

21 February 2017

# PERSEUS UPDATES MINERAL RESOURCE AND ORE RESERVE ESTIMATES FOR EDIKAN GOLD MINE

Perseus Mining Limited (ASX/TSX: PRU) ("Perseus") recently completed a re-estimation of Mineral Resources and Ore Reserves at its Edikan Gold Mine in Ghana ("Edikan"). Details are as follows:

#### **EXECUTIVE SUMMARY**

#### **Mineral Resources**

- Edikan's updated global Measured and Indicated Mineral Resource estimate, as at 31
   December 2016, is 155.8 million tonnes grading at 1.0g/t gold, containing 5,011 kozs of gold. A further 30.0 million tonnes of material grading at 0.9 g/t gold and containing a further 899kozs of gold are classified as Inferred Resources.
- Whereas all previous Mineral Resources estimates at Edikan have been prepared using the ordinary kriging ("OK") estimation method, the updated Open Pit Mineral Resource estimate (including the AFG, Fobinso, Fetish, Chirawewa, Bokitsi and Esuajah North deposits) is based on multiple indicator kriging ("MIK") estimating techniques. Estimates of the Esuajah South deposit and the Heap Leach material use the OK estimation method which is more appropriate for estimating underground mining projects and stockpiles.
- Comparisons of the updated Edikan Mineral Resource models against ore delineated by grade control during the last three months of calendar 2016 and in January 2017 indicate that the updated Resource estimates are likely to be more reliable predictors of ore tonnes and grades than were the previous Resource models and this should result in a closer correlation between forecasts and actual gold production going forward.
- When compared to a global Open Pit Mineral Resource estimate calculated based on the same data using the OK method, the revised MIK based Mineral Resource estimate includes:
  - o 15% more tonnes
  - o 8% lower grade
  - 199 kozs or 5% more contained gold
  - 35% less material in the Measured classification and 60% more material in the Indicated classification as a result of the adoption of more rigorous criteria for classification of Mineral Resources.

#### **Ore Reserves**

- Edikan's updated Proved and Probable Ore Reserve estimate is based on the Edikan Mineral Resources as at 31 December 2016 and updated pit optimisation, design and scheduling of the Open Pit resources and a new Esuajah South Ore Reserve based on underground mining methods. The total Ore Reserve is estimated at 56.5 million tonnes of ore, grading 1.14 g/t gold and containing 2,078kozs of gold.
- Allowing for ore depletion from mining since 30 June 2016 and for the addition of Ore
  Reserves contained in decommissioned heap leach stockpiles not previously included in
  Reserves, the updated Ore Reserve estimate contains 99kozs or approximately 5% less gold
  than Edikan's previous Ore Reserve estimated as at 30 June 2016 as shown below.

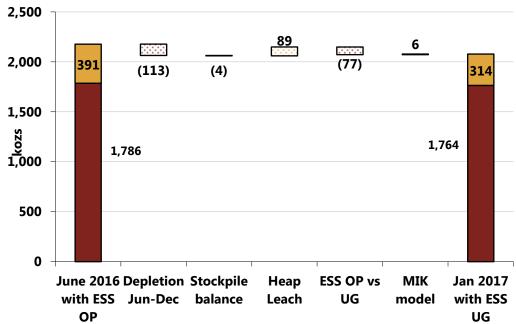
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Graph 1: Change in Edikan's Ore Reserves – June 2016 to December 2016



**Note:** Opening and closing balance shows the Esuajah South ("ESS") Ore Reserve (in gold) separately to the balance of the Edikan Ore Reserves as the ESS ore is not scheduled to be mined under the current Life of Mine Plan

 Based on Edikan's updated Ore Reserves, Perseus is preparing a revised Life of Mine Plan for Edikan which it intends to publish prior to the end of February 2017.

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

"The updated Mineral Resource and Ore Reserve estimates at Edikan have numerically changed very little from the previously published estimates notwithstanding the fact that a different estimating technique that is considered to be more suited to the style of mineralisation that we have been mining recently in the open pit has been adopted. Tonnes are slightly higher, grade is slightly lower and contained metal is slightly higher.

Since applying multiple indicator kriging techniques to estimate Mineral Resources in favour of ordinary kriging techniques that have been traditionally used at Edikan, we have witnessed a material improvement in the reconciliation between our Resource block model estimates and grade control data.

It is therefore expected that our production forecasts, and in particular our revised Life-of-Mine Plan for Edikan that is due to be published by the end of this month, will more closely reflect actual operating experience than has been the case during the last twelve months."

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#### **MINERAL RESOURCE ESTIMATE**

The global Mineral Resource estimate is prepared in accordance with the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Refer to **Appendices 1, 2 and 3** for the JORC Table 1 criteria for open pit, underground and heap leach resources, respectively. The Mineral Resource estimate is summarised in the following table that reports the Mineral Resources by category, deposit and deposit type. The classification categories of Measured, Indicated and Inferred under the JORC Code are equivalent to the CIM categories of the same name (CIM, 2010).

In summary, the updated global Measured and Indicated Mineral Resource for Edikan is now estimated as 155.8 Mt grading at 1.0g/t gold, containing 5,011 kozs of gold as shown in *Table 1*. A further 30.0 Mt of material grading at 0.9 g/t gold and containing a further 899 kozs of gold are classified as Inferred Resources. Details of these estimates are shown below in *Table 2*.

