

# ASX Announcement 14 January 2016

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**ASX CODE** 

**BLK** 

CORPORATE INFORMATION

202M Ordinary Shares 35.6M Unlisted Options 8.0M Performance Rights

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### **High Grade Quartz Reef Update**

High grade results at Galaxy demonstrates gold mineralisation open down plunge

o 3.1m @ 9.60 g/t Au

(GLDD0008)

3.1m @ 2.00 g/t Au and 0.7m @ 8.52 g/t (GLDD0009)

Encouraging maiden drill results from Caledonian

o 4m @ 7.97 g/t from 57m (CARC0001)

o 1m @ 5.82 g/t from 63m (CARC0006)

o 1m @ 5.32 g/t from 77m (CARC0009)

Galaxy DFS geological drilling completed

- Resource re-estimated to allow fast-tracked ore production
- DFS metallurgical test work confirmed the free milling nature of the Galaxy ore with recoveries up to 96%.
- Underground extensional drill programme at the high grade
   Golden Age orebody to commence next week

Blackham Resources Ltd (ASX Code: BLK) is pleased to provide an update on the results from the recent resource definition and Definitive Feasibility Study (DFS) drilling activities at its Galaxy gold deposit and from its maiden drill programme into the Caledonian prospect. Both Galaxy and Caledonian form part of the 15km long quartz reef structures that include the high grade Golden Age reef (see Fig 4).

Galaxy is located 13km north west from Blackham's 100% owned Wiluna gold plant. The recently published Pre-Feasibility Study (PFS) confirms Galaxy's high grade resource from surface will be an attractive feed for recommissioning the Wiluna gold plant.

Blackham has completed a geotechnical drill program of 2 diamond drill holes for 232m as part of the DFS phase of the project at Galaxy. Results from both holes were of consistent width and grade, with the results of GLDD0008 & GLDD0009 3.1m @ 9.6g/t and 3.1m @ 2.0g/t & 0.7m @ 8.52g/t respectively.

From a geological perspective these holes confirm the Galaxy high grade resource is still open at depth. GLDD0008 & GLDD0009 intercepted the high grade mineralisation 15m and 30m, respectively below the PFS pit design (see Figure 1). A follow up 800m RC programme is due to commence next week to begin testing Galaxy's potential as an underground mining target.

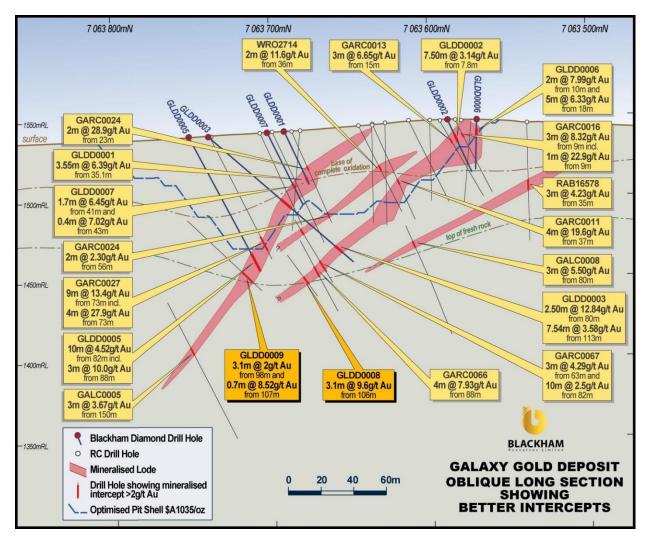


Fig 1. Galaxy long section looking south showing recent successful diamond drilling results.

Previously reported RC drilling results: 4m @ 19.6 g/t from 37m GARC0011 2m @ 28.9 g/t from 23m GARC0024 9m @ 13.4 g/t from 73m GARC0027 6m @ 8.82 g/t from 13m GARC0037 3m @ 6.77g/t from 117m GLDD0003 2.5m @ 12.8g/t from 80m GLDD0002 3.6m @ 6.39g/t from 35m GLDD0001

The Galaxy high grade shoots are stacked, flatter lying and have greater strike extensions than modelled in the current PFS resource block model. The DFS resource block model is currently being finalised and DFS mine design is in progress.

