inferred resources into the Indicated category is a result of the infill drilling conducted in the key areas of the M1, M3 and M4 mineralised trends. Additional Inferred and Indicated mineralisation is also included in zones along the M6 and M10 trends.

A new resource was completed extending the M6 mineralisation situated immediately north of the previously mined M6 pit. It is on the same Au-mineralised structure as the M1 deposit that is located 800m further north. The resource for the M6 deposit now stands at **482,000t @ 1.7g/t for 26,000oz** Au Indicated and Inferred. The M6 deposit has not been included in the mine plan or reserves. Initial mining studies look positive on the deposit. The exploration team is still in the progress of drilling the extensions of the M6 deposits both along strike and down plunge.

The Measured portion of the Matilda resource is defined where the drill spacing is predominantly at 10m by 10m and continuity of mineralisation is robust. The Indicated portion of the resource is defined where the drill spacing was predominantly at 25m by 25m and individual lodes include at least 3 drill hole intersections and continuity of mineralisation was strong. The Inferred Resource includes the down depth lode extensions or minor lodes defined by sparse drilling.

Underground Mining Inventory & Reserves

In July 2016, Blackham plans to commence underground mining of the high grade Golden Age orebody. **The Golden Age initial mine plan consists of 206,000 @ 5.8g/t for 38,000oz of free milling ore** which will be mined over the first 2 years and remains open both to the east and up dip. The Golden Age underground Reserve comprises 112,000t @ 6.0g/t for 21,000oz. The Golden Age UG mine plan includes only 13,000oz of inferred resource (approx. 34%). The Golden Age reef has existing access via the Bulletin decline and has mining infrastructure in place and good geotechnical conditions which has allowed easy re-entry to the mine. The average stope width is 1.5m.

The updated Golden Age Reserve design is illustrated in Figure 3. Surveyed as-constructed voids are shown as grey, the February 2016 Reserve design is shown in blue, and the June 2016 Reserve design is coloured green in this diagram. The 2016 drilling and upgraded resource has been successful in converting Inferred into Indicated resources and driving stopes further east.

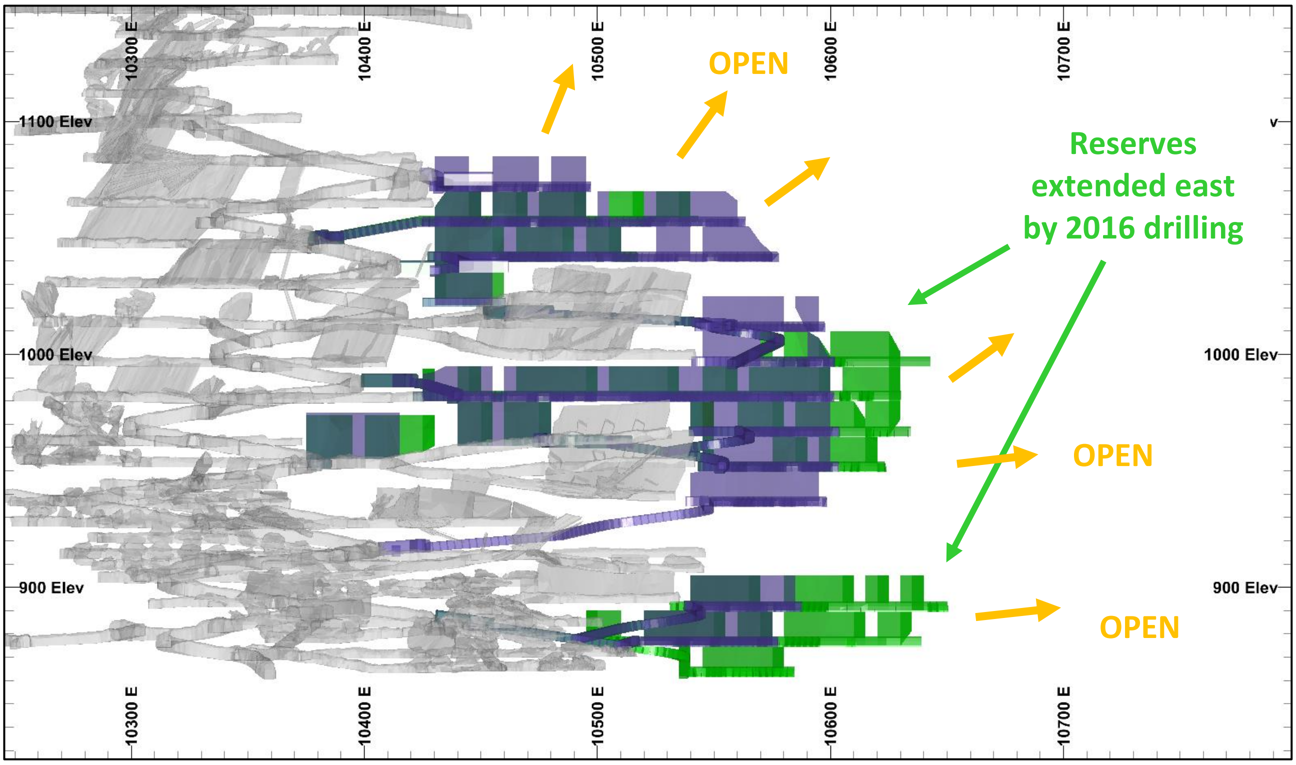


Figure 3: Golden Age Long-Section Looking North with June 2016 Reserve Estimate Design (Green) Compared to February 2016 Design (Blue).

The Blackham mining team has begun assessing a plan to recover remanent ore from the previously mined areas in grey. Initial scoping work suggests a moderate amount of additional tonnes could be recovered cheaply over the first 18 months of production. The remanent mineralisation has not been included in either Resources, Inventory or Reserves.

Underground production at the Golden Age, Bulletin and East-West underground mines will be predominantly by top-down mechanised longhole open stoping with in-situ pillars retained for stability. Lower areas of the Bulletin Underground have been assumed to be mined using a bottom-up modified Avoca method with unconsolidated backfill based on geotechnical advice. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation, and diesel-electric longhole rigs used for production drilling. The mining methods chosen are well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy.

Underground stopes were designed inclusive of minimum mining width plus dilution 'skins'. Dilution width estimates were provided by independent geotechnical consultants based on historical experience, production data and surveyed voids, and geotechnical analysis. Dilution was assumed to carry no grade. For Golden Age, this comprised a minimum planned width of 1m plus 0.2m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 1.4m at 15m sub-level intervals. Golden Age ore development tonnes and grades have been modelled assuming a resue split firing development method. Bulletin Sulphide has a minimum planned width of 2m plus 0.2m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 2.4m at 20-25m sub-level intervals. For East-West this comprised a minimum planned width of 2 m plus 0.2m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 2.4m at 20-25m sub-level intervals. Mining recovery of 95%

was assumed for the stopes at all the underground operations. Ore development had an assumed 100% mining recovery, based on historical experience and industry standards.

Within 11 months of first entering the Wiluna underground mine Blackham has developed an **underground mine plan comprising 3.4Mt @ 5.0g/t for 549,000oz** which will be mined over the initial 7 years. The underground Reserve comprises 1.1Mt @ 5.0g/t for 250,000oz. The underground mine plan includes 271,000oz of Inferred Resource (approx. 49%). Reserve infill and extensional drilling is ongoing in the underground.