Table 1: Edikan's Measured and Indicated Mineral Resources – December 2016<sup>6,7</sup>

	Deposit	Measur	ed Resou	ırces	Indicated Resources		Measured + Indicated Resources			
Deposit	Type	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
	.,,,,	Mt	g/t	'000	Mt	g/t	'000	Mt	g/t	'000
		IVIL	gold	oz	IVIC	gold	oz	IVIL	gold	oz
AF Gap <sup>1, 2</sup>	Open Pit	11.0	0.97	342	35.6	0.84	963	46.6	0.87	1,305
Fobinso <sup>1, 2</sup>	Open Pit	2.7	1.08	93	11.8	0.94	357	14.5	0.97	450
Esuajah North <sup>1, 2</sup>	Open Pit	11.4	0.96	352	19.5	0.89	557	30.9	0.92	909
Fetish <sup>1, 2,5</sup>	Open Pit	9.6	1.00	309	23.9	0.90	692	33.5	0.93	1,001
Chirawewa North <sup>1, 2</sup>	Open Pit	1.4	0.85	38	5.7	0.82	150	7.1	0.83	188
Chirawewa South <sup>1, 2</sup>	Open Pit	0.2	1.16	6	0.6	1.02	19	0.8	1.05	25
Bokitsi South <sup>1, 2</sup>	Open Pit	0.9	2.57	71	1.1	1.90	66	1.9	2.20	137
Sub-Total	Open Pit	37.2	1.01	1,211	98.2	0.89	2,804	135.3	0.92	4,015
Esuajah South <sup>3</sup>	U/ground	8.5	1.9	533	6.3	1.7	353	14.8	1.8	879
Heap Leach <sup>4</sup>	Stockpile				4.3	0.6	89	4.3	0.6	89
ROM Stockpiles	Stockpile	1.4	0.61	28	-	-	-	1.4	0.61	28
Total		47.1	1.17	1,772	108.8	0.93	3,246	155.8	1.00	5,011

#### Notes:

- 1. Allows for mining depletion to 31 December 2016.
- 2. 0.4g/t gold cut-off applied
- 3. 0.7g/t gold cut-off grade applied
- 4. At zero cut-off grade
- 5. Includes Bokitsi North lode
- 6. Mineral Resources are inclusive of any Ore Reserves
- 7. Numbers are rounded and may not add up correctly in the table
- 8. Note that the Dadieso and Mampong deposits have been removed from the Mineral Resource on economic grounds

Whereas all previous estimates of Mineral Resources at Edikan have been prepared using the OK estimation method, the updated Mineral Resource estimate is based on MIK estimating techniques for all deposits other than the Esuajah South deposit and Heap Leach where the OK estimation method has continued to be used.



Table 2: Edikan's Inferred Mineral Resources – December 2016

		Inferred Resources				
Deposit	Deposit Type	Quantity	Grade	Gold		
		Mt	g/t gold	'000 oz		
AF Gap <sup>1, 2</sup>	Open Pit	9.4	0.8	250		
Fobinso <sup>1, 2</sup>	Open Pit	3.5	0.9	95		
Esuajah North <sup>1, 2</sup>	Open Pit	2.9	0.9	88		
Fetish <sup>1, 2,4</sup>	Open Pit	6.3	1.0	191		
Chirawewa North <sup>1, 2</sup>	Open Pit	1.5	0.8	39		
Chirawewa South <sup>1, 2</sup>	Open Pit	0.04	1.1	1		
Bokitsi South <sup>1, 2</sup>	Open Pit	1.3	1.1	43		
Esuajah South <sup>3</sup>	Underground	4.7	1.3	192		
Total		30.0	0.9	899		

#### Notes:

- 1. Allows for mining depletion to 31 December 2016.
- 2. 0.4g/t gold cut-off applied.
- 3. 0.7g/t gold cut-off grade applied
- 4. Includes Bokitsi North lode
- 5. Numbers are rounded and may not add up correctly in the table

Comparisons of the updated Edikan Mineral Resource models against ore delineated by grade control during the last three months of calendar 2016 and in January 2017 indicate that the updated Resource estimates are likely to be more reliable predictors of ore tonnes and grades than were the previous Resource models and this should result in a closer correlation between forecasts and actual gold production going forward.

When compared to an Open Pit Mineral Resource estimate calculated at the same date, using the OK method (which has been traditionally used at Edikan), the revised MIK based Mineral Resource estimate includes:

- 15% more tonnes
- 8% lower grade
- 5% more contained gold
- 35% less material in the Measured classification and 60% more material in the Indicated classification as a result of the adoption of a more rigorous set of criteria for classification of Mineral Resources.

A direct comparison of Mineral Resource estimates using the two alternative techniques is shown in *Table 3* below.

Table 3: Edikan's Open Pit Mineral Resource Estimates using MIK and OK estimation techniques

	Estimated	l using MIK Te	chniques	Estim	nated Using OK	Techniques
Mineral Resource Category	Quantity (Mt)	Grade (g/t gold)	Gold (koz)	Quantity (Mt)	Grade (g/t gold)	Gold (koz)
Measured	37.2	1.01	1,211	56.8	1.01	1,860
Indicated	98.2	0.89	2,804	61.2	0.99	1,956
Measured + Indicated Inferred	135.3 24.8	0.92 0.89	4,015 707	118.0 48.6	1.00 0.94	3,816 1,473



Edikan's Mineral Resources comprise four components:

- remaining in situ mineralisation in the Abnabna-AF Gap, Fobinso, Esuajah North, Fetish,
   Chirawewa North, Chirawewa South and Bokitsi South deposits each of which is exploitable by open pit mining methods;
- in situ mineralisation in the Esuajah South deposit, potentially exploitable by underground mining methods;
- heap leach material remaining from the treatment of oxide mineralisation by previous mine operators; and
- material on mine stockpiles at 31 December 2016.

#### Geology

The Edikan gold deposits occur near the western flank of the Ashanti Greenstone Belt in southwestern Ghana. Mineralisation is hosted by Palaeoproterozoic aged rocks of the Birimian Supergroup. Structurally controlled gold mineralisation occurs in two principal modes: disseminated pyrite-arsenopyrite mineralisation associated with quartz veining and sericite alteration hosted by granitoids and shear-zone hosted mineralisation associated with pyrite-arsenpoyrite mineralisation in and adjacent to quartz veins in deformed, fine-grained metasedimentary rocks. The strike lengths of the individual deposits range from approximately 300 metres (Esuajah South) to more than 2 kilometres (Abnabna-AF Gap-Fobinso). Granite-hosted mineralisation is developed over widths of up to 150 metres; shear hosted mineralisation in metasedimentary rocks is typically 10-30 metres wide. Resource definition drilling has defined mineralisation to depths ranging from approximately 130 metres (Chirawewa South) to more than 550 metres (AF Gap, Esuajah South).