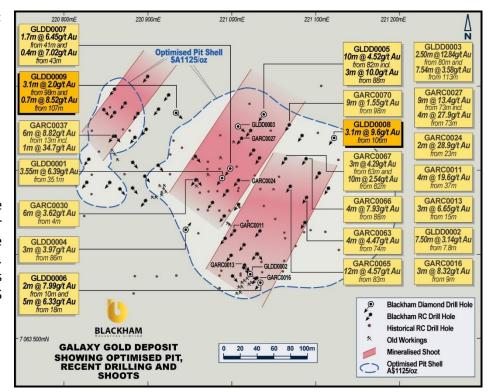


Fig 2. Galaxy plan with the stacked high grade quartz shoots plunging to the north east.

#### DFS Metallurgy test work confirms free milling ore with strong metallurgical recoveries

The free milling Galaxy ore has demonstrated DFS metallurgical recoveries of 93-96% after gravity and 24 hours of leaching which is consistent with the PFS test results of 96%. DFS gravity results in the Galaxy ore has shown 4% to 21% gravity recoveries. Galaxy PFS gravity recoveries were as high as 82% demonstrating the nuggetty nature of the orebody.

Blackham's processing flowsheet for the Wiluna Gold Plant will see the addition of a gravity circuit which should add significantly to the Galaxy and other quartz reef process recoveries.

### **Caledonian Quartz Reef Prospect**

The Caledonian prospect is a high grade reef located on a mining lease 5km north of the Wiluna Gold Plant by existing haul roads. Caledonian is part of a system of high-grade quartz reef gold deposits extending northwest from the Golden Age at the Wiluna mining centre to Galaxy in the north (see Fig 4).

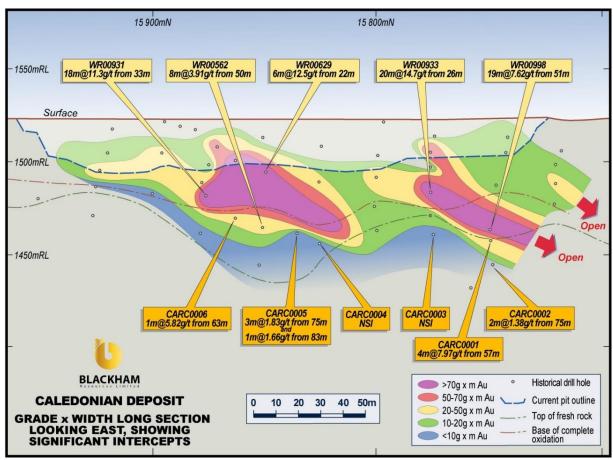


Fig 3. Caledonian long section plan with the high grade quartz shoots plunging to the south.

A small maiden RC program of 9 holes for 754m was also completed to provide geological confidence at Caledonian. The program aimed to replicate and extend historical RC data. Mineralisation of notable width and grade was achieved in the first drill hole CARCO001 (4m @ 7.97g/t). Significant Caledonian drill results included:

| 0 | 4m @ 7.97 g/t from 57m | (CARC0001) |
|---|------------------------|------------|
| 0 | 1m @ 5.82 g/t from 63m | (CARC0006) |
| 0 | 1m @ 5.32 g/t from 77m | (CARC0009) |

For full results please go to Table 1.