There is a lower level of geological confidence associated with Inferred Mineral Resources used in this report and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. Blackham over the last year has however demonstrated a high conversion of Inferred Resources into Reserves and has 3.8Moz of resources sitting outside its mine plan that it continues to conduct mining studies on.

Golden Age Resource

Blackham is pleased to report its updated 2012 JORC-compliant resource estimate over the Golden Age deposit of 1.3Mt @ 3.8g/t for 158,000oz Au.

This Golden Age surface oxide mineralisation is an extension of oxide and transitional mineralisation from the previously mined Golden Age pit.

Golden Age mineralisation is free milling ore with gold mineralisation located throughout the quartz reef, 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 bound in the sulphides as with the refractory ores. The mineralisation is mainly in the quartz reef but there are some splays of quartz, especially to the footwall which can contain gold. Geological and estimation information can be found in Appendix A.

Table 4: Golden Age Resources

Deposit	Indicated			Inferred			Total		
	Tonnes t	Au g/t	Au Oz	Tonnes t	Au g/t	Au Oz	Tonnes t	Au g/t	Au Oz
Golden Age Upper (UG)				460,000	3.2	50,000	**460,000**	**3.2**	**50,000**
Golden Age Middle (UG	124,000	8.9	35,000	61,000	9.1	18,000	**185,000**	**9.0**	**54,000**
Golden Age Lower (UG)	370,000	5.5	6,000	131,000	4.5	19,000	**168,000**	**4.8**	**26,000**
Golden Age Surface (OP)	220,000	1.7	10,000	250,000	1.9	20,000	**470,000**	**1.8**	**30,000**
Total	**381,000**	**4.2**	**51,000**	**902,000**	**3.7**	**107,000**	**1,283,000**	**3.8**	**158,000**

This Golden Age resource has been estimated using an ordinary kriging block model with a 100g/t top cut. Bottom cuts of 0.5g/t have been used in the oxide and transition. In the fresh bottom cuts of 2g/t above 200m and 3g/t below 200m depths have been used.

To date exploration and mining studies have focused on the high grade Golden Age middle underground area where mining will commence in July 2016. The Blackham is assessing a plan to recover remanent and extensional mineralisation from the previously stopped areas in the Golden Age middle and upper areas.

The Golden Age surface deposit has not been included in the mine plan or Reserves. Initial mining studies look positive on the deposit. The exploration team is currently planning a drill programme on the extensions of the Golden Age surface and upper deposits.

Galaxy

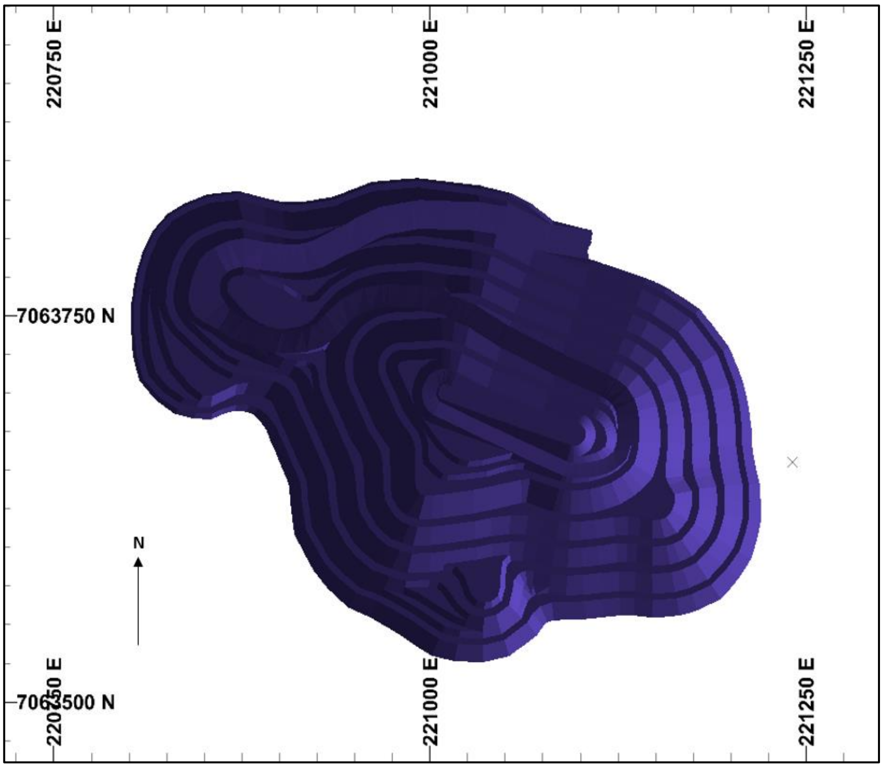
The revised Galaxy resource estimate now stands at **785,000t @ 2.7g/t for 68,000oz Au** and is now 63% Indicated. The Galaxy orebody is located 13km NNW of the Wiluna Gold Plant. The Galaxy quartz reef resource has been estimated using an ordinary kriging block model reported above a 0.60g/t bottom cut.

Table 5: Galaxy Resource

Deposit	Indicated			Inferred			Total		
	Tonnes t	Au g/t	Au Oz	Tonnes t	Au g/t	Au Oz	Tonnes t	Au g/t	Au Oz
Galaxy	427,000	3.09	42,000	358,000	2.2	25,000	**785,000**	**2.7**	**68,000**
Total	**427,000**	**3.1**	**42,000**	**358,000**	**2.2**	**25,000**	**785,000**	**2.7**	**68,000**

The Galaxy quartz reef is initially planned to be mined by open pit with Reserves totalling 338,000t @ 2.8g/t for 30,000oz. The Galaxy mine is a green field site with free milling ore that starts from surface and has a final pit depth of approximately 90m. The Galaxy pit design is shown in Figure 4.

Figure 4: Galaxy Pit Design June 2016



Matilda Approvals, Funding and Execution

Blackham now has in place all its Matilda Gold Project approvals required to commence operations.

As announced on 14 June 2016, Orion Mine Finance ("Orion") has confirmed the availability of the $23 million Project Facility under the revised funding agreement (see ASX Announcement dated 7 Dec 2015) and Blackham has lodged a drawdown notice for $15 million.

Blackham has successfully put together a quality operational team that is very experienced in gold exploration, development and operations. This experienced team, existing plant and infrastructure and the processing of soft Matilda oxides from open pits at the beginning of the mine plan, equates to a low risk start up strategy.

Blackham expects to commence mining very shortly with gold production expected during the September 2016 quarter.

For further information on Blackham please contact:

Bryan Dixon
Managing Director
Blackham Resources Limited
Office: +618 9322 6418

Tony Dawe
Professional Public Relations
Office: +618 9388 0944

Matilda Gold Resources

The Matilda Gold Project now has **46Mt @3.3g/t for 4.8Moz** of resource all within a 20 kilometres radius of Blackham's 100% owned Wiluna gold plant capable of 1.3Mtpa for over 100,000ozpa gold production. Measured and indicated resources now total **22Mt @ 3.4g/t for 2.4Moz**.