#### **Drilling Techniques**

Edikan Mineral Resources are delineated by Reverse Circulation ("RC") and diamond core drill holes undertaken by previous operators Cluff Mining Plc and Ashanti Goldfields Corporation, and by Perseus. Estimates of those portions of the *in situ* resources remaining at 31 December 2016 are informed almost entirely by Perseus drilling and the majority of data informing the estimates derive from samples of half NQ diameter diamond core.

Drill hole collar locations have been surveyed by qualified surveyors. Perseus diamond core holes were down-hole surveyed at nominal 30 metre intervals.

Orientation of drill holes at each of the deposits is approximately perpendicular to the strike of mineralisation. With the exception of Esuajah South, the interpreted geometries and continuities of mineralisation underpinning the resource estimates have been confirmed by grade control drilling and mine exposures.

#### Sampling

RC drill samples were collected at drill sites at 1 metre intervals and split using multi-stage riffle splitters. For the majority of Perseus's drilling, each two consecutive samples were composited into one sample for assaying. Sample weights were nominally 2.5 kilograms and 5 kilograms for 1 metre and 2 metre samples respectively.



Diamond core was sawn in half using a diamond blade saw, with the right-hand half sent for assaying and the left-hand half stored in core trays for reference. Samples were normally taken at 1 metre intervals.

Core recoveries from Perseus diamond drilling were measured and averaged in excess of 90% with no significant issues noted. RC samples were logged visually for recovery, moisture and contamination. RC sample recoveries were not quantitatively measured. Considering that the bulk of estimated remaining resources at Edikan are informed by diamond core samples, sample recovery is not considered to be a significant risk to the reliability of the estimates.

#### Sample Analytical Methods

All sample preparation and assaying was carried out by commercial laboratories; no sample preparation was undertaken by Perseus.

Samples collected by Perseus were variously assayed by Transworld Laboratories, Tarkwa, Intertek Laboratories (Gh) Ltd (formerly TWL), Tarkwa, and ALS, Kumasi. Approximately 5% of samples were assayed by 24 hour cyanide bottle roll with atomic absorption spectroscopy ("AAS") finish. All other RC samples and diamond half core samples were analysed by 50 gram Fire Assay and AAS finish. Sample preparation typically comprised drying, crushing to -2millimetres and pulverising of a 200 gram subsample. Internal laboratory checks required at least 90% of the pulp passing -75 microns.

Perseus's quality assurance and quality control "QAQC" procedures included submission of field duplicates (RC only) inserted at 1 in 25, certified blanks inserted at 1 in 20, certified standards at 1 in 20, internal laboratory standards, duplicates and repeats.

# **Open Pit Mineral Resources Estimation Methodology**

Geological logging of lithology and weathering were considered in conjunction with gold grades of 2 metre composited sample intervals to delineate mineralised domains at each of the deposits within which the tenor and spatial trends of mineralisation are similar. Grade control sampling and exposures of and host rocks within the open pits currently being mined confirm the geometry of the mineralisation.

MIK with block support adjustment was used to estimate gold resources into blocks with dimensions of 20 metres (east) by 20 metres (north) by 5 metres (elevation), is considered appropriate given the spacing of data available to inform the estimates and the mining bench height presently used at Edikan. MIK of gold grades used indicator variography based on the 2 metre resource composite sample grades. Gold grade continuity was characterised by indicator variograms at 14 indicator thresholds spanning the global range of grades in each of the mineralised domains.

The effect of extreme gold grades on the conditional statistics of data informing each of the estimation domains was considered. The effect of extreme grades on estimates was modified by composites being ignored domain during the generation of the indicator statistics, and by selection of the median instead of the mean for the highest indicator threshold.

Block support adjustments were derived from the variogram of gold grades in each of the mineralised domains. The selective mining unit was assumed to be in the general range 6mE by 10mN by 2.5mRL, reflecting the scale of mining presently employed at Edikan. Additional adjustments for the "Information Effect" have been applied, based on high quality grade control



sampling at 8mE x 8mN x 1m consistent with current practices at Edikan, to arrive at the final Mineral Resource estimates.

The Mineral Resource estimates can be reasonably expected to provide appropriately reliable estimates of potential mining outcomes at the assumed selectivity without application of additional mining dilution or mining recovery factors.

Compositing and wire-framing were performed using Micromine software. Exploratory data analysis, variogram calculation and modelling, and resource estimation were performed using FSSI Consultants (Australia) Pty Ltd (FSSI) GS3M software.

The Mineral Resource estimates for Abnabna – AFGap – Fobinso, Fetish, Chirawewa and Esuajah North were compared to recent mine site grade control outcomes. The grade control modelling undertaken for validation was performed using the MP3 grade control software. The mined tonnes and grade of ore for the four months to January 2017 compared favourably.

#### Criteria for Resource Classification

Confidence categories have been applied to the estimates of Mineral Resource on a block-by-block basis based on the number and location of data used to estimate proportions and gold grade of each block. This is based on the principle that larger numbers of samples, which are more evenly distributed within the search neighbourhood, will provide a more reliable estimate. Generally, Measured resources are informed by drilling at approximately 20 metre x 20 metre spacing or closer, Indicated resources are informed by drilling spaced at up to 40 metre x 40 metre and Inferred resources are on the peripheries of drilling to a maximum distance of approximately 40 metres.

The Mineral Resource classification also considered the quality of the data collected (geology, survey and assaying data), the density of data, the confidence in the geological models and mineralisation model, and the grade estimation quality.

#### **Cut-Off Grade**

The cut-off grade of 0.4g/t gold for the stated open pit Mineral Resource estimates reflects economic parameters deriving from current and anticipated mining practices at Edikan.

#### Esuajah South Mineral Resource Estimation Methodology

Wireframes were constructed using cross sectional interpretations based on geological contacts and a nominal 0.2g/t gold cut-off grade. Samples within the wireframes were composited to even 1 metre intervals. A 40g/t gold top cut was applied to composite values in the granite mineralisation. Top cuts of between 15g/t gold to 30g/t gold were applied to selected sediment lodes. Top cuts were based on statistical analysis of composite data.

