

20 February 2017

### PERSEUS UPDATES MINERAL RESOURCE ESTIMATE AT BÉLÉ

Perseus Mining Limited's (ASX/TSX: PRU) ("Perseus") recently completed a re-estimation of Mineral Resources for the Bélé mineral deposit on the Mahalé Exploration Licence ("Bélé") that is located within trucking distance of Perseus's currently developing Sissingué Gold Mine in Côte d'Ivoire ("Sissingué"). Details are as follows:

### **EXECUTIVE SUMMARY**

- Snowden Mining Industry Consultants Pty Ltd ("Snowden") has updated the recently published maiden Mineral Resource estimate for Bélé.
- The updated global Indicated Mineral Resource for Bélé, estimated as at February 2017, is estimated as 1.90 million tonnes grading at 2.0g/t gold, containing 130,000 ounces of gold. A further 0.42 million tonnes of material grading at 1.8 g/t gold and containing a further 25,000 ounces of gold are classified as Inferred Resources.
- The gold contained in the combined Measured and Indicated Mineral Resources of Sissingué and Bélé is now estimated to be 830,000 ounces of gold which is less than 6% lower than the original Sissingué estimate of 880,000 ounces of gold.
- Work is currently in progress on estimating Ore Reserves for both Sissingué and Bélé based on the revised Measured and Indicated Mineral Resources estimates and a Life-of-Mine Plan for a project encompassing both the Sissingué and Bélé Mineral Resources is expected to be completed by the end of the March 2017 quarter.

#### Perseus's Managing Director and CEO, Jeff Quartermaine, commented:

"The identification and delineation of additional Mineral Resources located within trucking distance of the processing plant that is currently being constructed at Sissingué has been a prime objective of our exploration team for some time. The delineation of the Indicated Mineral Resources at Bélé announced today goes some way towards achieving that objective and as well as materially compensating for the downgrade of the Sissingué Mineral Resource announced in late 2016.

We believe that there is further significant exploration potential on both our Sissingué exploitation permit and our Mahalé exploration permit and through successful exploration we are aiming to assemble a Mineral Resource inventory that will keep the Sissingué plant fully operational for many years beyond the currently defined mine life."

PO Box 1578 Subiaco WA 6008 Facsimile: +61 8 6144 1799 Website: www.perseusmining.com



#### **BÉLÉ MINERAL RESOURCE ESTIMATE**

In conjunction with the recent re-estimation of the Sissingué Mineral Resource, Snowden was requested to estimate the Mineral Resources contained in the Bélé mineral deposit that was drilled with a series of RC and diamond drill programmes during the period from 2013 to 2016. Since then, further drilling has been completed at Bélé and Snowden has reviewed this additional data and updated their earlier Mineral Resource estimate.

The revised global Mineral Resource estimate prepared by Snowden was reported in accordance with the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Refer to **Appendix 1** for MPR's assessment of the JORC Table 1 assessment criteria. The Mineral Resource estimate is summarised in the following table that reports the Mineral Resources by category and area, above a 0.8 g/t gold cut-off grade. The Indicated and Inferred classification categories under the JORC Code (2012) are equivalent to the CIM category of the same name (CIM, 2014).

The Bélé deposit comprises two main areas of mineralisation: Bélé East and Bélé West. In summary, the updated global Indicated Mineral Resource for the Bélé deposit is now estimated as 1.90 Mt grading at 2.0 g/t gold, containing 130,000 ounces of gold. A further 0.42 Mt of material grading at 1.8 g/t gold and containing a further 25,000 ounces of gold are classified as Inferred Resources. Details of these estimates are shown below in **Table 1**.

#### Geology

The Bélé gold deposits are located within a north-westerly striking splay of the Syama-Boundiali Greenstone Belt. At Bélé, Birimian aged rocks comprise a sequence of metasedimentary rocks and subordinate mafic volcanics that have been intruded by a nearly circular granitoid body approximately 4 kilometres in diameter. The sequence has also been intruded by numerous felsic dykes of various compositions.

Gold mineralisation at both Bélé East and Bélé West is associated with deformation zones developed at and adjacent to the margins of the granitoid intrusion. Gold is associated with disseminated pyrite and lesser pyrrhotite hosted by both mafic and felsic lithologies where they feature chloritesericite-calcite alteration. Vein-hosted mineralisation is rare.

Bélé West mineralisation is interpreted to extend around 1 kilometre in strike, 50 metres thickness (comprising several lodes up to 20 metres thick each) and to a depth of 150 metres. Bélé East mineralisation extends around 500 metres along strike, 130 metres thickness (comprising several lodes up to 20 m thick each) and to a depth of 170 metres. The currently defined mineralisation in both areas is open at depth but appears to be closed out along strike.

#### Drilling Techniques

The Bélé drill holes data includes reverse circulation ("RC"), diamond and air core ("AC") drill holes. AC drill holes were used as a guide to interpretation but were not used for grade estimation due to the poor quality of AC samples.

Drilling used for the Mineral Resource includes 274 RC drill holes for 21,937 metres, 54 diamond drill holes for 2,599 metres and 47 RC drill holes with diamond tails for 5,431 metres. Nominal drill holes spacing over the resource area is predominantly 20 metres by 40 metres to 40 metres by 40 metres at Bélé West and 20 metres by 20 metres at Bélé East. Data spacing is sufficient to establish grade and geological continuity appropriate to the resource estimation procedures and classifications applied.



#### Table 1: Bélé Mineral Resource Estimate – February 2017

| Category                 | Area                 | Tonnage | Grade      | Contained  |
|--------------------------|----------------------|---------|------------|------------|
|                          |                      | (kt)    | (g/t gold) | Gold (koz) |
| Bélé East                |                      |         |            |            |
|                          | Laterite             | 33      | 1.9        | 2          |
| Róló East                | Completely weathered | 80      | 2.1        | 5          |
| Indicated                | Partially weathered  | 49      | 1.9        | 3          |
| mulcaleu                 | Weakly weathered     | 120     | 2.0        | 8          |
|                          | Fresh                | 360     | 2.6        | 30         |
| Total Bélé East In       | dicated              | 650     | 2.3        | 49         |
|                          | Laterite             | 16      | 1.5        | 1          |
| Rálá Eact                | Completely weathered | 11      | 1.9        | 1          |
| Dele East                | Partially weathered  | -       | -          | -          |
| interreu                 | Weakly weathered     | 19      | 1.5        | 1          |
|                          | Fresh                | 240     | 1.8        | 14         |
| Total Bélé East In       | ferred               | 280     | 1.8        | 16         |
| Bélé West                |                      |         |            |            |
|                          | Laterite             | 38      | 1.7        | 2          |
|                          | Completely weathered | 82      | 1.7        | 4          |
| Bele West                | Partially weathered  | 90      | 1.6        | 5          |
| Indicated                | Weakly weathered     | 190     | 1.6        | 10         |
|                          | Fresh                | 870     | 2.0        | 57         |
| Total Bélé West I        | ndicated             | 1,300   | 1.9        | 78         |
|                          | Laterite             | 15      | 2.0        | 1          |
| Rálá Wost                | Completely weathered | 18      | 1.7        | 1          |
| bele west                | Partially weathered  | 13      | 1.3        | 1          |
| Illieneu                 | Weakly weathered     | 16      | 1.6        | 1          |
|                          | Fresh                | 77      | 2.0        | 5          |
| Total Bélé West I        | nferred              | 140     | 1.8        | 8          |
| Total Bélé Eas           | t and West           |         |            |            |
|                          | Laterite             | 71      | 1.8        | 4          |
| Total                    | Completely weathered | 160     | 1.9        | 10         |
| Indicated                | Partially weathered  | 140     | 1.7        | 8          |
| mulcaleu                 | Weakly weathered     | 320     | 1.7        | 18         |
|                          | Fresh                | 1,200   | 2.2        | 88         |
| Total Indicated R        | esource              | 1,900   | 2.0        | 130        |
|                          | Laterite             | 31      | 1.7        | 2          |
| Total                    | Completely weathered | 29      | 1.8        | 2          |
| Inforrod                 | Partially weathered  | 16      | 1.4        | 1          |
| mericu                   | Weakly weathered     | 36      | 1.6        | 2          |
|                          | Fresh                | 310     | 1.9        | 19         |
| <b>Total Inferred Re</b> | source               | 420     | 1.8        | 25         |