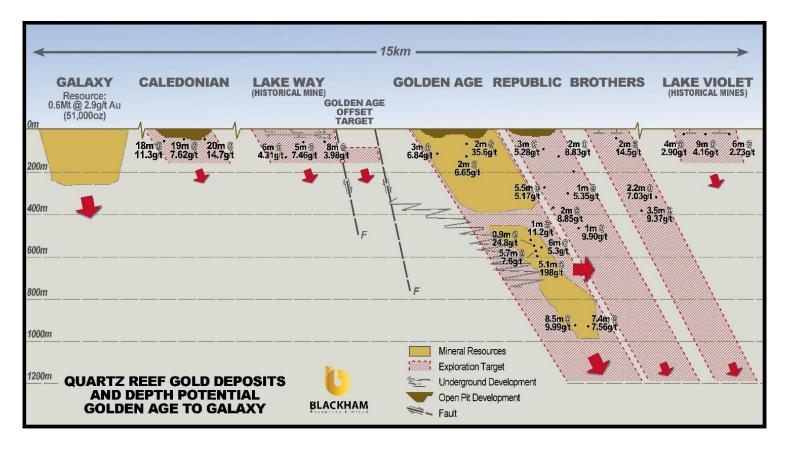


Fig 4. Regional long section showing high grade quartz reefs over 15kms and the depth potential

#### **Golden Age Drill Programme**

Next week Blackham plans to commence a further 2,700m underground drill programme into the Golden Age orebody with an aim of extending the resource further east along strike aimed at adding further high grade ore into the mine plan.

Golden Age is a high grade free milling orebody located with the Wiluna Gold Mine with a resource of **0.6Mt** @ **6.7g/t** Au for **125,000oz**. Blackham's maiden drill programme into the Golden Age reef reported an average composite grade of **83g/t** Au between the 900 to 1100m RL's. This middle portion of the deposit includes the extremely high grade GAUD0003 intersection which contained visible gold with assay results returning **5.1m** @ **198g/t** Au from 173m which includes **0.8m** @ **1,148g/t** Au from 177m. Historically the Golden Age orebody has produced **160,000oz** @ **9g/t** fully diluted. The last drill programme demonstrated the system is still open to the east.

Blackham's Managing Director, Bryan Dixon commented:

"Blackham's recent Pre-Feasibility Study confirmed the economics of Galaxy and Golden Age as high grade orebodies suitable for open pit and underground mining with good metallurgical recoveries. The latest drilling provides further confidence in the Galaxy orebody and its extensions at depth.

Later this year Blackham intends to start mining both the Galaxy and Golden Age orebodies as high grade feedstocks for its Wiluna gold plant. Interestingly Golden Age is the only one of these high grade reefs which has had significant drilling below 100m despite many of them having extensive old timer underground workings."

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#### **Gold Resources**

The Matilda Gold Project now has **44Mt** @**3.3g/t** for **4.7Moz** 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 **20Mt** @ **3.5g/t** for **2.2Moz**.