A Surpac block model was used for the estimate with a parent block size of 10 metre (North) by 10 metre (East) by 10 metre vertical with sub-cells of 2.5 metre by 2.5 metre by 2.5 metre. OK grade interpolation was used for the granite mineralisation with an oriented search ellipse based on interpreted controls on mineralisation. A first pass radius of 30 metres was used with a second pass radius of 60 metres and a third pass radius of 240 metres. Greater than 86% of the blocks were filled in the first two passes. An 'ellipsoid' search method was used.



Inverse distance squared grade interpolation was used for the sediment-hosted mineralisation with an oriented search ellipse based on individual lode geometry. A first pass radius of 30 metres was used with a second pass radius of 60 metres and a third pass radius of 180 metres. Greater than 92% of the blocks were filled in the first pass. An 'ellipsoid' search method was used.

#### Criteria for Resource Classification

The deposit was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, drill hole spacing, and continuity of mineralisation. The portion of the granite where the drill spacing was 20 metres by 20 metres or less and demonstrating good lode and grade continuity supported by high kriging efficiencies was classified as Measured Mineral Resource. The portion of the deposit where the drill spacing was generally greater than 20 metres by 20 metres but still demonstrated good lode and grade continuity was classified as Indicated Mineral Resource. The portion of the deposit classified as Inferred Mineral Resource includes areas where the drill spacing was greater than 40 metres by 40 metres and the zones of mineralisation within the adjacent sediments that are defined by limited drilling.

#### **Cut-Off Grade**

The Mineral Resource estimate has been constrained by the wire-framed mineralisation envelopes, is undiluted by external waste and reported above a 0.7g/t gold cut-off grade. The cut-off grade reflects economic parameters deriving from anticipated underground mining practices, costs and recoveries from the Feasibility Study.

#### Heap Leach Mineral Resource Geology

The heap leach mineral resource quoted herein comprises only material contained in the "Africa Heap". The Africa Heap comprises approximately 55% of the total volume of heap leach material remaining after processing of oxide ores by previous operators Cluff Mining Plc and Ashanti Goldfields Corporation between 1994 and 2001 and is defined by geographic limits.

#### **Drilling Techniques**

The Africa Heap has been sampled by 338 vertical RC and air core ("AC") drill holes at a nominal spacing of 20 metres x 20 metres. Hole depths varied from 18 metres to 45 metres. Drill hole collar locations were accurately surveyed by Perseus qualified mine surveyors.

#### Sampling

RC and AC samples were subsampled at the drill sites using a multi-tier riffle splitter. The Mineral Resource estimate is informed by 7,584 samples collected over 1 metre intervals and 1,632 samples assayed as 5 metre composite samples.

#### Sample Analytical Methods

Samples from the first 27 RC and first 27 AC holes were analysed for gold only by 24 hour bottle roll cyanide leach with AAS finish at Intertek Minerals Ltd in Tarkwa, Ghana. For all subsequent RC and AC holes, gold was assayed by Fire Assay with AAS finish at either Intertek Minerals Ltd or at ALS Minerals in Kumasi, Ghana.

Certified reference materials and blanks were submitted at a rate of one standard or blank for every 15 samples. Field duplicate splits were taken at a nominal rate of one duplicate per drill hole.



#### **Estimation Methodology**

Average gold grade of the Africa Heap was estimated by a number of methods including Inverse Distance Squared weighting, OK, Simple Kriging and Sequential Gaussian Simulation. All methods resulted in essentially identical estimates of average grade.

The volume of the Africa Heap has been estimated by generating two triangulated surfaces: a topographic surface based on approximately 2,300 surveyed spot heights and drill hole collar locations and a bottom surface based on depths at which drill holes penetrated the plastic liner at the base of the heap. The volume was adjusted for depletion by illegal mining carried out between the date of the topographic survey and November 2015, the affected volume being estimated from aerial photography.

A dry in-situ density estimate of 1.32 t/m³ was assigned to the heap leach pad material. Density values and moisture content were determined by independent consultants in August 2015 from 30 test pits, and a mean value was applied to the Mineral Resource.

#### Criteria for Resource Classification

The Mineral Resource is classified as Indicated, based on drill and sample density, accurate and detailed surface survey of the heaps and the close match of average grades derived from the various estimation methods.

#### **Cut-Off Grade**

There has been no cut-off grade applied to derive the Heap Leach Mineral Resource. It is assumed that it is not feasible to selectively mine higher grade portions of the material.

#### **Stockpiles**

Mineral Resources contained in stockpiles are based on volume estimates based on ground survey data, loose bulk densities derived over time by reconciliation of volumes mined (at *in situ* densities) to stockpile movements and volumes, and estimates of stockpile grades based on predicted grades of mined material transferred onto stockpiles and material depleted by processing.

Closing stockpiles at 31 December 2016 were estimated to be:

Material	Quantity (Tonnes)	Grade (g/t gold)	Gold (Ounces)
High grade oxide	12,939	1.04	433
Low grade oxide	540,128	0.55	9,567
Low grade fresh	789,044	0.59	14,865
High grade fresh	13,544	1.15	501
High grade transition	90,631	1.04	3,042
TOTAL	1,446,286	0.61	28,408

Stockpile tonnes and grade estimates are considered sufficiently accurate to support classification as Measured Mineral Resources.



#### **ORE RESERVE ESTIMATE**

The updated Ore Reserve is summarised below in *Table 4* and is based on the Edikan Mineral Resources as at 31 December 2016 and updated pit optimisation, design and scheduling of the Open Pit resources and a new Esuajah South Ore Reserve based on underground mining methods. All Ore Reserves are reported in accordance with the JORC Code. Refer to *Appendices 1 and 2* for the JORC Table 1 assessment criteria. The Ore Reserve estimate is summarised in the following table that reports the Ore Reserves by category, deposit and type, above variable cut-off grades. The classification categories of Proved and Probable under the JORC Code are equivalent to the CIM categories of the same name (CIM, 2010).