Notes: Mineral Resources are inclusive of any Ore Reserves. Mineral Resources are reported to two significant figures. Rounding may cause minor discrepancies in the table.

RC drilling (5<sup>4</sup>/<sub>"</sub> diameter) was usually 80 metres or less in depth. Generally RC holes only have the collar azimuth and inclination measured.

Diamond drilling was carried out using HQ in oxide and transitional rock and NQ diameter in fresh rock. All diamond holes are downhole surveyed at 30 m intervals. Downhole surveys were conducted by the drill contractors using a FlexIT tool.

Orientation of drill holes is approximately perpendicular to the strike of the geology and mineralisation at Bélé West. At Bélé East, drill holes are angled to cross the steep dip of the geological domains. At Bélé East, 12 early RC holes have been drilled along exploration fences oriented towards the east and hence sub-parallel to the mineralisation. Three of these holes intercepted significant mineralisation.



These intercepts have been verified by holes drilled in the opposite direction however, they have been removed from the database for estimation to ensure no bias occurs due to the orientation.

#### Sampling

All RC samples were collected at the drill site at 1 m intervals and split using a multi-stage riffle splitter. Each two consecutive samples were composited (where applicable) in one bag. Sample weights were nominally 2.5 kg and 5 kg for 1 metre and 2 metre samples respectively.

Diamond core was sawn in half using a motorised diamond blade saw, with the right half sent for assaying and the left half stored in core trays for reference. One metre samples were taken in fresh material and 1.5 metres in oxide and transition.

Both core and RC samples followed a sample preparation path involving drying, crushing and grinding. Samples were pulverised with a ring mill and thoroughly mixed on a rolling mat ("carpet roll"), and then 200 grams of sub-sample was collected. Internal laboratory checks required at least 90% of the pulp passing -75 microns. A 40 to 50 grams charge was produced for subsequent analysis of gold by fire assay.

RC samples were weighed at 1 metre intervals and recoveries back-calculated using nominal hole diameter and expected density values. Recoveries average between 60% and 75% in strongly weathered material depending on rock type, around 75% in the transition zone and >85% in fresh rock.

Recovered length of diamond samples were measured in the core trays. The overall recovery of 93% is considered good, although Snowden notes that the recovery is lower in the oxide and transitional materials.

No apparent relationship exists between sample recovery and grade for diamond drilling.

Some RC samples at depth were identified as having downhole contamination and resultant smearing of grades as a result of wet drilling in 'sticky' material, with the samples being 'hung up' in the cyclone and subsequently contaminating later samples. This issue appears to only occur in a few drill holes and is not as prevalent as what was seen at the nearby Sissingué deposit. As a result of this, all RC holes in the pit area were reviewed and any suspected of containing smeared assays were removed from the dataset prior to estimation. 277 metres from four RC drill holes (<1% of the samples) were removed due to suspected downhole contamination. In addition, 2016 drilling focused on diamond drill holes to confirm areas with RC drilling in the core of the deposit. With the exception of the issue noted above, the sub-sampling is considered appropriate and representative.

#### Sample Analytical Methods

All analytical work up till March 2016 was carried out by independent, commercial laboratory Bureau Veritas Minerals Laboratory ("BMVL") in Abidjan, Côte d'Ivoire. Analytical work for the recent drill holes program between November 2016 and January 2017 was carried out by independent, commercial laboratory Actlabs Burkina Faso SARL ("Actlabs") in Ouagadougou, Burkina Faso.

Two types of analysis for gold were performed, a standard fire assay using a 40 g to 50 g sub-sample, and BLEG bottle roll using a 1 kilogram sub-sample. Both methods were read by atomic absorption spectroscopy ("AAS") with a detection limit of 0.01 g/t Au. The first 13 RC holes were assayed by 1 kilogram 24-hour bottle roll, with all subsequent diamond core and RC samples assayed by 50 gram fire assay.



#### **Quality Assurance and Quality Control**

As part of the 2016 drilling program, several RC drill holes with suspected downhole smearing due to contamination at Bélé East were twinned with diamond drill holes. As a result, the suspect RC drill holes were removed as discussed previously.

Between one and two field duplicates were taken for each RC hole, preferably within mineralised intervals. The results of duplicate analysis show no bias, but only moderate repeatability. Field duplicates of diamond core were not taken as ¼ core is considered inappropriate for comparison. Coarse crush and pulp duplicates were taken for RC and diamond samples during the recent drilling program and show good precision.

Certified reference material (blanks and standards) were submitted into the sample stream at a rate of 1 in 20 to 25 samples. Review of the standards results indicates that Actlabs tends to under call the gold standards for low grade samples by around 5% to 10%. As a result, umpire analysis was carried out on two batches using BMVL. The umpire results show that BMVL reports the low grade standards accurately. BMVL reports around a 5% to 10% higher gold grade for the low grade samples between 0.3 and 0.8 g/t gold. Results are comparable at all other grade ranges.

As a result of the above analysis, Snowden considers the Actlabs results acceptable for resource estimation, with the acknowledgement that the low grade samples are slightly conservative. Given the Mineral Resource reporting cut-off of 0.8 g/t gold, this should not have a material impact on the Mineral Resource.

With the exception of the item above, the QA/QC shows acceptable precision and no bias. Overall assaying quality is considered adequate.

#### Estimation Methodology

The Mineral Resource was estimated using CAE Studio (Datamine) software. Estimation was constrained within mineralisation envelopes (wireframes) defined based on a nominal 0.2 g/t gold to 0.5 g/t gold cut-off together with the geological logging and lithology interpretation. The cut-off used for the interpretation is observed as a population change in the global log-probability plot. The mineralisation domains were used as hard boundaries to control estimation.