|                                       | Table 4: Matilda Gold Project Resource Summary |           |        |     |          |        |     | -         |        |      |           |        |
|---------------------------------------|------------------------------------------------|-----------|--------|-----|----------|--------|-----|-----------|--------|------|-----------|--------|
|                                       | M                                              | easure    | ed     | lr  | ndicated |        | lı  | nferred   |        | To   | tal 1009  | %      |
| Mining Centre                         | Mt                                             | g/t<br>Au | Koz Au | Mt  | g/t Au   | Koz Au | Mt  | g/t<br>Au | Koz Au | Mt   | g/t<br>Au | Koz Au |
| Matilda Mine                          | 0.2                                            | 2.1       | 13     | 6.7 | 1.8      | 381    | 5.7 | 1.7       | 311    | 12.5 | 1.8       | 705    |
| Williamson Mine                       |                                                |           |        | 2.7 | 1.7      | 150    | 3.6 | 1.7       | 200    | 6.3  | 1.7       | 350    |
| Regent                                |                                                |           |        | 0.7 | 2.7      | 61     | 3.1 | 2.1       | 210    | 3.9  | 2.2       | 270    |
| Galaxy                                |                                                |           |        | 0.2 | 3.3      | 25     | 0.3 | 2.6       | 26     | 0.6  | 2.9       | 51     |
| Golden Age                            |                                                |           |        | 0.2 | 8.0      | 45     | 0.4 | 6.1       | 80     | 0.6  | 6.7       | 125    |
| Bulletin South OP                     |                                                |           |        | 0.9 | 3.2      | 90     | 1.7 | 3.5       | 190    | 2.6  | 3.4       | 280    |
| East Lode                             |                                                |           |        | 1.0 | 5.2      | 170    | 2.3 | 4.7       | 340    | 3.3  | 4.8       | 510    |
| West Lode Calvert                     |                                                |           |        | 1.4 | 5.5      | 240    | 2.8 | 5.2       | 460    | 4.2  | 5.3       | 700    |
| Henry 5 - Woodley -<br>Bulletin Deeps |                                                |           |        | 2.1 | 5.9      | 400    | 0.8 | 4.6       | 120    | 2.9  | 5.6       | 520    |
| Burgundy - Calais                     |                                                |           |        | 1.3 | 6.0      | 250    | 0.3 | 5.7       | 60     | 1.6  | 6.0       | 310    |
| Happy Jack - Creek<br>Shear           |                                                |           |        | 1.5 | 5.9      | 290    | 1.3 | 4.8       | 200    | 2.9  | 5.4       | 490    |
| Other Wiluna Deposits                 |                                                |           |        | 1.1 | 3.1      | 111    | 1.7 | 4.2       | 229    | 2.8  | 3.7       | 340    |
| Total                                 | 0.2                                            | 2.1       | 13     | 20  | 3.5      | 2,213  | 24  | 3.1       | 2,426  | 44   | 3.3       | 4,651  |

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 21 October 2015 continue to apply and have not materially changed.

#### 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.

Table 1. Significant intercepts from latest Galaxy and Caledonian drilling.

| Hole ID  | East   | North   | RL   | EOH<br>(m) | Azi | Dip | From   | То     | Interval<br>(m) | Au<br>g/t |
|----------|--------|---------|------|------------|-----|-----|--------|--------|-----------------|-----------|
| GLDD0008 | 221115 | 7063735 | 1500 | 119.8      | 215 | -55 | 90     | 91     | 1               | 0.64      |
|          |        |         |      |            |     |     | 106.10 | 109.20 | 3.1             | 9.60      |
| GLDD0009 | 220925 | 7063775 | 1500 | 112.3      | 140 | -50 | 30.4   | 32     | 1.6             | 1.26      |
|          |        |         |      |            |     |     | 62     | 63     | 1               | 1.54      |
|          |        |         |      |            |     |     | 98.88  | 102    | 3.12            | 2.00      |
|          |        |         |      |            |     |     | 107.3  | 108    | 0.7             | 8.52      |
| CARC0001 | 223946 | 7057083 | 1518 | 80         | 90  | -60 | 57     | 61     | 4               | 7.97      |
|          |        |         |      |            |     |     | 64     | 65     | 1               | 0.67      |
| CARC0002 | 223924 | 7057083 | 1518 | 100        | 90  | -60 | 75     | 77     | 2               | 1.38      |
| CARC0003 | 223929 | 7057110 | 1518 | 70         | 90  | -70 | NSI    |        |                 |           |
| CARC0004 | 223897 | 7057158 | 1519 | 80         | 90  | -60 | NSI    |        |                 |           |
| CARC0005 | 223900 | 7057170 | 1520 | 94         | 90  | -55 | 75     | 78     | 3               | 1.83      |
|          |        |         |      |            |     |     | 83     | 84     | 1               | 1.66      |
| CARC0006 | 223891 | 7057196 | 1520 | 88         | 90  | -50 | 63     | 64     | 1               | 5.82      |
| CARC0007 | 223868 | 7057502 | 1525 | 60         | 90  | -60 | NSI    |        |                 |           |
| CARC0008 | 223935 | 7057060 | 1519 | 100        | 90  | -60 | 89     | 90     | 1               | 0.99      |
| CARC0009 | 223956 | 7057060 | 1518 | 82         | 90  | -60 | 69     | 70     | 1               | 0.74      |

<sup>\*</sup> Grid is GDA\_94 Z51S. Minimum 0.6g/t, minimum 1.2 gram x metres, maximum 2m internal dilution. NSI = No significant intercept. Holes drilled perpendicular to mineralisation so that interval lengths are close to true thickness.