Table 4: Edikan's Proved and Probable Ore Reserves as at 31 December 2016

		F	roved		Probable		Prove	Proved + Probable		
Deposit	Deposit	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
	Туре	Mt	g/t gold	koz	Mt	g/t gold	koz	Mt	g/t gold	koz
AF Gap	Open Pit	5.5	1.09	191	6.0	1.07	208	11.5	1.08	399
Fobinso	Open Pit	1.1	1.19	44	3.3	1.11	119	4.5	1.13	163
Esuajah North	Open Pit	6.5	1.10	229	7.8	1.04	262	14.3	1.07	491
Fetish	Open Pit	4.6	1.21	179	7.9	1.11	281	12.5	1.15	459
Chirawewa North	Open Pit	0.5	1.05	17	2.0	0.99	63	2.5	1.01	80
Bokitsi	Open Pit	0.5	2.94	44	0.1	2.75	10	0.6	2.91	55
Sub-total	Open Pit	18.7	1.17	704	27.1	1.08	943	45.8	1.12	1,647
Esuajah South	U/ground				4.9	2.0	314	4.9	2.0	314
Heap Leach	Stockpile				4.3	0.6	89	4.3	0.6	89
ROM Stockpiles	Stockpile	1.4	0.61	28				1.4	0.61	28
Total		20.1	1.13	733	36.3	1.13	1,346	56.5	1.14	2,078

#### Notes:

- 1. Numbers are rounded and may not add up correctly in the table
- 2. All the estimates are on a dry tonne basis
- 3. Based on December 2016 Mineral Resource estimation
- 4. Variable gold cut-off grade based on material type and mining method
- 5. Inferred Mineral Resource is treated as mineralised waste
- 6. Allows for mining depletion up to and including 31 December 2016
- 7. ROM denotes Run of Mine
- 8. Heap Leach refers to decommissioned heap leach pads established by prior owners of Edikan

Proven and Probable Ore Reserves are found within the economic limits of six discrete open pits, an underground project and stockpiles that have been designed based on Measured and Indicated Mineral Resources that incorporated all available Resource in-fill drilling results, a gold price of US\$1,200/oz and mining, processing and general and administration costs derived from recent operating experience.

When compared to Edikan's most recently published Ore Reserve estimate as at 30 June 2016, and after taking into account ore depletion plus the addition of Ore Reserves contained in the decommissioned heap leach stockpiles created by prior owners of the mine and not previously accounted for by Perseus, the gold contained in the updated Ore Reserve estimate has changed by less than 5% or 99kozs of gold. As shown below in *Table 5* and in the waterfall graph below, the following changes have occurred:



- All open pit Ore Reserves are based on Mineral Resources estimated using MIK techniques;
- A new underground Ore Reserve has been calculated for the Esuajah South deposit that contains 77 kozs less gold than previously estimated for the Esuajah South open pit;
- Ore Reserves contained in decommissioned heap leach pads created by prior owners of the Edikan Mining Leases have been included in the revised Ore Reserve estimate.;
- Small increases in the Ore Reserves of AF Gap, Fobinso and Esuajah North have been estimated while small decreases in Ore Reserves have been estimated at Chirawewa and Bokitsi; and
- The reclassification of significant quantities of Ore from the Proved classification to the Probable classification is a function of the application of more stringent classification criteria in the Mineral Resource estimates related to drill hole and data density.

Table 5: Comparison of Proved and Probable Ore Reserves as at 31 December & 30 June 2016

	P&P Rese	rves (Decemb	er 2016)		P&P Reserves	(June 2016)
Deposit	Quantity	Grade	Gold	Quantity	Grade	Gold
	(Mt)	(g/t gold)	(koz)	(Mt)	(g/t gold)	(koz)
AF Gap - Fobinso	16.0	1.1	562	14.9	1.2	558
Fetish	12.5	1.1	459	12.7	1.2	497
Esuajah North	14.3	1.1	491	15.3	1.0	475
Esuajah South	4.9	2.0	314	6.7	1.8	391
Chirawewa	2.5	1.0	80	3.8	1.2	146
Bokitsi	0.6	2.9	55	0.8	3.2	79
ROM <sup>7</sup> Stockpile	1.4	0.6	28	1.6	0.6	32
HL <sup>8</sup> Stockpile	4.3	0.6	89	-	-	-
	56.5	1.1	2,078	55.8	1.2	2,177

#### **Economic Assumptions**

- Gold metal price US\$1,200/oz.
- Un-escalated average costs used in optimising pit designs are as shown in Table 6 below.
- A discount rate of 10% (real) has been assumed to calculate net present values of forecast cash flows.

**Table 6: Assumed Open Pit operating costs** 

Mining	Processing	G&A	Selling	Royalties
US\$3.24t/mined	US\$9.25t/milled	US\$2.20t/milled	US\$1.02t/oz sold	6.75%



#### **Open Pit Mining Parameters**

- The chosen method for the Open Pit Reserves is conventional open pit mining utilising hydraulic excavators and trucks, mining bench heights of 5 metres with 2.5 metre flitches to minimise ore loss and waste rock dilution.
- The economic pit shell was defined using Whittle 4X pit optimisation software ("Whittle 4X")
  with inputs such as geotechnical parameters, ore loss and dilution, metallurgical recovery and
  mining costs.
- The pit optimisation was run with revenue generated only by Measured and Indicated Mineral Resources. No value was allocated to Inferred Mineral Resources.
- Whittle 4X input parameters were generally based on Perseus's operating site experience and supporting technical studies.
- The pit slope design assumptions are based on a geotechnical study by George, Orr and Associates (Australia) Pty Ltd. Overall pit slopes are 30 to 50 degrees inclusive of berms spaced at between 5 and 20 metres vertically and berm widths of 5 to 12 metres.
- Pit ramps have been designed for a 777 truck fleet and are set at a net 16 metres (single lane) to 26 metres (dual lane).
- Vertical mining advance has been capped based on Perseus's operating experience.
- The geological block models used in planning employed MIK estimation to assign block grades that also represented the ore mining loss and dilution.
- Minimum mining width of 40 metres was generally applied to the pit designs.
- There are no physical constraints to mining within the lease area. No property, infrastructure
  or environmental issues are known to exist which may limit the extent of mining within the
  mining lease.
- Ore cut-off grades are based on the gold price, cost and mining parameters are as shown in
   Table 7 as follows:

**Table 7: Cut-off Grades** 

Cut-Off Grade by Ore Type (g/t gold)						
Deposit	Oxide	Transition	Fresh			
AF Gap	0.35	0.5	0.45			
Fobinso	0.35	0.5	0.45			
Esuajah North	0.4	0.6	0.5			
Fetish	0.5	0.65	0.55			
Chirawewa North	0.4	0.5	0.45			
Bokitsi	0.35	0.5	0.45			



#### **Underground Mining Parameters**

- The chosen method for the Underground Reserves is Sub-level mining under rock fill ("SURF").
   SURF is a bulk, semi-selective, underground mining method similar to sublevel caving ("SLC") in layout, but with waste being introduced from surface instead of the hangingwall caving.
- The ore is broken through drilling and blasting of regularly spaced, fan shaped up-hole rings along each ore drive. As ore is extracted from the underground mine, waste fill will be introduced from surface to fill the resulting void. The orebody is accessed through regularly spaced draw points on multiple levels. Draw points are offset between levels to provide a regular, honeycomb layout to ensure maximum recovery of blasted ore.
- Parallel rings are designed along the length of each ore drive. The rings are typically blasted and loaded one at a time, in "choke blast" conditions (i.e. blasting is against the previously mined ring instead of into a free void).
- In total, 79% of the designed ring tonnes are extracted the remaining 21% is either left behind, or is replaced by the external dilution being mined. About 14% on average is mined from waste introduced into the pit as part of the SURF method. Only swell is drawn in subeconomic rings and this improves the remaining grade that is drawn and also the dilution grade for future rings. In total, the mined grade is 91% of the insitu grade.
- Geotechnical assessment has been undertaken to assess
  - Requirements for development ground support;
  - Sublevel intervals;
  - Ore drive spacing;
  - Stand-off distances for infrastructure; and
  - Mine portal access.
- The Esuajah South underground development and stoping within fresh rocks will be carried out in generally "fair" to "good" quality rock mass conditions.
- Power, air, water and other consumables were estimated based on the calculated mine schedule
- The operating and capital costs assume a contractor operated mine with most capital equipment being supplied by the mining contractor.
- The underground project greatly benefits from sharing the process plant and general and administration ("G&A") overheads with the larger Edikan Gold Project. This reduces plant processing operating cost and G&A. It does however make the ESS underground project reliant on being completed in conjunction with the current larger Edikan Gold Project open pit schedules.

#### **Processing Parameters**

 The process metallurgical recovery for gold is fixed by material type in each deposit. Gold recovery rates range from 59.5-69% for oxide ore and 86-94% for primary ore. Recovery variation is a function of differing metallurgical properties of ores from different deposits and recoveries by pit are as shown in **Table 8**.



- No deleterious material has been identified.
- Average annual processing throughput rate of ore is nominally 7.0Mtpa, with throughput rates variable by material type and deposit. The processing circuit involves single stage crushing, semi-autogenous grinding, gravity recovery, flotation, regrind and CIL.

Table 8: Metallurgical Recoveries By Material Type and Pit

Recovery by Ore Type (%)					
Deposit	Oxide	Transition	Fresh		
AF Gap	61.0	73.4	88.0		
Fobinso	61.0	73.4	88.0		
Chirawewa	59.5	72.0	86.0		
Bokitsi	69.0	78.0	87.0 <sup>1</sup>		
Fetish	61.0	73.4	90.0		
Esuajah North	61.0	73.4	93.0		
Esuajah South	-	-	94.0		
Heap Leach	67.0	-	-		

<sup>&</sup>lt;sup>1</sup>Average value, the recovery for Bokitsi is variable based on the input grade

#### Stockpile and Heap Leach Parameters

It is assumed all the Heap Leach material is mined and fed to the processing plant during the mine life and all the material is rehandle on the ROM stockpile. The ROM stockpiles that existed at 31 December 2016 are all fed to the processing plant over the mine life and associated rehandle costs for all material is allowed for.

#### Criteria for Ore Reserve Classification

Ore Reserves have been classified based on the underlying Mineral Resources classifications and the level of detail in the mine planning. The Mineral Resources were classified as Measured, Indicated and Inferred. The Ore Reserves, based only on the Measured and Indicated Resources, have been classified as Proven and Probable Ore Reserves, respectively.

The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the Mineral Resource classifications of Measured and Indicated and taking into account other factors where relevant. The deposit's geological model is well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposit, the moderate grade variability, drilling density, structural complexity and mining history. Therefore it was deemed appropriate to use Measured Mineral Resources as a basis for Proven Reserves and Indicated Mineral Resources as a basis for Probable Reserves.

No Inferred Mineral Resources were included in the Ore Reserve estimate.

Jeffrey Quartermaine
Chief Executive Officer and Managing Director
21 February 2017



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

Mr Gary Brabham, FAusIMM, MAIG, has compiled and reviewed the consolidated information on the Mineral Resources in this report and compiled the information in the attachment in Appendix 1, Sections 1 and 2 of JORC Table 1 relating to the results of exploration and resource definition drilling for the Open Pit Mineral Resources of the Edikan Gold Mine. The Open Pit Mineral Resources have previously been reported by Perseus in NI43-101 technical reports filed with Canadian authorities and available on SEDAR. Mr Gary Brabham is the Group Geologist for Perseus Mining Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and a Qualified Person as defined in NI43-101. Mr Brabham consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Nicolas Johnson, MAIG, who is an employee of MPR Geological Consultants Pty Ltd, has compiled the information in the attachment in Appendix 1, Section 3 of JORC Table 1 which relate to the Open Pit Mineral Resources of the Edikan Gold Mine. Mr Johnson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person, as defined in the JORC Code. Mr Johnson has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Joe McDiarmid, who is a Chartered Professional Member of the Australasian Institute of Mining and Metallurgy, and is an employee of RungePincockMinarco Limited has compiled the information in the attachment in Appendix 1, Section 4 of JORC Table 1 which relate to the Open Pit Ore Reserves of the Edikan Gold Mine. Mr Joe McDiarmid has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person, as defined in the JORC Code 2012. Mr McDiarmid has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Shaun Searle, who is a Member of the Australasian Institute of Geoscientists and is an employee of RungePincockMinarco Limited has compiled the information in the attachment in Appendix 2, Section 1, 2 and 3 of JORC Table 1 which relate to the Esuajah South Mineral Resource of the Edikan Gold Mine. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code. Mr Searle has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Allan Earl, who is a Member of the Australasian Institute of Mining and Metallurgy and is an employee of Snowden Mining Industry Consultants Pty Ltd., has compiled the information in the attachment in Appendix 3, Section 4 of JORC Table 1 which relate to the Esuajah South Ore Reserve of the Edikan Gold Mine. Mr Earl has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Mr Earle has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Steffen Brammer, who is a Member of the Australasian Institute of Mining and Metallurgy and is an employee of Perseus Mining Limited has compiled the information in the attachment in Appendix 2, Sections 1 and 2 and Appendix 3, Section 1, 2 and 3 of JORC Table 1 which relate to the Esuajah South and Heap Leach Mineral Resource of the Edikan Gold Mine, respectively. Mr Brammer has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