Estimation of gold grades was carried out using ordinary kriging with top cuts applied to limit the influence of outliers. Parent blocks of 10 mE by 10 mN by 5 mRL were derived from a kriging neighbourhood analysis together with the geometry of the orebody.

Dynamic anisotropy was used for estimation, whereby the local dip and azimuth of the mineralised lodes was estimated into each block in the model and the search and variogram orientations were locally adjusted to reflect the geological orientation. This method allows the estimate to better reflect the changing orientation and undulating nature of the lodes.

The resultant estimate contains less tonnes at a higher grade within the main domains compared to the previous estimate. This is a result of the additional data allowing for a more locally accurate estimate. Application of the constraining pit shell has removed the deeper portions of the Inferred Resource, together with some blocks at the northern and southern extents. This has resulted in an overall reduction in tonnes and ounces compared to the previous Mineral Resource.



#### Criteria for Resource Classification

The Bélé Mineral Resource has been classified as an Indicated and Inferred Mineral Resource, in accordance with the 2012 JORC Code and the CIM Definition Standards (CIM, 2005). A range of criteria has been considered in determining this classification including geological continuity, data quality, drill holes spacing, estimation properties including kriging neighbourhood analysis to determine the appropriate block size and search strategy, and potential for economic extraction.

The above parameters were used in combination to guide the manual digitising of strings on drill sections to control the classification. Typically Indicated Resources are defined in areas of 20 metres by 20 metres drilling at Bélé East and 40 metres by 40 metres drilling at Bélé West which shows more continuity in grade.

Trial optimisation was run at a US\$2,400 gold price to define the base of potentially mineable material by open pit mining.

#### Cut-Off Grade

The Mineral Resource has been reported by resource classification and weathering above a 0.8 g/t gold cut-off. The reporting cut-off is based on preliminary engineering work which indicates a 0.75 g/t gold to 0.85 g/t gold cut-off will be applicable for mining, depending on the degree of weathering.

#### Mining and Metallurgical Methods and Parameters

The metallurgical work carried out to date indicates that gold can be satisfactorily recovered from Bélé ore using conventional CIL extraction techniques as per the nearby Sissingué deposit. The work is considered sufficient to determine that the Bélé resource represents a deposit capable of economic extraction.

#### **COMBINED SISSINGUÉ AND BÉLÉ MINERAL RESOURCES**

As previously noted, the Bélé Mineral Resources are located on the Mahalé exploration permit, approximately 40 kilometres from the proposed processing plant for Sissingué and subject to confirmation of its feasibility, it is intended that this material will be processed in due course through the Sissingué process facility. The combined Sissingué and Bélé Mineral Resource is as shown in *Table 2* below:

| Deposit          | Category             | Tonnage | Grade      | Contained  |
|------------------|----------------------|---------|------------|------------|
|                  |                      | ('000t) | (g/t gold) | Gold (koz) |
|                  | Measured             | 4300    | 2.1        | 290        |
| SISSINGUE        | Indicated            | 8900    | 1.4        | 410        |
| SISSINGUE        | Measured + Indicated | 13,000  | 1.6        | 700        |
|                  | Inferred             | 900     | 1.9        | 60         |
|                  | Measured             | -       | -          | -          |
|                  | Indicated            | 1,900   | 2.0        | 130        |
| DELE             | Measured + Indicated | 1,900   | 2.0        | 130        |
|                  | Inferred             | 420     | 1.8        | 25         |
| SISSINGUE + BELE | Measured + Indicated | 14,900  | 1.7        | 830        |
| COMBINED         | Inferred             | 1,300   | 1.9        | 85         |

#### Table 2: Combined Sissingué and Bélé Mineral Resource Estimate – February 2017

This combined Mineral Resource compares favourably to the Measured and Indicated Mineral Resource that contained 880,000 ounces of contained gold on which Sissingué's April 2015 Definitive Feasibility Study and subsequent development decision was based.



Work is currently in progress on estimating Ore Reserves for both Sissingué and Bélé based on the revised Measured and Indicated Mineral Resource estimates and a Life-of-Mine Plan for a project encompassing both the Sissingué and Bélé Mineral Resources is expected to be completed by the end of the March 2017 quarter.

| To discuss any aspect of | of this announcement, please contact:                    |
|--------------------------|--|
| Managing Director:       | Jeff Quartermaine at telephone +61 8 6144 1700 or email  |
|                          | jeff.quartermaine@perseusmining.com;                     |
| Investor Relations:      | Cathy Moises at telephone + 61 412196350 or email        |
|                          | <u>cathy.moises@perseusmining.com</u> (Perth/Melbourne); |
| Media Relations:         | Nathan Ryan at telephone +61 4 20 582 887 or email       |
|                          | nathan.ryan@nwrcommunications.com.au (Melbourne)         |

#### **Competent Person Statement:**

The information in this report and the attachments that relates to the Bélé Mineral Resource estimate is based on information compiled by Lynn Olssen a Competent Person who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM), and a full time employee of Snowden Mining Industry Consultants Pty Ltd. Ms Olssen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she has undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and a Qualified Person as defined in NI43-101.Ms Olssen has no economic, financial or pecuniary interest in the company. Ms Olssen consents to the inclusion in this report of the matters based on her information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

The information in this report that relates to Mineral Resources for the Sissingué Gold Project (SGP) was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement released on 15 December 2016. The Company confirms that it is not aware of any new information or data that materially affects the information in that market announcement and that all material assumptions and technical parameters underpinning the estimates in that market announcement continue to apply and have not materially changed.

#### Caution Regarding Forward Looking Information:

This report contains forward-looking information which is based on the assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management of the Company believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Assumptions have been made by the Company regarding, among other things: the price of gold, continuing commercial production at the Edikan Gold Mine without any major disruption, development of a mine at Sissingué and/or Yaouré, the receipt of required governmental approvals, the accuracy of capital and operating cost estimates, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used by the Company. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Forwardlooking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of gold, the actual results of current exploration, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. The Company believes that the assumptions and expectations reflected in the forward-looking information are reasonable. Assumptions have been made regarding, among other things, the Company's ability to carry on its exploration and development activities, the timely receipt of required approvals, the price of gold, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. Readers should not place undue reliance on forward-looking information. Perseus does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