Table 6: Matilda Gold Project Resources Summary

Matilda Gold Project Resource Summary												
Mining Centre	Measured			Indicated			Inferred			Total 100%		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda Mine	0.2	2.1	13	7.8	1.8	447	5.1	1.6	261	13.1	1.7	**721**
Golden Age				0.4	4.5	51	0.9	3.7	107	1.3	3.8	**158**
Galaxy				0.4	3.1	42	0.4	2.2	25	0.8	2.7	**68**
Williamson Mine				3.3	1.6	170	3.8	1.6	190	7.1	1.6	**360**
Regent				0.7	2.7	61	3.1	2.1	210	3.8	2.2	**271**
Bulletin Upper				0.9	4.2	120	0.7	5.5	130	1.6	4.8	**250**
Henry 5 - Woodley - Bulletin Deeps				2.1	5.9	400	0.8	4.6	120	2.9	5.6	**520**
Happy Jack - Creek Shear Upper				0.1	2.2	7	0.4	3.2	46	0.5	3.0	**53**
Happy Jack - Creek Shear Lower				1.5	5.9	290	1.3	4.8	200	2.9	5.4	**490**
East Lode				1.0	5.2	170	2.3	4.7	340	3.3	4.8	**510**
West Lode				1.4	5.5	240	2.8	5.2	460	4.2	5.3	**700**
Burgundy - Calais				1.3	6.0	250	0.3	5.7	60	1.6	6.0	**310**
Other Wiluna Deposits				1.1	4.5	165	1.5	4.0	195	2.6	4.1	**360**
Total	**0.2**	**2.1**	**13**	**22**	**3.4**	**2,413**	**23**	**3.1**	**2,344**	**46**	**3.3**	**4,771**

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

Competent Persons Statement

The information contained in the report that relates to Exploration Targets and Exploration Results at the Matilda Gold Project is based on information compiled or reviewed by Mr 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 Gold Project Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcements dated 14 March 2016 and 17 June 2016 continue to apply and have not materially changed.

The information contained in the report that relates to Ore Reserves at the Matilda Gold Project is based on information compiled or reviewed by Matthew Keenan. Mr Keenan confirmed that he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 JORC Edition). He is a Competent Person as defined by the JORC Code 2012 Edition, having more than five years' experience which is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which he is accepting responsibility. Mr Keenan is a Member of The Australasian Institute of Mining and Metallurgy, has reviewed the Report to which this consent statement applies and is a full time employee working for Entech Pty Ltd having been engaged by Blackham Resources Ltd to prepare the documentation for the Matilda Gold Project on which the Report is based, for the period ended 13 June 2016. He disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. Mr Keenan verifies that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Ore Reserves.

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 – Compliance

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
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such*	• Historically (pre-Blackham Resources), RC drill samples were taken at predominantly 1m intervals, or as 2m or 4m composites. 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 reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig. In places 4m composites were obtained using spear sampling, with mineralised samples to be subsequently re-assayed using the original 1m splits. • For Blackham's (BLK) 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. • BLK Diamond drilling was completed to industry standard using varying sample lengths (0.3m to 1.2m) based on geology intervals. • BLK'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 bottom-of hole cut line. Drill core is measured by tape and compared to downhole core blocks consistent with industry standards. • At the laboratory, samples >3kg were 50:50 riffle split to become <3kg. The <3kg splits were pulverized to produce a 50g charge for fire assay. Historical assays were obtained using either aqua regia digest or fire assay, with AAS readings. • Blackham Resources analysed samples using Quantum Analytical Services (QAS), ALS laboratories or SGS Laboratories in Perth. Analytical method was Fire Assay with a 50g charge

	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.	and AAS finish.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• BLK DD data reported herein is HQ3 and PQ diameter, and orientated where possible using a Reflex ACT III tool. Downhole surveys are taken every 30m using a Reflex EZ-TRAC tool. Historical drilling data contained in this report includes RC, RAB 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 half core samples. It is unknown if historical core was orientated, though it is not material to this report. All Blackham RC drilling used a face-sampling bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• For Blackham DD drilling, drill core recovery is measured by drillers and BLK staff, logged per drill run and stored in a digital database. For BLK RC drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. 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. • For Blackham DD drilling, sample recovery is maximised by using best-practice drilling techniques, such as short drill runs, and split tubes. For depth mark-up and sampling the core is reconstructed in an orientation angle bar to ensure accuracy. Representivity of samples is maximised by routinely sampling half core on the right-hand side of the orientation line, and is checked through analysis of duplicate sampling results. 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 Blackham drilling, no such relationship was evaluated as sample recoveries were generally very good. For historical drilling no relationship was investigated as recovery data is not available.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Samples have been routinely logged for geology, including lithology, colour, oxidation, veining and mineralisation content. This level of detail is considered appropriate for Mineral Resource estimation. • Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative. • Holes were logged entirely. • Core photography was taken for BLK diamond drilling.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half*	• Sampling techniques and preparation are not known for all the historical drilling. 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. Sawn half core HQ3 or quarter core PQ is routinely analysed by BLK. • Mention is made in historical reports of 1m riffle split samples for Chevron RC drilling, and of 1m and 2m or 4m composites for Agincourt drilling. For Blackham drilling, 1m samples were split using a cone splitter. 4m composite samples were collected with a spear tube where mineralisation was not anticipated. 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. • RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice. • Half-core HQ3 sampling and quarter core PQ are considered standard industry practice for this style of mineralisation. Quarter coring of PQ was selected due to the larger sample volume relative to HQ3, and the desire to retain maximum sample volume for other metallurgical tests.

	sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Boyd crushing to -2mm for samples >3kg is completed owing to the coarse nature of gold nuggets, prior to obtaining a <3kg sub-split for pulverisation. For RC sampling, riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. • Field duplicates were collected every 40m down hole for BLK holes by taking a 50:50 split from the Boyd crusher / splitter. Analysis of results indicated good correlation between primary and duplicate samples. 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. • 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, whereas Aqua Regia is a partial digestion method. The lower detection limits of 0.01ppm or 0.02ppm Au used at various times are considered fit for purpose. For Blackham drilling, Bureau Veritas, Genalysis, ALS, SGS and QAS completed the analyses using industry best-practice protocols. These are globally-recognized and highly-regarded companies in the industry. • No geophysical tools were required as the assays directly measure gold mineralisation. For Blackham drilling, down-hole survey tools were checked for calibration at the start of the drilling program and every two weeks. • Comprehensive programs of QAQC have been adopted since the 1980's. • BLK drilling: certified reference material and blanks were submitted at a 1:40 ratio. A lab barren quartz flush is requested following predicted high grade (e.g. visible gold). Check samples are routinely submitted to an umpire lab at 1:40 ratio. Analysis of results confirms the accuracy and precision of the assay data. • Chevron inserted standards, blanks and field duplicates at 1:20 ratios; the Chevron data relates to the majority of in-pit drilling at Matilda. • Results show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%). A recognised laboratory has been used for historical analyses (Classic Labs, Analabs, ARM).
Verification of sampling	• *The verification of significant intersections by either independent or alternative*	• BLK's significant intersections are verified by alternative company personnel. For historical results, significant intersections can't be independently verified. However, database validation