**Mr Paul Thompson**, who is a Fellow of the Australasian Institute of Mining and Metallurgy and is an employee of Perseus Mining Limited has compiled and reviewed the consolidated information on the Ore Reserves in this report.

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Mr Thompson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and a Qualified Person as defined in NI43-101 and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

#### **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 2012 Table 1 - Section 1 sampling techniques and data

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

Criteria	JORC Code Explanation	Commentary
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Sampling techniques

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Nature and quality of sampling (e.g. 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.

The Abnabna – AFGap – Fobinso deposits comprise near-continuous mineralisation over approximately 2.3km of strike, trending E-W (local grid). The mineral resource estimates are informed by reverse circulation (RC) and diamond core (DD) drilling on 20-40m spaced N-S (local grid) oriented traverses with 20-40m hole spacing (plan view) on those traverses. The central portions of each of the higher-grade portions of the deposits have drill coverage at predominantly 20m by 20m spacing. Holes are generally inclined at 60 degrees toward grid south, resulting in 25-40m down-dip intercept spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In Abnabna - AFGap deposit (west of 27,000E; local grid) a total of 66,718 2m composite samples are available to inform the resource estimate. Of the 20,341 sample composites that represent mineralisation and lie below the 31 December 2016 surveyed surface, 93 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by PRU. In Fobinso Deposit (east of 27,000E) a total of 26,005 2m composite samples are available to inform the resource estimate. Of the 3,122 sample composites that represent mineralisation and lie below the 31 December 2016 surface, 12 derive from RC holes drilled by PRU and 3,110 derive from diamond core holes drilled by PRU. Grade control drill samples were not used to inform the mineral resource estimates for Abnabna, AFGap or Fobinso.

The Fetish and Bokitsi North deposits comprise N-S trending (local grid) mineralisation extending over approximately 800m strike. The Bokitsi North deposit is a distinct mineralised structure located approximately 125 metres to the west of Fetish deposit and striking sub-parallel to it. Mineral resource models of the two deposits are combined because they are exploited by a single open pit. The mineral resource estimate is informed by RC and DD drilling on 20m-40m spaced E-W (local grid) oriented traverses with holes generally at 40m spacing on those traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 25-35m down-dip spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In total, 39, 114 2m composite samples are available to inform the resource estimate. Of the 12,968 sample composites that represent mineralisation and lie below the 31 December 2016 surveyed surface, 779 derive from RC holes drilled by AGC, 41 derive from diamond core holes drilled by AGC, 1,179 derive from RC holes drilled by PRU and 12,148 derive from diamond core holes drilled by PRU. Grade control drill samples were not used to inform the mineral resource estimate.

The Chirawewa North deposit comprises N-S trending (local grid) mineralisation extending over approximately 650m strike. The mineral resource estimate is informed by RC and DD drilling at 20m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 25-40m down-dip spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In total, 15,354 2m composite samples are available to inform the resource estimate. Of the 5,129 sample composites that represent mineralisation and lie below the 31 December 2016 surveyed surface, 251 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by AGC, 1,684 derive from RC holes drilled by PRU and 3,194 derive from diamond core holes drilled by PRU. Grade control drill samples were not used to inform the mineral resource estimate. The Chirawewa South deposit comprises N-S trending (local grid) mineralisation extending over approximately 400m strike.

The mineral resource estimate is informed by RC and DD drilling at 20m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 15-25m down-dip spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In total, 2,873 2m composite samples are available to inform the resource estimate. Of the 292 sample composites that represent mineralisation and lie below the 31 December 2016 surveyed surface, 15 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by AGC, 242 derive from RC holes drilled by PRU and 35 derive from diamond core holes drilled by PRU. Grade control drill samples were not used to inform the mineral resource estimate. The Esuajah North deposit comprises N-S trending (local grid) mineralisation extending over approximately 500m strike. The mineral resource estimate is informed by RC and DD drilling at 20-40m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees to either grid east or grid west, resulting in 15-40m down-dip spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In total, 21,656 2m composite samples are available to inform the resource estimate. Of the 15,345 sample composites that represent mineralisation, 1,434 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by AGC, 2,114 derive from RC holes drilled by PRU and 11,797 derive from diamond core holes drilled by PRU. Grade control drill samples were not used to inform the mineral resource estimate. The Bokitsi South deposit comprises N-S trending (local grid) mineralisation extending over approximately 900m strike. The mineral resource estimate is informed by RC and DD drilling at 20-40m spacings on 20m spaced E-W traverses. Holes are generally inclined at 50 degrees toward grid west, resulting in 15-35m down-dip spacing in cross-section view. Drilling from 1996 to 2000 was completed by Ashanti Goldfields Corporation (AGC); drilling from 2006 onward was completed by PRU. In total, 9.854 2m composite samples are available to inform the resource estimate. Of the 1.284 sample composites that represent mineralisation, 475 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by AGC, 561 derive from RC holes drilled by PRU and 268 derive from diamond core holes drilled by PRU. Include reference to measures taken AGC drill hole collars were located in local grid coordinates by qualified mine surveyors. Collars of holes drilled by PRU were surveyed in UTM coordinates by qualified surveyors and converted to local grid coordinates. PRU drill holes were down-hole to ensure sample representivity and the appropriate calibration of any surveyed at nominal 30 metre intervals. measurement tools or systems used. Aspects of the determination of RC samples were collected as 4m composites until potential mineralisation was expected at which time samples were mineralisation that are Material to the collected at 1m intervals from a rig mounted cyclone into large numbered plastic bags. Recently, PRU drilling has used 2m Public Report. In cases where composite samples, and then 1m samples through potential mineralisation. Diamond core was generally sampled at uniform 'industry standard' work has been 1m intervals. Sampling and QAQC procedures were carried out to industry standards. done this would be relatively simple (e.g. 'reverse circulation drilling was Rig mounted riffle splitters were used to split RC samples and minimise bias. Diamond core was cut in half using a diamond used to obtain 1 m samples from saw and the right hand side of the core consistently submitted for analysis with the left side being stored in trays on site. which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other Of samples collected by PRU, approximately 5% of all RC samples were sent to the Intertek (formerly TWL) laboratory for 24hr bottle roll with AAS finish. All other RC samples and Diamond half core were analysed by 50g Fire Assay and AAS cases more explanation may be required, such as where there is finish. Samples were sent to Intertek Laboratories (Gh) Ltd at Tarkwa/Ghana (24%), ALS (35%), TWL (18%), and SGS coarse gold that has inherent sampling laboratories (2%). Sampling and assaying methods for samples collected by AGC are unknown. problems. Unusual commodities or