### JORC Code 2012 Section 1 sampling techniques and data

| Criteria               | JORC Code explanation  | Commentary  |
|------------------------|--|---|
| Sampling<br>techniques | Nature and quality of sampling (e.g. cut channels, random<br>chips, or specific specialised industry standard measurement<br>tools appropriate to the minerals under investigation, such as<br>down hole gamma sondes, or handheld XRF instruments,<br>etc.). These examples should not be taken as limiting the<br>broad meaning of sampling.<br>Include reference to measures taken to ensure sample<br>representivity and the appropriate calibration of any<br>measurement tools or systems used<br>Aspects of the determination of mineralisation that are<br>Material to the Public Report.<br>In cases where 'industry standard' work has been done this<br>would be relatively simple (e.g. 'reverse circulation drilling<br>was used to obtain 1 m samples from which 3 kg was<br>pulverised to produce a 30 g charge for fire assay'). In other<br>cases, more explanation may be required, such as where<br>there is coarse gold that has inherent sampling problems.<br>Unusual commodities or mineralisation types (e.g.<br>submarine nodules) may warrant disclosure of detailed | Samples at Bélé were collected using standard drilling techniques: reverse circulation (RC) and diamond drilling (DD).<br>RC samples were collected in 1 m intervals at rig mounted cyclone. Samples from the first 13 RC holes were composited to 4 m length (111 samples, <1% of all RC samples). All other RC drilling was composited to 2 m samples, by equal weight. Sample weight was nominally 3 kg for composited samples.<br>Diamond core was generally sampled at 1 m intervals.<br>The first 13 RC holes were assayed by 1 kg 24-hour bottle roll, all subsequent DD and RC samples by 50 g or 40 g fire assay. All analytical work up till March 2016 was carried out by independent, commercial laboratory Bureau Veritas Minerals Laboratory (BMVL) in Abidjan, Côte d'Ivoire. Analytical work for the recent drill holes program between November 2016 and January 2017, was carried out by independent, commercial laboratory Actlabs Burkina Faso SARL (Actlabs) in Ouagadougou, Burkina Faso. |
| Drilling               | Drill type (e.g. core, reverse circulation, open-hole hammer   | All RC drilling used a 5.25 inch diameter face sample bit   |
| Drilling<br>techniques | Drill type (e.g. core, reverse circulation, open-hole hammer,<br>rotary air blast, auger, Bangka, sonic, etc.) and details (e.g.<br>core diameter, triple or standard tube, depth of diamond<br>tails, face-sampling bit or other type, whether core is<br>oriented and if so, by what method, etc.)   | All RC drilling used a 5.25 inch diameter face sample bit.<br>Diamond core drilling was carried out using HQ3 in the oxide and transitional rock<br>and NQ2 in fresh rock. Diamond core was generally oriented using a spear.   |

| Criteria                 | JORC Code explanation   | Commentary  |
|--------------------------|---|---|
| Drill sample<br>recovery | ple       Method of recording and assessing core and chip sample recoveries and results assessed.       RC samples were weighed at 1 m intervals and recoveries nominal hole diameter and expected density values. Recovering and 75% in strength weathered metarial denording and 75% in strength weathered metaring and 75% in strength w | RC samples were weighed at 1 m intervals and recoveries back-calculated using nominal hole diameter and expected density values. Recoveries average between 60% and 75% in strongly weathered material depending on rock type, around 75% |
|                          | representative nature of the samples.   | in the transition zone and >85% in fresh rock.  |
|                          | 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.  | Recovered length of diamond samples were measured. The overall recovery of 93% is considered good, although Snowden notes that the recovery is lower in the oxide and transitional materials.   |
|                          |   | No apparent relationship exists between sample recovery and grade for diamond drilling.   |
| 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  | RC drill chips were logged geologically, including rock type, weathering, alteration type and intensity (where recognisable), vein quartz content in estimated percentage, sulphide minerals and estimated content.                       |
|                          | metallurgical studies.<br>Whether logging is qualitative or quantitative in nature. Core<br>(or costean, channel, etc.) photography.  | Diamond drill core was geologically and structurally logged. Geological logging is identical to RC logging. Structural logging includes joints, fractures, roughness and infill type of structures and veins as well as recovery and RQD. |
|                          | The total length and percentage of the relevant intersections   | Logging was qualitative (descriptive) and semi-quantitative (estimates) in nature.  |
|                          | loggea.   | All diamond core was photographed in the core boxes.  |
|                          |   | RC drill chips were glued on chip boards for visual reference for each hole.  |
|                          |   | All drill holes (RC and diamond) were logged in full.   |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Subsampling techniques   | If core, whether cut or sawn and whether quarter, half or all core taken.  | Diamond core was cut in half using a diamond saw. The "right" side of the core was submitted for analysis, the other half stored in core trays.  |
| and sample<br>preparation  | If non-core, whether riffled, tube sampled, rotary split, etc.<br>and whether sampled wet or dry.  | All RC samples were collected at the drill site at 1 m interval and split using a multi-stage riffle splitter. Each two (resp. four) consecutive samples were composited in one bag by equal weight.   |
|  | of the sample preparation technique.   | 621 or 4% of RC samples were logged as wet. Wet samples were sub-sampled using a spear. 888 or 5% of RC samples were logged as damp.   |
|  | stages to maximise representivity of samples.  | Sample preparation of diamond core and RC chips used industry standard techniques. After drving, the entire sample was subject to a primary crush, 200 g   |
|  | Neasures taken to ensure that the sampling is<br>representative of the in situ material collected, including for<br>instance results for field duplicate/second-half sampling. | of sub-sample was collected and pulverised. Internal laboratory checks required at least 90% of the pulp passing -75 microns.  |
| Whether sample sizes are appropriate to the grat<br>the material being sampled | Whether sample sizes are appropriate to the grain size of the material being sampled.  | Laboratory QAQC includes the use of internal standards, certified reference materials and pulp replicates.   |
|  |  | Field sampling QAQC procedures included the use of certified reference materials inserted at a rate of 1 in 20.  |
|  |  | Between one and two field duplicates were taken for each RC hole, preferably within mineralised intervals. The results of duplicate analysis show no bias, but only moderate repeatability.  |
|  |  | Field duplicates of diamond core were not taken as ¼ core is considered inappropriate for comparison. Coarse crush and pulp duplicates were taken for RC and diamond samples during the recent drilling program and show good precision.   |
|  |  | Some RC samples at depth were identified as having downhole contamination and resultant smearing of grades as a result of wet drilling in 'sticky' material, with the samples being 'hung up' in the cyclone and subsequently contaminating later samples. This issue appears to only occur in a few drill holes and is not as prevalent as what was seen at the nearby Sissingué deposit. As a result of this, all RC holes in the pit area were reviewed and any suspected of containing smeared assays were removed from the dataset prior to estimation. 277 m from four RC drill holes (<1% of the samples) were removed due to suspected downhole contamination. In addition, 2016 drilling focused on diamond drill holes to confirm areas with RC drilling in the core of the deposit. |
|  |  | With the exception of the issue noted above, the sub-sampling is considered appropriate and representative.  |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
| Criteria<br>Quality of<br>assay data<br>and laboratory<br>tests | JORC Code explanation<br>The nature, quality and appropriateness of the assaying and<br>laboratory procedures used and whether the technique is<br>considered partial or total.<br>For geophysical tools, spectrometers, handheld XRF<br>instruments, etc., the parameters used in determining the<br>analysis including instrument make and model, reading<br>times, calibrations factors applied and their derivation, etc.<br>Nature of quality control procedures adopted (e.g. standards,<br>blanks, duplicates, external laboratory checks) and whether<br>acceptable levels of accuracy (i.e. lack of bias) and precision<br>have been established. | Commentary A small number of samples from initial holes were assayed by bottle roll with AAS finish, all subsequent RC and DD samples were assayed by standard 50 g fire assay with AAS finish for total gold content. No geophysical tools were used to determine any element concentrations. QAQC procedures included One to two field duplicates per RC hole Certified blanks inserted at one in 40 Certified standards at one in 20 Internal laboratory standards, duplicates and repeats. Review of the standards results indicates that Actlabs tends to undercall the gold standards for low grade samples by around 5% to 10%. As a result, umpire analysis was carried out on two batches using BMVL. The umpire results show that BMVL reports the low grade standards accurately. BMVL reports around a 5% to 10% higher gold grade for the low grade ranges. As a result of the above analysis, Snowden considers the Actlabs results acceptable for resource estimation, with the acknowledgement that the low grade samples are slightly conservative. Given the Mineral Resource reporting cut-off of 0.8 g/t gold, this should not have a material impact on the Mineral Resource. |
|   |  | no bias. Overall assaying quality is considered adequate.  |