and assaying	*company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	has been done to ensure the latest assay set appears i.e. where intervals have been sub-split the newest assays are given priority. • Some holes in the DD program have been designed to twin historical RC and BLK RC drilling; results broadly match the DD results. • 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 2015". • Conversion of lab non-numeric code to numeric for estimation.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 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. • MGA Zone 51 South. • 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. • A topographical survey has been flown with 30cm vertical accuracy, which has been used to determine historical pre-Blackham collar RL's.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Blackham's exploration holes are generally drilled 25m apart on east-west sections, on sections spaced 50m apart north-south. • Using Blackham's drilling and historical drilling, a spacing of approximately 12.5m (on section) by 20m (along strike) is considered adequate to establish grade and geological continuity. Areas of broader drill spacing have also been modelled but with lower confidence. • The mineralisation lodes show sufficient continuity of both geology and grade between holes to support the definition of 2012 JORC compliant resources. • 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. • RC Samples have been collected on 1m lengths. All assay intervals are in multiples of 1m so there are no residual excluded intervals. Diamond Drill core is logged and divided into sample intervals that have a minimum sample length of 0.3m and a maximum sample length of 1.2m. Geological boundaries are typically used to determine intervals. Most sample lengths are at 1m

		intervals and statistical compositing is not applied until the estimation stage.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drill holes were generally orientated towards the west to intersect predominantly steeply east-dipping mineralisation. However, around the historical pits optimal drill sites were not always available, so alternative orientations were used. Thus drill intercepts are not true thicknesses. • Such a sampling bias is not considered to be a factor as the RC technique utilizes the entire 1m sample. • For Blackham DD sampling, 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.
Sample security	• *The measures taken to ensure sample security.*	• 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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory. Historical assay techniques and data have not been reviewed in detail owing to the preliminary stage of exploration work. • Blackham Resources staff have visited the ALS lab and confirmed that the sample handling systems and techniques meet the industry standard.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral*	• Data is validated upon upload into the Datashed database such that only codes within the various code libraries are accepted. Assay data is loaded from digital files. • Data is subsequently validated using Datashed validation macros, and then in Micromine and Surpac using validation macros. Data is checked for holes that are missing data, intervals that

	Resource estimation purposes. • Data validation procedures used.	are missing data, missing intervals, overlapping intervals, data beyond end-of-hole, holes missing collar co-ordinates, and holes with duplicate collar co-ordinates.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The site has been visited by the Competent Person, and no problems were identified.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The deposit has previously been mined, which has confirmed the geological interpretation. • 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 consistently by various geologists, though it is likely that some of the variations between drill holes are due to different logging styles or interpretations. • 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. • 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. • 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.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Matilda deposit is comprised of a number of domains; M1, M2, M3, M4, M5, 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.
Estimation and	• *The nature and appropriateness of the estimation technique(s) applied and key*	• The sample domains were flagged into an Access database from a validated wireframe. • Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate.

modeling techniques	*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.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind 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*	• 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%. • Gold grades were estimated into the model by ordinary kriging using the block model field coding to constrain the estimate. • Soft boundaries was utilised between the oxidation surfaces. The majority of the deposit is currently situated within oxide. • Only samples contained within each individual ore wireframe were used for the estimate of that lode. • 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. • 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. • Blackham has not made assumptions regarding recovery of by-products from the mining and processing of the Matilda Au resource. • No estimation of deleterious elements was carried out. Only Au was interpolated into the block model. • The parent block dimensions used were 10m NS by 2.5m EW 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. • No assumptions were made on selective mining units. • 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 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 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.

	process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• Search passes were utilised to populate blocks using search ellipse ranges from 30 m to 60 m. 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 in an attempt to limit grade smoothing within the very close (less than 20m) spaced drill holes.
		• Topcuts were determined from the aforementioned statistical analysis. A number of factors were taken into consideration when determining the top-cuts including:
		  o The disintegration point of the data on the probability plots;
		  o Having a coefficient of variance (CV) under 2.0; and
		  o Reviewing the model (block) grades against the composites.
		• The estimate was validated using a number of techniques including but not limited to:
		  o A visual comparison of block grade estimates and the drill hole data;
		  o A comparison of the composite and estimated block grades;
		  o Use of SWATH plots.
		• A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• 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 900mRL (which occurs on average at a depth of 200m below the topographic surface) and at a 2g/t cut-off below the 900mRL for M1, M2, M3, M4, M5, M6 and M10. 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.

Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Blackham believes that a significant portion of the Matilda Deposit defined Mineral Resource has 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.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.*	• 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.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable*	• Blackham Resources has submitted a detailed Mine Closure Plan to the Department of Mines and Petroleum. • No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant

	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.	issues are known, that may affect the estimate.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• 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. • Values of 2.1 t/m3 for oxide, 2.4t/m3 for transitional and 2.8t/m3 for fresh material were used.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. ○ Geological continuity and volume models;

	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	○ 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 • 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. 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. • 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. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• External audits have been completed and a comparison has been made with the previous resource estimate completed by RPM.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within*	• This resource estimate is considered appropriate for a definitive study into the mining of the Matilda deposit and reports global estimates. • 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. • The Mineral Resource statement relates to global estimates of tonnes and grade. • The deposit is not currently being mined. Historical production figures supplied to Blackham

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

JORC Code, 2012 Edition – Table 1 (Wiluna)

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has*	• This is a portion of a large drilling database compiled since the 1930's by various project owners. Only the drilling results contained in this document are considered in this table, as it is impractical to comment on the entire database. Golden Age has been mainly core drilled from underground, though some surface RAB and RC drilling has tested the shallow portions of the deposit. Drilling data contained in this report includes RC and diamond core data. Drilling data is more complete for holes drilled since the early 2000's. Sundry data on sampling quality is not available and not evaluated in earlier drilling. Blackham Resources has used reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig. • 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. NQ2 diamond holes were completed by BLK in Golden Age and half core sampled. The drilling was completed to industry standard using varying sample lengths (0.3m to 1.2m) based on geology intervals • Historically, RC samples were composited in the field on 2m or 6m composites, with high-grade samples subsequently re-sampled on 1m intervals. Composited samples were spear-split, and / or reduced in size in the field using a riffle splitter to ensure sample representivity. For Blackham drilling, 4m composites were collected in the field, with 1m splits to be assayed where mineralisation is encountered. At the laboratory, samples >3kg were 50:50 riffle split to become <3kg. The <3kg splits were pulverized to produce a 50g charge for fire assay. • 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. Blackham Resources analysed samples using laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish (P-FA6).

	inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Historical drilling data contained in this report includes RC and DD core samples. RC sampling utilized a face-sampling hammer of 4.5" or 5.5" diameter, 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 drilling is RC with a face-sampling bit or NQ2 diamond.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• For Blackham drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. 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. • For Blackham 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. • Diamond Drill core is logged and divided into sample intervals that have a minimum sample length of 0.3m and a maximum sample length of 1.2m. Geological boundaries are typically used to determine intervals.