## JORC Code, 2012 Edition – Table 1

**Section 1 Sampling Techniques and Data** (Criteria in this section apply to all succeeding sections.)

| Criteria                      | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Criteria  Sampling techniques | <ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul> <li>Galaxy represents a portion of a large drilling database compiled since the 1980's by various project owners. 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. Diamond core samples are HQ half-core and PQ quarter core. 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 or at intervals determined by the logging geologist.</li> <li>Blackham's sampling procedures are in line with standard industry practice to ensure sample representivity. Core samples are routinely taken from the right-hand-side of the bottom-of hole cut line. For Blackham's RC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. It is assumed that previous owners of the project had procedures in place in line with standard industry practice to ensure sample representivity.</li> <li>Historically, RC and RAB samples were composited in the field on 2m</li> </ul> |
|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 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 are collected in the field in the hanging wall, 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 crushed to <2mm in a Boyd crusher and pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay.  • Historically, gold analyses were obtained using industry standard methods; split samples were pulverized in an LM5 bowl to produce a 50g charge for assay by Fire Assay or Aqua Regia with AAS finish at the Wiluna Mine site laboratory. Blackham Resources analysed                                                                                                                                                                                                                                                                                                                                                                                                      |

| Criteria               | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                      | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                                                                                                                                                                                                                                                                                                                                                                            | samples using SGS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Drilling<br>techniques | <ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air<br/>blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple<br/>or standard tube, depth of diamond tails, face-sampling bit or other<br/>type, whether core is oriented and if so, by what method, etc).</li> </ul>                                                                        | <ul> <li>Blackham 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 NQ2 half core samples. It is unknown if core was orientated, though it is not material to this report. All Blackham RC drilling used a face-sampling bit.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Drill sample recovery  | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul> | <ul> <li>For Blackham DD drilling, drill core recovery is measured by drillers and Blackham staff, logged per drill run and stored in a digital database. For Blackham RC drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. For historical drilling, recovery data for drill holes contained in this report has not been located or assessed, owing to incomplete data records. Database compilation is ongoing.</li> <li>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</li> </ul> |