| Criteria                     | JORC Code explanation  | Commentary   |
|------------------------------|--|--|
| Verification of sampling and | The verification of significant intersections by either<br>independent or alternative company personnel.   | Significant intersections are not highlighted; all RC cuttings and diamond core are systematically sampled.  |
| assaying                     | The use of twinned holes.  | As part of the 2016 drilling program, several RC drill holes with suspected  |
|                              | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.   | downhole smearing due to contamination at Bele East were twinned with diamond drill holes. As a result, the suspect RC drill holes were removed as discussed previously.   |
|                              | Discuss any adjustment to assay data.  | Drill holes information for both RC and diamond core holes is captured at the drill site on paper.   |
|                              |  | All hard copies are handed over to the database assistant at the site office and the information provided on paper is then entered into a database.  |
|                              |  | All hard copies are kept at the Tengrela site office.  |
|                              |  | Downhole survey data and collar survey data are provided by the drilling contractors and surveyors respectively in digital format.   |
|                              |  | Perseus maintains a centralised database for its various operations in Ghana and Côte d'Ivoire. Database administration is based in Perseus's office in Accra/Ghana and under the supervision of the company's Resource Geologist.   |
|                              |  | 2,082 below detection limit samples were reset to 0.001 g/t gold. No other adjustments were made to the raw assay data with the exception of the removal of any RC samples with suspected smearing of grades as previously discussed. Top cutting is only applied after database compositing and statistical analysis and prior to resource estimation.  |
| Location of<br>data points   | Accuracy and quality of surveys used to locate drill holes<br>(collar and downhole surveys), trenches, mine workings and<br>other locations used in Mineral Resource estimation.<br>Specification of the grid system used.<br>Quality and adequacy of topographic control. | Most RC and diamond drill holes collars were surveyed by the company's surveyor<br>in 2015 and 2016 using differential GPS equipment. 22 holes, including two holes<br>with diamond tails, could not be found at the time and were not surveyed. In these<br>cases, the original coordinates taken by handheld GPS were used. On average,<br>the difference between handheld and differential GPS is less than 2 m in the X and<br>Y directions. |
|                              |  | Downhole surveys were conducted by the drill contractors using a FlexIT tool at 30 m intervals for the diamond drill holes. Generally RC holes only have the collar azimuth and inclination measured.  |
|                              |  | The WGS84 UTM Zone 29 North grid system is used.   |
|                              |  | The topography covering the extent of the Resource model was created as a digital terrain model (DTM) in Surpac using the surveyed drill hole collar data and an additional 77,767 points established at 3 m intervals by differential GPS during 100 m spaced geophysical traverses.  |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
| Data spacing<br>and<br>distribution                              | Data spacing for reporting of Exploration Results<br>Whether the data spacing and distribution is sufficient to<br>establish the degree of geological and grade continuity<br>appropriate for the Mineral Resource and Ore Reserve<br>estimation procedure(s) and classifications applied.<br>Whether sample compositing has been applied.  | Nominal drill holes spacing over the resource area is predominantly 20 m by 40 m to 40 m by 40 m at Bélé West and 20 m by 20 m at Bélé East.<br>Data spacing is sufficient to establish grade and geological continuity appropriate to the resource estimation procedures and classifications applied.<br>Diamond and RC samples within the resource have been composited to 2 m.   |
| Orientation of<br>data in relation<br>to geological<br>structure | Whether the orientation of sampling achieves unbiased<br>sampling of possible structures and the extent to which this<br>is known, considering the deposit type.<br>If the relationship between the drilling orientation and the<br>orientation of key mineralised structures is considered to<br>have introduced a sampling bias, this should be assessed<br>and reported if material. | Orientation of drill holes is approximately perpendicular to the strike of the geology<br>and mineralisation at Bélé West.<br>At Bélé East, drill holes are angled to cross the steep dip of the geological<br>domains.<br>At Bélé East, 12 early RC holes have been drilled along exploration fences<br>oriented towards the east and hence sub-parallel to the mineralisation. Three of<br>these holes intercepted significant mineralisation. These intercepts have been<br>verified by holes drilled in the opposite direction, however, they have been<br>removed from the database for estimation to ensure no bias occurs due to the<br>orientation. |
| Sample<br>security   | The measures taken to ensure sample security.   | Chain of custody is managed by Perseus. Samples are stored on site until conveyed to the Bureau Veritas laboratory in Abidjan. Once dispatched, Perseus personnel have no further involvement in the preparation or analysis of the samples.  |
| Audits or<br>reviews   | The results of any audits or reviews of sampling techniques and data.   | Several reviews of sampling techniques were carried out by the company's senior personnel during site visits, with acceptable conclusions.  |
|  |   | Basic drill data validation has been carried out by Snowden during the preparation of the Mineral Resource estimate. No material issues were noted with the exception of the down-dip and potentially smeared RC samples mentioned previously.  |
|  |   | In addition Snowden reviewed the drilling and sampling procedures for diamond<br>and RC drilling at the Bélé deposit. Snowden also visited the core shed and<br>reviewed the diamond core sampling processes and diamond core, RC chip<br>boards and logging procedures. No material issues in the procedures were noted.<br>For the 2016 drilling, where RC drilling is used, the RC drilling is conducted until<br>wet samples are returned, at which point the drilling is changed to diamond drilling<br>to avoid the contamination of RC samples.  |