		Some intervals logged as 'stope' were assayed, presumably this is back-fill material and would be excluded from detailed investigation of these prospects. The presence of these intervals does not materially affect assessment of the prospects at this stage. • For Blackham drilling, no such relationship was evaluated as sample recoveries were generally very good. For historical drilling no relationship was investigated as recovery data is not available.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Samples have been routinely logged for geology, including lithology, colour, oxidation, veining and mineralisation content. This level of detail is considered appropriate for exploration drilling. • Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative. • Holes were logged entirely. Geology data has not yet been located for some holes, database compilation is on-going. • Core photography was taken for BLK diamond drilling.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half*	• For core samples, it is assumed that sawn half-core was routinely sampled. 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. • Historically, RC and RAB samples were riffle split for dry samples; wet samples were collected in polyweave bags and speared. RC and RAB samples were initially composited on 2m, 4m or 6m intervals. Composites grading >0.1g/t were subsequently assayed on 1m intervals. For Blackham drilling, 1m samples were split using a cone splitter. 4m composite samples were collected with a spear tube where mineralisation was not anticipated. 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. • 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.

	sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 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 considered a total digestion technique, whereas aqua regia is a partial digestion. Both techniques are considered appropriate for analysis of exploration samples. • No geophysical tools were used to obtain analyses. • Field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Results generally fall within acceptable levels. However, for holes drilled prior to this no QAQC data has been located or evaluated. Some intervals logged as 'stope' were also assayed, presumably this is back-fill material and would be excluded from detailed investigation of these prospects. The presence of these intervals does not materially affect assessment of the prospects at this stage, although if anything prospectivity is enhanced as pre-mining metal tenor was greater than the drilling results indicate in stoped areas. For Blackham drilling certified reference material and blanks were submitted at 1:40 and 1:40 ratios for various campaigns and duplicate splits were submitted at 1:40 ratio with each batch of samples. Check samples are routinely submitted to an umpire lab at 1:40 ratio. Analysis of results confirms the accuracy and precision of the assay data.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Blackham's significant intersections have been verified by several company personnel. For historical results, significant intersections can't be independently verified. However, database validation and cleaning has been done to ensure the latest assay set appears i.e. where intervals have been sub-split the newest assays are given priority. • The use of twin holes is not noted, as this is not routinely required. However, drilling at various orientations at a single prospect is common, and this helps to correctly model the mineralisation orientation. • 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 Geological Manual 2015". Historical procedures have not been sighted. • Conversion of lab non-numeric code to numeric for estimation.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All historical holes appear to have been accurately surveyed to centimeter accuracy. Blackham holes reported herein have not yet been DGPS surveyed, though collar positions have been GPS located to within several metres accuracy. • Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S. Drilling collars were originally surveyed in either Mine Grid Wiluna 10 or AMG, and converted in Datashed to MGA grid. • An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Each of the prospects mentioned in this report has received sufficient historical drilling to allow structural orientation and lode thicknesses to be confidently interpreted. Drill spacing is general 50m x 25m or better, with holes oriented perpendicular to the strike of quartz reefs. Mineral resources and reserves are not the subject of this report. • For core samples, typically 1m intervals were sampled though 3m composites are noted in some barren zones. Historical RC and RAB samples were initially composited on 2m, 4m or 6m intervals. Composites grading >0.1g/t were subsequently assayed on 1m intervals. For Blackham drilling, samples have been composited, the 1m samples will be submitted for analysis and these results were prioritized over the 4m composite values.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if*	• In the historical data, no such bias is noted or believed to be a material factor. Potentially diamond half-core samples may show such bias to a minor degree; holes are orientated perpendicular to strike to mitigate any such bias. For Blackham drilling, the RC technique utilizes the entire 1m sample so significant bias is unlikely.

	material.	
Sample security	• *The measures taken to ensure sample security.*	• It is not known what measures were taken historically. For Blackham drilling, 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.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory. Historical assay techniques and data have not been reviewed in detail owing to the preliminary stage of exploration work.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary

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

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken*	• A site visit has been undertaken and no concerns or issues were discovered.

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

	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• The modelled wireframes were used to create a blockmodel with a user block size of 2mE by 10mN by 10mRL. The model used variable sub-blocking to 0.5mE by 2.5mN by 2.5mRL. The Block size corresponds to around half of the nominal drillhole spacing for all the main lodes.
		• Specifically for the Golden Age narrow vein a user block size of 2mE by 2mN by 2mRL. The model used variable sub-blocking to 0.5mE by 0.5mN by 0.5mRL. The smaller block sizes are based on the narrow nature of the Golden Age ore body and the corresponding data density.
		• The search ellipses used were based on the ranges of continuity observed in the variograms along with considerations of the drillhole spacing and lode geometry. The search ellipse was rotated to best reflect the lode geometry and the geology as seen in the drilling and as described in the logging. This geometry was checked to ensure that it was also supported by the variogram analysis.
		• Ordinary kriging parameters were also checked against those used in previous resource estimates and variography studies. No significant differences were discovered.
		• Three search passes were used to populate blocks using search ellipse distances based on ranges observed in the variograms. Typically the first pass was no more than 30 m and a second pass no more than 60 m. Each pass incorporated a different set of sample selection criteria to ensure blocks were filled with an appropriate level of statistical confidence.
		• For the first two passes at least 3 individual drillholes were required to complete the estimate.
		• 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;
		  ○ A comparison of the estimated block grades for the ordinary kriged model against an inverse distance model.
		  ○ A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.
		  ○ A comparison of the estimated block grades against the composite grades along

		northings.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The nominal cut-off grade of applied for the individual resource areas appears to be a natural cut-off between mineralised veins and host rock as determined from analysis of log probability plots of all samples at each prospect. Mineralisation boundaries are typically sharp in that there is generally a significant order of magnitude (2 to 4 fold) increase in gold values between ore and waste zones. • 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. • A cut-off of 0.5g/t was applied in the in the oxide and transitional. In fresh rock less than 200m below the surface a 2.0g/t cut-off was applied.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• No mining factors or assumptions have been applied although it is envisaged that the resource has been created on the basis of an underground mining method.

Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.*	• Wiluna ores are typically extremely refractory, with most gold occurring in either solid solution or as submicroscopic particles within fine-grained sulphides. • 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.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered*	• No environmental, permitting, legal, taxation, socio-economic, marketing or other relevant issues are known, that may affect the estimate.

	this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk densities were assigned as 1.80 t/m^3 for oxide, 2.40 t/m^3 for transitional and 2.80 t/m^3 • A total of 16,206 bulk density determinations have been collected by extensive sampling of diamond drill core in Calais – Henry 5, East Lode North and Calvert areas throughout the orebody and in wallrock adjacent to the mineralisation. All sections of the underground resource are in primary rock, and Bulk Density values are relatively uniform throughout. • Bulk Density determinations were completed by Apex staff for every assayed interval since the 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.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view*
		• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate.
		  ○ Geological continuity and volume models;
		  ○ Drill spacing and available mining information;
		  ○ Modelling technique
		  ○ Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters.
		• The classification for this model was predominantly based on the estimation pass. With the first pass relating to an indicated resource and the second pass being inferred.
		• The classification of the blocks was also visually checked and adjusted to remove any "spotted dog" effects. No measured resources were calculated.

	of the deposit.	
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Audits have been undertaken on the resource estimates completed by Apex Minerals in 2012. No major issues were discovered and recommendations made from those audits have been assessed and included where required in subsequent estimates. • No specific review or audit has been under on the updated Golden Age Resource estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• This resource estimate is intended an underground mining assessment and reports global estimates.