| Criteria                                                    | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 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.  In historical drilling, 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. |
|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <ul> <li>For Blackham drilling, no such relationship was evaluated as sample<br/>recoveries were generally very good. For historical drilling no<br/>relationship was investigated as recovery data is not available.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Logging                                                     | <ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>                                                                                                                                                                                                                                                                                             | <ul> <li>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.</li> <li>Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>Holes were logged entirely. Geology data has not yet been located for some historical holes, database compilation is on-going.</li> </ul>                                                                                                                                                         |
| Sub-<br>sampling<br>techniques<br>and sample<br>preparation | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | were subsequently assayed on 1m intervals. For Blackham drilling, 1m samples were split using a cone splitter. 4m composite samples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Criteria                                               | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <ul> <li>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. Boyd crushing to -2mm for samples &gt;3kg is completed owing to the coarse nature of gold nuggets, prior to obtaining a &lt;3kg sub-split for pulverisation. For RC sampling, riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate.</li> <li>Boyd &lt;2mm crushing and splitting is considered to be standard industry practice; each sample particle has an equal chance of entering the split chute. At the laboratory, &gt;3kg samples are split so they can fit into a LM5 pulveriser bowl. 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.</li> <li>Field duplicates were collected approximately every 40 samples, by taking a 50:50 split from the Boyd crusher / splitter. No clear errors have been noted. For RC drilling, field duplicates were collected every ~40m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples. No field duplicate data has been located or evaluated in earlier drilling.</li> <li>Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul> |
| Quality of<br>assay data<br>and<br>laboratory<br>tests | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul> | <ul> <li>Fire assay is a total digestion method. The lower detection limit of 0.01ppm is considered fit for purpose. Pre-Blackham sampling used both fire assay and aqua regia, which is a partial digestion technique. Both techniques are considered appropriate for analysis of exploration samples.</li> <li>No geophysical tools were used to obtain analyses.</li> <li>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. For Blackham drilling certified reference material, duplicates and blanks were submitted at 1:40 with each batch of samples. Check samples are routinely submitted to an umpire lab at 1:20 ratio. Analysis of results</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Criteria                                       | JORC Code explanation                                                                                                                                                                                                                                                                                                                                              | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                |                                                                                                                                                                                                                                                                                                                                                                    | confirms the accuracy and precision of the assay data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Verification<br>of sampling<br>and<br>assaying | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>                    | <ul> <li>Blackham's significant intercepts have been verified by several company personnel. For historical results, significant intercepts 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.</li> <li>The DD program has been designed to twin historical RC and Blackham RC drilling; results broadly match the DD results. Detailed analysis will be completed during the upcoming resource update. Drilling has also been designed at different orientations, to help correctly model the mineralisation orientation and test for alternative orientations.</li> <li>Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within Blackham's manual "BLK Assay QAQC Protocol 2013.doc". Historical procedures have not been sighted.</li> <li>Assay data has not been adjusted.</li> </ul> |
| Location of<br>data points                     | <ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>                                                              | <ul> <li>All historical holes appear to have been accurately surveyed to centimeter accuracy. Blackham holes reported herein have been DGPS surveyed.</li> <li>Grid systems used in this report is GDA 94 Zone 51 S. Historical drilling collars were originally surveyed in AMG, and converted in Datashed to MGA grid.</li> <li>A topographical survey has been flown with 30cm vertical accuracy, which has been used to determine historical pre-Blackham collar RL's.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Data<br>spacing and<br>distribution            | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul> | <ul> <li>Drill spacing is generally 20m x 20m, with holes oriented perpendicular to the strike of quartz reefs. Mineral resources and reserves are not the subject of this report.</li> <li>For core samples, typically 1m intervals were sampled. Historical RC and RAB samples were initially composited on 2m, 4m or 6m intervals. Composites grading &gt;0.1g/t were subsequently assayed on 1m intervals. For Blackham drilling, samples have been composited generally where mineralisation was not anticipated, and to reduce</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Criteria                                                | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                              | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                    | assay costs. Where composite samples returned significant gold values, 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 | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul> | • 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 DD sampling, a cut line is routinely drawn at an angle 10degrees 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. The RC technique utilizes the entire 1m sample so significant bias is unlikely. |
| Sample<br>security                                      | The measures taken to ensure sample security.                                                                                                                                                                                                                                                                                                                                                      | <ul> <li>It is not known what measures were taken historically. For Blackham<br/>drilling, samples are delivered to Toll Ipec freight yard in Wiluna by<br/>Blackham personnel, where they are stored in a gated locked yard<br/>(after hours) until transported by truck to the laboratory in Perth. In<br/>Perth the samples are likewise held in a secure compound.</li> </ul>                                                                                                                                                                                                                                       |
| Audits or<br>reviews                                    | The results of any audits or reviews of sampling techniques and data.                                                                                                                                                                                                                                                                                                                              | <ul> <li>For Blackham drilling, data has been validated in Datashed and upon<br/>import into Micromine. QAQC data has been evaluated and found to<br/>be satisfactory. Historical assay techniques and data have not been<br/>reviewed in detail owing to the preliminary stage of exploration work.</li> </ul>                                                                                                                                                                                                                                                                                                         |