### JORC Code 2012 Section 2 Reporting of Exploration Results

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
| Mineral<br>tenement and<br>land tenure  | Type, reference name/number, location and ownership<br>including agreements or material issues with third parties such<br>as joint ventures, partnerships, overriding royalties, native title<br>interests, historical sites, wilderness or national park and<br>environmental settings. | Perseus, through its 100% owned subsidiary Occidental Gold SARL holds an Exploration Licence Permit PR259, issued by the Ivorian government in December 2012, valid for mineral exploration (Decree "2012-1172").  |
| status  |  | The tenement is fully owned by Perseus, through its subsidiary, with the Ivorian government holding a statutory 10% free carried interest.   |
| The security of the tenure held at th<br>with any known impediments to obta<br>in the area. | The security of the tenure held at the time of reporting along<br>with any known impediments to obtaining a licence to operate<br>in the area.   | The Exploration Licence expired on 19 December 2015 and is currently under application for renewal. The application has been approved by the General Director of Mines and Geology and is awaiting final signature of the Minister of Mines and Industry.  |
|   |  | The initial licence covered an area of 398 km <sup>2</sup> . The renewed licence has been reduced to an area of 298.5 km <sup>2</sup> .  |
|   |  | There are no known impediments with respect to exploration or mining.  |
| Exploration<br>done by other<br>parties   | Acknowledgment and appraisal of exploration by other parties.  | Perseus is not aware of any previous exploration activities.   |
| Geology   | Deposit type, geological setting and style of mineralisation.  | The Bélé gold deposits are located within a north-westerly striking splay of the Syama-Boundiali Greenstone Belt. At Bélé, Birimian aged rocks comprise a sequence of metasedimentary rocks and subordinate mafic volcanics that have been intruded by a nearly circular granitoid body approximately 4 km in diameter. The sequence has also been intruded by numerous felsic dykes of various compositions.                          |
|   |  | Gold mineralisation at both Bélé East and Bélé West is associated with deformation zones developed at and adjacent to the margins of the granitoid intrusion. Gold is associated with disseminated pyrite and lesser pyrrhotite hosted by both mafic and felsic lithologies where they feature chlorite-sericite-calcite alteration. Vein-hosted mineralisation is rare.   |
|   |  | Bélé West mineralisation is interpreted to extend around 1 km in strike, 50 m thickness (comprising several lodes up to 20 m thick each) and to a depth of 150 m. Bélé East mineralisation extends around 500 m along strike, 130 m thickness (comprising several lodes up to 20 m thick each) and to a depth of 170 m. The currently defined mineralisation in both areas is open at depth but appears to be closed out along strike. |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Drill holes<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:</li> <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>downhole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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> </ul> | <ul> <li>The Bélé drill holes data includes RC, diamond and aircore drill holes. Aircore drill holes were used as a guide to interpretation but were not used for estimation due to the poor quality of aircore samples. In additional 376 m (from four drill holes; 1% of the samples) of RC drilled down-dip to the mineralisation and 277 m (from four drill holes; &lt;1% of the samples) of RC with suspected downhole smearing due to contamination were excluded in Bélé East.</li> <li>Drilling used for the Mineral Resource includes: <ul> <li>274 RC drill holes for 21,937 m</li> <li>47 RC drill holes with diamond tail for 5,431 m</li> <li>54 diamond drill holes for 2,599 m.</li> </ul> </li> <li>Drill holes were set up using a compass. Compass readings and all downhole survey azimuth readings were adjusted according to the magnetic deviation.</li> <li>Exploration results have been reported previously. All drilling is included for Mineral Resource estimation.</li> </ul> <li>NA; exploration results are not reported.</li> |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept<br>lengths | These relationships are particularly important in the reporting<br>of Exploration Results.<br>If the geometry of the mineralisation with respect to the drill<br>hole angle is known, its nature should be reported.<br>If it is not known and only the down hole lengths are reported,<br>there should be a clear statement to this effect (e.g. 'downhole<br>length, true width not known').   | The majority of drilling is perpendicular to the mineralisation. Some scissor<br>holes have also been drilled, particularly in Bélé East where the mineralisation<br>is sub-vertical. Three of these holes intercepted significant mineralisation.<br>These intercepts have been verified by holes drilled in the opposite direction,<br>however, they have been removed from the database for estimation to ensure<br>no bias occurs due to the orientation.<br>Areas of the main northeast trending limb of Bélé West are not optimally<br>orientated as they are drilled east-west and the mineralisation is trending to the<br>northeast. The orientation is acceptable to define the limits of the<br>mineralisation however.  |

| Criteria                                 | JORC Code explanation   | Commentary   |
|--|---|--|
| Diagrams                                 | Appropriate maps and sections (with scales) and tabulations of<br>intercepts should be included for any significant discovery<br>being reported These should include, but not be limited to a<br>plan view of drill hole collar locations and appropriate sectional<br>views.   | Location plans and example sections are included in the Mineral Resource technical documentation.  |
| Balanced<br>reporting                    | Where comprehensive reporting of all Exploration Results is<br>not practicable, representative reporting of both low and high<br>grades and/or widths should be practiced to avoid misleading<br>reporting of Exploration Results.  | NA; all drilling is included in the Mineral Resource.  |
| Other<br>substantive<br>exploration data | Other exploration data, if meaningful and material, should be<br>reported including (but not limited to): geological observations;<br>geophysical survey results; geochemical survey results; bulk<br>samples – size and method of treatment; metallurgical test<br>results; bulk density, groundwater, geotechnical and rock<br>characteristics; potential deleterious or contaminating<br>substances. | NA; all drilling is included in the Mineral Resource.  |
| Further work                             | The nature and scale of planned further work (e.g. tests for<br>lateral extensions or depth extensions or large-scale step-out<br>drilling).<br>Diagrams clearly highlighting the areas of possible extensions,<br>including the main geological interpretations and future drilling<br>areas, provided this information is not commercially sensitive.   | Further resource definition drilling depends upon preliminary economic<br>evaluation of the resources defined to date. Further exploration is proposed for<br>other areas of the exploration permit. |

### JORC Code 2012 Section 3 Estimation and Reporting of Mineral Resources

| Criteria              | JORC Code explanation  | Commentary   |
|-----------------------|--|--|
| Database<br>integrity | Measures taken to ensure that data has not been<br>corrupted by, for example, transcription or keying<br>errors, between its initial collection and its use for<br>Mineral Resource estimation purposes.<br>Data validation procedures used. | Perseus validates the data routinely during data entry and data import into its database platform, Maxwell's Datashed software, and during importation into Surpac. This includes checks for   |
|                       |  | Duplicate or erroneous collars information   |
|                       |  | Missing samples  |
|                       |  | Down-hole from-to interval inconsistencies   |
|                       |  | Overlapping samples  |
|                       |  | Records beyond hole depth  |
|                       |  | Missing assays   |
|                       |  | Invalid geological codes   |
|                       |  | Import of digitally communicated assay results into Datashed is automated and does not necessitate manual interference (such as copy-and-paste commands).  |
|                       |  | Snowden carried out basic validation checks as part of preparing the data for estimation. The database checks undertaken by Snowden are listed below; no significant issues were identified:   |
|                       |  | • The downhole sampling intervals are consistent with no overlapping sample intervals.   |
|                       |  | • Assay values are within realistic limits. 2,082 below detection limit samples were reset to 0.001 g/t gold.  |
|                       |  | • The sample tables were checked to ensure there are no duplicate sample records.  |
|                       |  | There are no missing or incomplete collar survey coordinates.  |
|                       |  | <ul> <li>In addition, Snowden reviewed all RC samples within the pit area to assess them for<br/>potential downhole contamination and resultant smearing. Any samples suspected of<br/>containing smeared assays were removed from the dataset prior to estimation. This<br/>impacts 277 m from four RC drill holes (&lt;1% of the samples).</li> </ul>  |
| Site visits           | Comment on any site visits undertaken by the<br>Competent Person and the outcome of those visits.<br>If no site visits have been undertaken indicate why this<br>is the case.  | Steffen Brammer (Perseus) has visited the site several times and on a regular basis<br>since the commencement of Perseus' exploration activities and during various drilling<br>campaigns.<br>Lynn Olssen (Senior Principal Consultant) of Snowden Mining Industry Consultants<br>visited site during December 2016. Lynn reviewed the drilling and sampling procedures<br>for diamond and RC drilling at the Bélé deposit. Lynn also visited the core shed and<br>reviewed the diamond core sampling processes and diamond core, RC chip boards and<br>logging procedures. No material issues in the procedures were noted. |