JORC Code, 2012 Edition Table 1 – Galaxy

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be 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.*	• Prior to Blackham Resources, a majority of samples were obtained on 1m intervals, with a smaller number of samples obtained on 2m, 4m and 8m intervals. Early stages of RAB and RC utilised 8m or 2m composites, respectively, collected in the field. Subsequently, selected zones of economic interest were riffle-split and re-assayed on 1m intervals. Later stages of RC drilling were sampled on 1m intervals from surface in the field using a riffle splitter. DD samples were obtained on 1m intervals in intervals containing mineralisation. • Blackham Resources obtained 1m samples using a rig-mounted cone splitter.

Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Prior to Blackham Resources, the deposit was drilled using 497 RAB holes for 18778.6m, 93 RC holes for 7441m and 1 DD hole for 160m. RAB holes were drilled on 100m-spaced NS and EW lines, with holes generally spaced either 25m apart or 12.5m apart on each line. Most RAB holes were drilled vertically though some were angled towards either the west or south. Some holes were drilled off the grid pattern adjacent to historical workings and early RC holes were drilled either vertically or angled towards the E, W, or S. In later phases, RC holes were angled optimally towards the SW. The single DD hole was optimally angled towards the SW. Hole diameter information is not recorded.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Prior to Blackham Resources drill sample recovery methods were not recorded. • Blackham Resources estimates RC sample recovery visually as a percentage, and records this data on a per metre basis in a digital database. • Blackham Resources procedure is for drilling to pause at the end of each metre drilled to allow all the sample from that metre to be captured in the sample bag. • Not investigated for Blackham Resources samples- recoveries were found to be 100% in greater than 99% of samples.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Samples have been routinely logged for geology, including lithology, colour, oxidation, veining and mineralisation content. This level of detail is considered appropriate for exploration drilling. • Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative. • Holes were logged entirely. • Core photography for the single diamond drillhole was not located.
Sub-sampling techniques and	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Prior to Blackham Resources, RC and RAB samples were routinely composited in the field (method not recorded), with subsequent zones of mineralisation riffle-split on

sample preparation	• *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.*	1m intervals. Moisture not recorded. • Blackham Resources obtained samples using a cone splitter. Over 97% of samples were dry. Blackham Resources policy is to abandon RC drilling after 3 successive wet samples to allow a diamond core tail to be drilled, thus maintaining sample quality. • Prior to Blackham Resources, analytical results for standards, blanks, duplicates, repeats and umpire lab analyses are not available. However, field duplicates and blanks are recorded for 3 Agincourt-era holes (RWR* prefixed) as evidenced by extant sample registers, though the raw QAQC data was not located. For 11 GALC* prefixed holes (Great Central Mines-era) regular missing sample numbers in the assay sequence suggest that QAQC samples were regularly inserted, though these assay values are not present in the QAQC database. QAQC samples do not appear to have been used for earlier Wiluna Mines RC and RAB drilling, nor for the single Normandy DD hole prefixed GALD*. Generally speaking, for the more recent Agincourt Resources and Great Central Mines drilling it appears that QAQC measures were implemented though the data could not be located for verification. • Blackham Resources collected field duplicates at 1:20 ratio, and submitted field blanks and certified reference material samples at 1:40 ratio. Blackham Resources checks that QAQC sample results are within acceptable limits prior to accepting the lab results. • As above, it appears field duplicates were collected for certain Great Central Mines-era RC holes; it appears that QAQC measures were implemented though the data could not be located for verification. • Prior to Blackham Resources, the sample sizes typically obtained from RAB, RC or DD drilling over 1m intervals are believed to be appropriate for the style of mineralisation being sampled, being gold mineralisation finely disseminated within and around veins, over mineralised intervals of several metres in length. • Blackham Resources typically collected 2-4kg samples the larger 1m bulk samples. Again, these are considered appropriate for the material being sampled.

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.*	• Prior to Blackham Resources, laboratory name and locations not verified. Assaying techniques not known for all samples. Wiluna Mines analysed for gold using Aqua Regia digestion with AAS reading (AR_AAS) and follow-up Fire Assay with AAS reading (FA_AAS) in ore-grade areas. Presumably these samples were analysed at the mine site lab, though this is unconfirmed. Normandy utilised screen fire assay (SFA) and Agincourt utilised FA_AAS. • Blackham Resources has analysed samples at ALS laboratories using industry standard practices. The Fire assay method of determination used is a total digestion technique, more accurate than Aqua Regia. Field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Results generally fall within acceptable levels. • No geophysical tools were used to determine any element concentrations used in the resource estimate. • As above, it appears field duplicates were collected for certain Agincourt Resources and Great Central Mines-era RC holes; it appears that QAQC measures were implemented though the data could not be located for verification.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Blackham Resources has implemented QAQC controls as per the sections above. • Prior to Blackham Resources, significant intercepts are inherited from historical databases. The Competent Person validated the database; however, significant intercepts have not been independently verified. • For Blackham Resources results, several staff received and reviewed the analytical results. • The use of twin holes is not noted, as this is not routinely required. • Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine and Surpac were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. • Assay data has not been adjusted.

Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Prior to Blackham Resources, collar survey methods are not recorded in the database, though data appears at either mm or cm accuracy, which suggests that DGPS collar pick-ups were routinely obtained. Collar co-ordinates were transformed to GDA_94 using Datashed internal grid transformation parameters prior to resource estimation. • Blackham Resources collar positions are planned collar positions as marked out using a handheld GPS to metre-scale accuracy. These will be surveyed using a DGPS to mm accuracy when logistics allow.historical holes appear to have been accurately surveyed to centimeter accuracy. • MGA_94 Zone 51 S. Local RL has 1000m added to value. • Drillhole collar locations on screen match with that observed on the ground and from aerial photography. • Prior to Blackham resources, collar RL's appear to have been collected to mm or cm accuracy. Collars are closely aligned with the undulating surface topography. Only two holes appear to show nominal collar RL's of 1530m RL. • Blackham RL's are estimated in line with the existing topography digital terrain model. Accurate RL surveys will be obtained in due course when logistics allow.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Prior to Blackham Resources, the hole spacing is irregular owing to various phases of drilling having been completed, with some phases completed without an understanding the orientation of mineralisation. Typically however, hole spacing is less than 25m in EW and NS directions. • Blackham Resources drilling is set out on a 20x20m pattern, with holes orientated towards southwest perpendicular to the dominant orientation of mineralisation. There is a secondary orientation of lodes which has also been targeted by drilling holes oriented towards the southeast. • The mineralisation lodes show sufficient continuity of both geology and grade between holes to support the definition of 2012-JORC compliant resources. • However, doubt remains over the geometry of mineralisation in places, and whether

		it is aligned with the dominant NW trend, or the secondary NE trend. This doubt justifies a relatively lower level of confidence under the JORC code. Further drilling is warranted. • Samples have been collected on 1m lengths. All assay intervals are in multiples of 1m so there are no residual excluded intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Prior to Blackham Resources, early vertical RAB and RC drilling was conducted on EW and NS gridlines. This is not optimal for delineation of what is now known to be predominantly NW-SE trending, NE-dipping mineralisation, which has led to non-true width intercepts. Subsequent angled drilling still on EW or NS lines is likewise not optimal, leading to non-true width intercepts. Later RC and DD drilling angled towards the SW (perpendicular to mineralisation) was optimally orientated to intersect the predominantly NE-trending mineralisation. • Given the good drill density and various drill orientations, it appears that the orientation of mineralisation is mostly understood. However, doubt remains over the geometry of mineralisation in places, and whether it is aligned with the dominant NW trend, or the secondary NE trend. This doubt justifies a relatively lower level of confidence under the JORC code. Further drilling is warranted. • Blackham Resources has also identified a secondary orientation of NE-trending lodes which has been targeted by drilling holes oriented towards the southeast. • No orientation based sampling bias has been identified. Owing to the finely disseminated nature of the gold mineralisation, and sampling of full 1m RAB and RC intervals (ie no known half or quarter core), it is unlikely that a material sample orientation bias exists.
Sample security	• *The measures taken to ensure sample security.*	• Prior to Blackham resources, this is not recorded. For Blackham resources drilling, samples are delivered in closed packages to TollIpec transport company by Blackham staff, and stored in a locked yard overnight until dispatch to the laboratory in Perth. Upon arrival, samples are again held in a secure yard, and tracked through the sample processing flow.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Prior to Blackham Resources it is not known if these were conducted owing to lack of historical information.