## **Section 2 Reporting of Exploration Results**

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

| Criteria                                         | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                              | Commentary                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mineral<br>tenement and<br>land tenure<br>status | <ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul> | <ul> <li>All drill holes mentioned in this report are situated on granted mining licenses held 100% by Matilda Operations Pty Ltd or Kimba Resources Pty Ltd, a fully-owned subsidiaries of Blackham Resources Ltd.</li> <li>Tenements are in good standing and no impediments exist.</li> </ul> |
| Exploration done by other                        | <ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  | <ul> <li>Historical artisanal mining was conducted on the tenements, modern<br/>exploration has been conducted since the early-1980's. This<br/>exploration is considered to have been successful as it led to the</li> </ul>                                                                    |

| Criteria                       | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| parties                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | definition of JORC-compliant mineral resources. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Geology                        | Deposit type, geological setting and style of mineralisation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The gold deposits are categorized as orogenic gold deposits, with similarities to many other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna Greenstone Belt. Rocks in the Wiluna Domain have experienced greenschist-facies regional metamorphism and brittle deformation. The Wiluna Domain is comprised of a fairly monotonous sequence of foliated basalts and high-magnesian basalts, with intercalated felsic intrusions, lamprophyre dykes, metasediments, and dolerites. Gold mineralisation is related to quartz vein emplacement, typically along stratigraphic boundaries, and the lodes have also been disrupted by later cross-faults. |
| Drill hole<br>Information      | <ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul> | Please see tables in the body of this report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Data<br>aggregation<br>methods | <ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>                                                                                                                                                       | <ul> <li>Assay intervals reported are length-weighted averages. Intervals are reported using a 0.6g/t lower cut-off, minimum of 1.2gram x metres, and maximum 2m internal contiguous dilution. High grade intervals of &gt;5g/t are likewise separately reported.</li> <li>No metal equivalent grades are reported as Au is the only metal of economic interest.</li> </ul>                                                                                                                                                                                                                                                                                                                             |
| Relationship                   | These relationships are particularly important in the reporting of<br>Exploration Results.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul> <li>Please see assay tables in the body of this report.</li> <li>Holes were often drilled perpendicular to mineralisation. Accordingly,</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Criteria                                                        | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                         | Commentary                                                                                                                                                 |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| between<br>mineralisation<br>widths and<br>intercept<br>lengths | <ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>                                                                                                              | intercept widths are close to true widths.                                                                                                                 |
| Diagrams                                                        | <ul> <li>Appropriate maps and sections (with scales) and tabulations of<br/>intercepts should be included for any significant discovery being<br/>reported. These should include, but not be limited to a plan view of<br/>drill hole collar locations and appropriate sectional views.</li> </ul>                                                                                                                            | Please see body of this report for diagrams and tables.                                                                                                    |
| Balanced<br>reporting                                           | <ul> <li>Where comprehensive reporting of all Exploration Results is not<br/>practicable, representative reporting of both low and high grades<br/>and/or widths should be practiced to avoid misleading reporting of<br/>Exploration Results.</li> </ul>                                                                                                                                                                     | <ul> <li>Selected intervals have been reported owing to impracticality of<br/>reporting the large drilling database.</li> </ul>                            |
| Other<br>substantive<br>exploration<br>data                     | <ul> <li>Other exploration data, if meaningful and material, should be reported<br/>including (but not limited to): geological observations; geophysical<br/>survey results; geochemical survey results; bulk samples – size and<br/>method of treatment; metallurgical test results; bulk density,<br/>groundwater, geotechnical and rock characteristics; potential<br/>deleterious or contaminating substances.</li> </ul> | Not material to this report.                                                                                                                               |
| Further work                                                    | <ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>                                                           | <ul> <li>Resource definition for the DFS is complete. Further drilling planned<br/>following mineralisation open down-plunge to the north east.</li> </ul> |