| Criteria                     | JORC Code explanation  | Commentary  |
|------------------------------|--|---|
| Geological<br>interpretation | Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.  | Mineralisation domains, weathering and lithology were originally interpreted by Perseus.<br>Snowden reviewed and updated this interpretation for the March 2016 update.   |
|                              | tion geological interpretation of the mineral deposit.<br>Nature of the data used and of any assumptions made.<br>The effect, if any, of alternative interpretations on<br>Mineral Resource estimation.<br>The use of geology in guiding and controlling Mineral<br>Resource estimation.<br>The factors affecting continuity both of grade and<br>geology. | <ul> <li>Mineralisation at Bélé occurs as a series of lodes subparallel to the mafic lithologies.<br/>The lodes cross the mafics-granite boundary in places. In Bélé East there is a wider<br/>dilation of mineralisation in the central area which appears to be associated with a kink<br/>in the lithology, and is likely structurally related.</li> <li>The mineralisation domains were defined based on a nominal 0.2 g/t gold to 0.5 g/t gold<br/>cut-off together with the geological logging and lithology interpretation. The cut-off used<br/>is observed as a population change in the global log-probability plot.</li> <li>Note, the drill holes data includes RC, diamond and aircore drill holes. Aircore drill holes<br/>were used as a guide to interpretation but were not used for estimation due to the poor<br/>quality of aircore samples.</li> <li>The mineralisation domains were used as hard boundaries to control estimation.</li> <li>Snowden considers that any alternative interpretation would not have a material effect</li> </ul> |
| Dimensions                   | The extent and variability of the Mineral Resource   | Bélé West mineralisation is interpreted to extend around 1 km in strike, 140 m across   |
|                              | expressed as length (along strike or otherwise), plan<br>width, and depth below surface to the upper and lower<br>limits of the Mineral Resource.  | strike and to a depth of 150 m.<br>Bélé East mineralisation extends around 500 m along strike, 150 m across strike and to<br>a depth of 170 m.  |
|                              |  | The currently defined mineralisation in both areas is open at depth but appears to be closed out along strike.  |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Estimation<br>and modelling<br>techniques<br>The interp<br>extrag<br>estim<br>comp<br>The a<br>and/o<br>Miner<br>of suc<br>The a<br>and<br>o<br>units.<br>Any a<br>Desci<br>used<br>Discu<br>of rec | The nature and appropriateness of the estimation<br>technique(s) applied and key assumptions, including<br>treatment of extreme grade values, domaining,<br>interpolation parameters and maximum distance of<br>extrapolation from data points. If a computer assisted<br>estimation method was chosen include a description of<br>computer software and parameters used.<br>The availability of check estimates, previous estimates<br>and/or mine production records and whether the<br>Mineral Resource estimate takes appropriate account<br>of such data.<br>The assumptions made regarding recovery of by-<br>products.<br>Estimation of deleterious elements or other non-grade<br>variables of economic significance (e.g. sulphur for acid<br>mine drainage characterisation).<br>In the case of block model interpolation, the block size<br>in relation to the average sample spacing and the | Snowden estimated gold grades using ordinary block kriging (parent cell estimates) using Datamine software. The grades were estimated using the mineralisation domains for each area as hard boundaries. Ordinary kriging was selected as appropriate for estimation on the basis that coefficients of variation are generally low to moderate within the deposit, with top cuts used where required to control the influence of extreme grades. Discretisation of 4 by 4 by 4 was applied during estimation. Parent block size was based on kriging neighbourhood analysis (KNA) results and the geometry of the two areas; a 10 mE by 10 mN by 5 mRL parent block size was selected for both areas. The average drill holes spacing is 20 m by 20 m to 20 m by 40 m. Review of the histograms and log-probability plots shows that there is a high coefficient of variation (CV) and outliers evident within the Bélé East area. As a result, a top cut of 30 g/t Au was applied to the data in this area prior to estimation. The Bélé West area has a maximum value of <30 g/t gold and does not appear to require top cutting. Dynamic anisotropy was used for estimation, whereby the local dip and azimuth of the mineralised lodes was estimated into each block in the model and the search and variogram orientations were locally adjusted to reflect the geological orientation. This method allows the estimate to better reflect the changing orientation and undulating nature of the lodes. |
|   | search employed.<br>Any assumptions behind modelling of selective mining   | Search parameters were defined based on the ranges of continuity seen in the variograms and KNA results. Estimates were run using a minimum of 6 and a maximum of 14 informing composites for the first search pass.  |
|   | Any assumptions about correlation between variables.<br>Description of how the geological interpretation was<br>used to control the resource estimates.<br>Discussion of basis for using or not using grade cutting  | The second search pass used a minimum of six and a maximum of eight informing composites, with the search ellipse doubled in size to inform blocks not informed during the first search pass. A third search pass with the number of samples reduced to a minimum of four and a maximum of eight, with six times the search ellipse size, was to used where an estimate could not be obtained using the second search pass.   |
|   | or capping.<br>The process of validation, the checking process used,<br>the comparison of model data to drill hole data, and use<br>of reconciliation data if available.   | To ensure that data from multiple drill holes were used during the block estimation, a maximum of three composites were allowed from each drill holes.  |
|   |  | Final grade estimates were validated by: undertaking global grade comparisons with the input drill holes composites; visual validation of block model cross sections; and by grade trend plots. In addition, a theoretical global change of support was carried out to validate the level of smoothing in the estimate.   |
|   |  | The resultant estimate contains less tonnes at a higher grade within the main domains compared to the previous estimate. This is a result of the additional data allowing for a more locally accurate estimate. Application of the constraining pit shell has removed the deeper portions of the Inferred Resource, together with some blocks at the northern and southern extents. This has resulted in an overall reduction in tonnes and ounces compared to the previous Mineral Resource.   |