		• Blackham Resources staff have visited the ALS lab and confirmed that the sample handling systems and techniques meet the industry standard.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary

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

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was undertaken and no concerns were found.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral*	• The interpretation of the mineralisation was carried out using a methodical approach to ensure continuity of the geology and estimated mineral resource using Surpac software. The confidence in the geology and the associated mineralisation is high. • All available geological data was used in the interpretation including mapping, drilling, oxidation surfaces and interpretations of high grade ore shoots.

	Resource estimation. • *The factors affecting continuity both of grade and geology.*	• No alternate interpretations have been completed. • Drill logging has been used to constrain the 3D wireframes. • Gold mineralisation is localised at dilatational bends or jogs along the faults, at fault intersections or associated with later stage cross-cutting structures.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Strike length = ~ 300 metres. • Width (total of combined parallel lodes) = ~ 50 metres. • Depth (from surface) = 0 to 150 metres.
Estimation & modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was*	• The sample domains were flagged into an Access database from a validated wireframe. • Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate. • 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 40%. • Gold grades were estimated into the model by ordinary kriging using the blockmodel field coding to constrain the estimate. • Soft boundaries was utilised between the oxidation surfaces. • Only samples contained within each individual ore wireframe were used for the estimate of that lode. • No previous mining has occurred so no reconciliation data is available for comparison. • The modelled wireframes were used to create a blockmodel with a user block size of 5mE by 10mN by 5mRL. The model used variable sub-blocking to 1.25mE by 2.5mN by 1.25mRL. • The blockmodel was rotated around the Y axis by -43 degrees. • The search ellipse 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. • A number of search passes were utilized to populate blocks using search ellipse ranges from 15 m to 60 m. Each pass incorporated a different set of sample

	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.*	selection criteria to ensure blocks were filled with an appropriate level of statistical confidence. • Topcuts were determined from the aforementioned statistical analysis. A number of factors were taken into consideration when determining the top-cuts including: o The disintegration point of the data on the probability plots; o Having a coefficient of variance (CV) under 2.0; and o Reviewing the model (block) grades against the composites. • The estimate was validated using a number of techniques including but not limited to: o A visual comparison of block grade estimates and the drill hole data; o A comparison of the composite and estimated block grades; o A comparison of the estimated block grades for the ordinary kriged model against an inverse distance model. o A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off of 0.6g/t was applied to the global resource. • This cut-off is based on the assumption that the resource will be mined using an open pit.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this*	• No mining factors or assumptions have been applied although it is envisaged that the resource has been created on the basis of open pit mining method.

	should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for 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.*	• Gold mineralisation is believed to be free-milling and not refractory in nature. • Metallurgical studies completed for Galaxy have confirmed gravity and cyanide leach recoveries averaging 98%.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Mining approvals on waste dump locations has been received for Matilda, Williamson and Wiluna mines. • The tailings storage facilities have been approved under the DER Environmental License.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for*	• Bulk densities were assigned as 1.80 t/m3 for oxide, 2.40 t/m3 for transitional and 2.85 t/m3 • Bulk density data has not been collected by Blackham Resources for the Galaxy Deposit. Therefore, density values have been adopted from known density determinations in line with the geology occurring at a similar stratigraphic level within the Wiluna Mines sequence. In this case density values have been adopted from the Regent deposit, which occurs at a similar stratigraphic level within the

	void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Wiluna Mines sequence.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. o Geological continuity and volume models; o Drill spacing and available mining information; o Modelling technique o Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters. • The classification for this model has predominantly being based on the estimation pass. With the first and second pass relating to an indicated resource and the third and fourth pass being inferred. • Several small localised historical exploration shafts have been reported across the deposit. The underground development associated with these, if any, is unknown. The shafts should be surveyed and their locations flagged as areas of risk in the model. This may change the resource classification in these areas. • The classification of the blocks was also visually checked and adjusted to remove any "spotted dog" effects. No measured resources were calculated.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Resource Evaluation Services (RES) was engaged to undertake a review of the Galaxy Resource Model. They concluded that the Galaxy resource estimate was globally correct and suitable as input to a pit optimisation study. The points of difference and error noted should make no material difference to the global resource, particularly when reported to the correct significant figures.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example,*	• This resource report is intended for an initial open pit investigation and reports global estimates.

	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. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Section 4 Estimation and Reporting of Ore Reserves (Wiluna)

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

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mineral Resources used as the basis of this Ore Reserve were released to market: ○ Galaxy and Golden Age both announced on the 17th June 2016 ○ Wiluna East/West Lode 14th December 2014 ○ Matilda 17th June 2016

		- Williamson 11th February 2016 - Bulletin Upper 14th March 2016 • Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person's most recent site visit was from 31st May to 3rd June 2016.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• A Definitive Feasibility Study has been completed for all material being converted from Mineral Resource to Ore Reserve. • Modifying factors accurate to the study level have been applied based on detailed selective mining unit (SMU) and stope design analysis. Modelling indicates that the resulting mine plan is technically achievable and economically viable.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Cut-off grade parameters were determined based on previous pre-feasibility study work and historical costs from the Wiluna mine. Cut-off grade sensitivity analysis has been carried out using the detailed financial model to check assumptions.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated*	• Detailed mine designs were carried out on all ore sources and used as the basis for the Ore Reserve estimate. • Conventional mining methods were chosen. Open cut operations are planned around using 250 t-class excavators and 140 t dump trucks for waste excavation where working area sizes allowed, and 120 t-class excavators with 90 t dump trucks for ore excavation and in cutback benches or deeper parts of the pits where working room is restricted. Fleet equipment types assumed have been confirmed in a detailed contract tendering process based on the Reserve pit designs. All material excluding existing in-pit backfill or historical waste dumps was assumed

	design issues such as pre-strip, access, etc. • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	to require drilling and blasting using emulsion-type explosives for costing and scheduling purposes. • Underground production at the East-West, Golden Age and Bulletin Sulphide underground mines will be predominantly from top-down mechanised longhole open stoping with in-situ pillars retained for stability. Deeper areas of the Bulletin Sulphide have been assumed to be mined using a bottom-up modified Avoca method with unconsolidated backfill based on geotechnical advice. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation, and diesel-electric longhole rigs used for production drilling • The mining methods chosen are well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy. Suitable access exists for all mines. Dewatering, re-entry and refurbishment of flooded workings was costed and allowed for in the schedule. Allowance was made for earthworks and infrastructure requirements including haul road construction and clearing for site facilities and mining areas. • Independent consultants prepared a geotechnical analysis to a suitable level of detail. This forms the basis of pit wall design criteria, underground stope sizes and pillar designs, underground mining factors and underground development design and support assumptions. • Cost allowances were made for grade control activities in both underground and open pit mines. • Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. All Inferred material has had grade set to waste. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material. • Underground stopes were designed inclusive of minimum mining width plus dilution 'skins'. Dilution width estimates were provided by independent geotechnical consultants based on historical experience, production data and surveyed voids, and geotechnical analysis. Dilution was assumed to carry no grade.