| Criteria                                   | JORC Code explanation  | Commentary   |
|--|--|--|
| Moisture                                   | Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.   | All tonnages are calculated and reported on a dry tonnes basis.  |
| Cut-off<br>parameters                      | The basis of the adopted cut-off grade(s) or quality parameters applied.   | The Mineral Resource has been reported by resource classification and weathering above a 0.8 g/t gold cut-off.   |
|  |  | The cut-off grade is based on preliminary engineering work which indicates a 0.75 g/t Gold to 0.85 g/t gold cut-off will be applicable for mining, depending on the degree of weathering.              |
| Mining factors<br>or<br>assumptions        | Assumptions made regarding possible mining methods,<br>minimum mining dimensions and internal (or, if<br>applicable, external) mining dilution. It is always<br>necessary as part of the process of determining<br>reasonable prospects for eventual economic extraction<br>to consider potential mining methods, but the<br>assumptions made regarding mining methods and<br>parameters when estimating Mineral Resources may<br>not always be rigorous. Where this is the case, this<br>should be reported with an explanation of the basis of<br>the mining assumptions made. | Mining is assumed to be traditional drill and blast open cut mining.   |
| Metallurgical<br>factors or<br>assumptions | The basis for assumptions or predictions regarding<br>metallurgical amenability. It is always necessary as part<br>of the process of determining reasonable prospects for<br>eventual economic extraction to consider potential<br>metallurgical methods, but the assumptions regarding<br>metallurgical treatment processes and parameters<br>made when reporting Mineral Resources may not<br>always be rigorous. Where this is the case, this should<br>be reported with an explanation of the basis of the<br>metallurgical assumptions made.                                | Metallurgical work has been initiated and is currently ongoing. Preliminary results suggest that the ore is amenable to the treatment processes considered for the company's nearby Sissingué project. |

| Criteria                                   | JORC Code explanation  | Commentary  |
|--|--|---|
| Environmental<br>factors or<br>assumptions | Assumptions made regarding possible waste and<br>process residue disposal options. It is always<br>necessary as part of the process of determining<br>reasonable prospects for eventual economic extraction<br>to consider the potential environmental impacts of the<br>mining and processing operation. While at this stage<br>the determination of potential environmental impacts,<br>particularly for a greenfields project, may not always be<br>well advanced, the status of early consideration of<br>these potential environmental impacts should be<br>reported. Where these aspects have not been<br>considered this should be reported with an explanation<br>of the environmental assumptions made. | There are other gold mines operating within Mali and Côte d'Ivoire in the general region<br>where Bélé is located.<br>There are no known environmental impediments to mining.   |
| Bulk density                               | Whether assumed or determined. If assumed, the basis<br>for the assumptions. If determined, the method used,<br>whether wet or dry, the frequency of the<br>measurements, the nature, size and representativeness<br>of the samples.<br>The bulk density for bulk material must have been<br>measured by methods that adequately account for void<br>spaces (vugs, porosity, etc.), moisture and differences<br>between rock and alteration zones within the deposit.<br>Discuss assumptions for bulk density estimates used in<br>the evaluation process of the different materials.  | Bulk density values were determined by measurements on available core and RC chips.<br>The values assigned to the models are based on the weathering and lithology domains<br>and range from 1.60 t/m <sup>3</sup> in the oxide granites to 2.76 t/m <sup>3</sup> in the fresh mafic volcanics.<br>Bulk density of fresh material was determined by 93 laboratory measurements of half<br>core pieces (10 cm pieces) using an Archimedes method of weight in water and weight<br>in air. Full core trays were also weighed and bulk density calculated by measuring the<br>length of the core within the tray and calculating the volume. This method compares<br>well to the laboratory measurements for the granites but resulted in an unrealistically<br>low bulk density for the mafic volcanics.<br>Bulk density for the transitional material was assigned based on 98 whole core tray<br>measurements. In-house Archimedes style measurements were also taken on whole<br>core pieces (10 cm pieces), however, while the granite values are the same for both<br>methods, the mafic volcanics appear unrealistically low (lower than the granite) for the<br>in-house measurements.<br>Bulk density for the oxide was assigned based on 47 in-house measurements which<br>appear reasonable. While core tray measurements were also calculated, these are<br>considered prone to bias in the oxides due to the poorer recovery in the oxide material.<br>The core tray values are higher than the in-house measurements.<br>Previous transitional and oxide bulk densities were based on weighing RC sample bags<br>which is acknowledged to be a suboptimal method. Snowden considers that the revised<br>bulk density values (which are typically lower than those used previously) are more<br>robust. |

| Criteria             | JORC Code explanation  | Commentary  |
|----------------------|--|---|
| Classification       | The basis for the classification of the Mineral<br>Resources into varying confidence categories.<br>Whether appropriate account has been taken of all<br>relevant factors (i.e. relative confidence in<br>tonnage/grade estimations, reliability of input data,<br>confidence in continuity of geology and metal values,<br>quality, quantity and distribution of the data).<br>Whether the result appropriately reflects the Competent<br>Person's view of the deposit. | <ul> <li>The resource estimate has been classified as an Indicated and Inferred Resource in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code) and the CIM Definition Standards (CIM, 2005).</li> <li>A range of criteria has been considered in determining this classification including: <ul> <li>Geological continuity.</li> <li>Data quality.</li> <li>Drill holes spacing.</li> <li>Estimation properties including kriging neighbourhood analysis to determine appropriate block size and search strategy.</li> <li>Potential for economic extraction</li> </ul> </li> <li>The above parameters were used in combination to guide the manual digitising of strings on drill sections to control classification. Typically Indicated Resources are defined in areas of 20 m by 20 m drilling at Bélé East and 40 m by 40 m drilling at Bélé West which shows more continuity in grade.</li> <li>Trial optimisation has been run at a US\$2,400 gold price to define the base of potentially mineable material by open pit mining.</li> <li>The Competent Person endorses the final results and classification.</li> </ul> |
| Audits or<br>reviews | The results of any audits or reviews of Mineral Resource estimates.  | The Mineral Resource has been internally reviewed by Snowden.   |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Discussion of<br>relative<br>accuracy/<br>confidence | Where appropriate a statement of the relative accuracy<br>and confidence level in the Mineral Resource estimate<br>using an approach or procedure deemed appropriate by<br>the Competent Person. For example, the application of<br>statistical or geostatistical procedures to quantify the<br>relative accuracy of the resource within stated<br>confidence limits, or, if such an approach is not deemed<br>appropriate, a qualitative discussion of the factors that<br>could affect the relative accuracy and confidence of the<br>estimate.<br>The statement should specify whether it relates to<br>global or local estimates, and, if local, state the relevant<br>tonnages, which should be relevant to technical and<br>economic evaluation. Documentation should include<br>assumptions made and the procedures used.<br>These statements of relative accuracy and confidence<br>of the estimate should be compared with production<br>data, where available. | No studies of relative accuracy have been carried out. The classification applied reflects the confidence in the Mineral Resource.<br>No production data is available. |