		• For East-West this comprised a minimum planned width of 2 m plus 0.2 m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 2.4 m at 20-25 m sub-level intervals. • For Golden Age, this comprised a minimum planned width of 1 m plus 0.2 m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 1.4 m at 15 m sub-level intervals. • For Bulletin Sulphide this comprised a minimum planned width of 2 m plus 0.2 m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 2.4 m at 20-25 m sub-level intervals. • Open pit mining blocks were diluted by 10% based on detailed SMU analysis. • Mining recovery of 95% was assumed for the stopes at all the underground operations. Ore development had an assumed 100% mining recovery, based on historical experience and industry standards. Golden Age ore development tonnes and grades have been modelled assuming a resue split firing development method. • Open pit mining recovery was assumed at 95% based on detailed SMU analysis and industry standards. • Most of the infrastructure required for the operations is already in place at the Wiluna operation, including a processing plant and associated infrastructure, camp, airstrip, offices, power station and power reticulation, borefields and coreyards. Allowance has been made for refurbishment of this infrastructure where required based on quotes provided by reputable independent vendors to an appropriate standard of detail. Allowance has been made for earthworks including road refurbishment and construction, and clearing for mining contractor facilities required at Matilda.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and*	• The proposed process for most of the material is Crush-Grind-Gravity-Leach-CIL, a standard gold processing flowsheet used throughout the industry for this style of mineralisation. • The East-West and Bulletin Sulphide underground ore material is expected to be processed using the existing installed BIOX® circuit. This circuit was operated successfully on this type of material for over 20 years during previous operations.

	representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• Enough recent processing plant production data exists to estimate metallurgical recoveries and throughput rates to a suitable degree of accuracy. Recoveries have been applied to individual mines by weathered material type. • Metallurgical testing has been performed on diamond drill holes in well-known and recognised laboratories to standard test practices on a sufficient number of samples to be representative of the different domains. • No deleterious elements were detected however some of the ore sources may require alternative unit processes.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Environmental impacts and hazards are being considered as part of the DMP application process. • Historical data indicates that the rock mass is non-acid forming. • Tailings from ore processing will be stored within the existing Tailings Storage Facility (TSF). Allowance has been made for expansions to this facility as required by the mine plan. • At this point in time the Competent Person sees no reason why permitting will not be granted within a reasonable time frame.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Substantial infrastructure exists on-site at the Wiluna mine from previous operations (which ceased in 2013 and have been on care and maintenance since that time), and refurbishment of this infrastructure is well advanced and has been allowed for in the detailed cost model. The site is located proximal to the township of Wiluna and the all-weather Goldfields Highway. The Wiluna airport services both the mine and the town.

Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Existing infrastructure refurbishment capital estimates are based on quotes from contractors and vendors following inspections. • Surface mining capital costs including contractor mobilisation and set-up and site preparation have been estimated based on the results of a detailed contract tender. Pit dewatering costs have been estimated based on analysis by an independent hydrological consultant and quotes from suppliers. • Underground mining capital costs have been estimated based on a detailed contract tender process, recent vendor quotes or estimates for refurbishment of capital infrastructure following inspection by independent experts. • Mining operating costs have been estimated based on a detailed contract tender. Power, diesel and accommodation costs have been determined based on vendor quotes. Staff costs have been assumed based on current market salary levels. • Processing operating costs were determined based on metallurgical testing of PQ diamond core, modelling, and supplier quotes for input costs. • No deleterious elements are expected to report through the process into the saleable product. • All costs have been estimated in Australian dollars. • All costs had transportation charges built into the final figure. No transportation charges were assumed for the product as it will be transported from site on scheduled flights. • A 2.5% WA state government royalty has been allowed over all the mines. An additional 5% non-government royalty has been applied over the Matilda and Williamson pits based on an existing agreement. This 5% royalty was also applied over the Wiluna material after 200 koz has been produced from these tenements. The 5% royalty was applied to the portion of the Galaxy pit which falls within the tenement over which the royalty holds (approximately 66% of metal produced from the Galaxy pit).

Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Production for revenue calculations was based on detailed mine plans and mining factors. • The assumed metal price used for revenue calculation was A$1,500/oz, being the average price over the past 3-5 years.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Gold doré from the mine is assumed to be sold at the Perth mint as soon as it is produced.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The Ore Reserve estimate is based on a financial model that has been prepared at a Definitive Feasibility study level of accuracy. All inputs from open pit and underground operations, processing, transportation and sustaining capital as well as contingencies have been scheduled and evaluated to generate a full life of mine cost model. • Economic inputs have been sourced from suppliers or contractors. • A discount rate of 7% has been applied. • The NPV of the project is positive at the assumed commodity price. The Competent Person is satisfied that the project economics based on mining the Ore

		Reserve retains a suitable margin of profitability against reasonably foreseeable commodity price movements.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• To the best of the Competent Persons knowledge all necessary agreements are in place and current with all key stakeholders including traditional owner claimants and residents of Wiluna.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• A formal process to assess and mitigate naturally occurring risks will be undertaken prior to execution. Currently, all naturally occurring risks are assumed to have adequate prospects for control and mitigation. • The approvals process for commencement of operations at Matilda and Wiluna is complete. Based on the information provided, the Competent Person sees no reason why all required approvals will not be successfully granted within the anticipated timeframe.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.*	• The Probable Ore Reserve is based on that portion of the Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss.

	• *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The Proved Ore Reserve is based on that portion of the Measured Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss. • None of the Probable Ore Reserves have been derived from Measured Mineral Resource. • The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• The Ore Reserve estimate, along with the mine design and life of mine plan, has been peer-reviewed by Entech internally.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions*	• The design, schedule and financial model on which the Ore Reserve is based has been completed to a Definitive Feasibility study standard, with a corresponding level of confidence. • The Ore Reserve is based on a global estimate. • There is a degree of uncertainty associated with geological estimates. The Reserve classifications reflect the levels of geological confidence in the estimates. • There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical assumptions, hydrological assumptions and the modifying mining factors, commensurate with the level of study. The Competent Person is satisfied that the analysis used to generate the modifying factors is appropriate, and that a suitable margin exists to allow for the Reserve estimate to remain economically viable despite reasonably foreseeable negative modifying factor results. • There is a degree of uncertainty regarding estimates of commodity prices and exchange rates, however the Competent Person is satisfied that the assumptions used to determine the economic viability of the Ore Reserves are reasonable based on current and historical data. • Further, i.e. quantitative, analysis of risk is not warranted or appropriate at the

	should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	current level of technical and financial study.