mineralisation types (e.g. submarine

	nodules) may warrant disclosure of detailed information.	
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	RC drilling used 5¼" diameter face-sampling bit. Most RC holes have collar azimuth and down-hole surveys at 12m depth and at end of hole, using a Reflex tool. The 2014/15 drill holes have down-hole surveys at 12m and every 30m to end of hole Diamond drilling was carried out with HQ2 and NQ2 sized equipment. DD have collar azimuth and down-hole surveys at nominally 30m intervals, using a Reflex tool.  Diamond core was generally oriented using a spear.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Recoveries from historical drilling by AGC are unknown. Actual recoveries from PRU diamond drilling are recorded in the database and averaged in excess of 90% with no significant issues noted.  RC samples were logged visually for recovery, moisture and contamination. Sample recoveries were not quantitatively measured.  Considering that the bulk of estimated remaining resources at Edikan are informed by diamond core samples, the Competent Person does not consider sample recovery to be a significant risk to the reliability of the estimates.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Recoveries from historical drilling by AGC are unknown. Actual recoveries from PRU diamond drilling are recorded in the database and averaged in excess of 90% with no significant issues noted.  RC samples were logged visually for recovery, moisture and contamination. Sample recoveries were not quantitatively measured.
	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.	Investigations by previous workers have found no relationship between sample recovery and grade.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	RC drill chips were logged geologically, including rock type, weathering, alteration type and intensity (where recognizable), vein quartz content in estimated percentage, sulphide mineralisation and estimated content.  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.  Only lithological logs are available for historic holes drilled by AGC.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging was qualitative (descriptive) and semi-quantitative (estimates).  All diamond core was photographed in the core boxes. RC drill chips were glued to chip boards for visual reference for each hole.

	The total length and percentage of the relevant intersections logged.	All PRU drill holes (RC & DD) were logged in full. Only lithological logs are available for historic holes drilled by AGC.
Sub-sampling techniques and sample preparation	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 hand side of the core was consistently submitted for analysis, the other half stored in trays.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	All PRU RC samples were collected at drill sites at 1m intervals and split using a multi-stage riffle splitter to produce subsamples of approximately 3kg mass. When composited, each two consecutive sample splits were composited into one subsample for sample preparation and assay.
		At each deposit, 3-5% of RC samples are recorded as having been wet.
		Sample quality of AGC RC holes is unknown.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sampling of PRU diamond core and RC chips used industry standard techniques. After drying, the sample is subject to a primary crush to 2mm, then 200g of sub-sample was split off and pulverised. Internal laboratory checks required at least 90% of the pulp passing -75 microns.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Sampling Field QC procedures included the use of certified reference materials (1 in 20) and field duplicates (1 in 20).
	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.	Field duplicate splits of PRU RC samples were produced for 1 in 20 samples. Duplicate splits of diamond core samples were not submitted.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate and representative for the style of mineralization, the thickness and consistency of the mineralized intersections and the grade ranges encountered at Edikan.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples from a small number of initial holes drilled by PRU were assayed by cyanide bottle roll with AAS finish, a partial digest method. All subsequent RC and DD samples were assayed by standard 50g Fire Assay with AAS finish, a total digest technique.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the	No geophysical tools were used to determine any element concentrations.

	parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
Nature of quality control procedure adopted (e.g. standards, blanks, duplicates, external laboratory che and whether acceptable levels of		QAQC procedures applied to historic drilling by AGC are unknown. Considering that those data make up a very small proportion of the data available to inform estimates of remaining resources at Edikan, the Competent Person does not consider this a significant risk.
	accuracy (i.e. lack of bias) and precision have been established.	PRU QAQC procedures included submission of field duplicates (RC only) inserted at 1 in 25, certified blanks inserted at 1 in 20, certified standards at 1 in 20, internal laboratory standards, duplicates and repeats.
		The Competent Person is satisfied that investigations by previous workers have demonstrated no significant bias. The moderate reproducibility demonstrated in QAQC data is considered normal for the style of gold mineralisation at Edikan.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not relevant. The validity of drill hole intercepts has been demonstrated by mining exposures and by close-spaced grade control sampling.
	The use of twinned holes.	No RC holes have been specifically twinned by diamond core holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic)	Drill hole logs for both RC and diamond core holes are captured at site on paper. Data are digitised by manual entry using Logchief software (Maxwell Geoservices) at Edikan site office. Hard copies are archived at Edikan mine office.
	protocols.	Down-hole survey data and collar survey data are provided by drilling contractors and surveyors respectively in digital format.
		Assay results are provided by laboratories in digital form accompanied by digital certificates. Assays are imported directly to the Datashed database and digitally matched to sample intervals with appropriate validation checks.
		Perseus maintains a centralized Datashed database for its various operations in Ghana and Ivory Coast. Database administration is based in Perseus' office in Accra/Ghana under the supervision of the company's Senior Resource Geologist.
	Discuss any adjustment to assay data.	Intervals for which samples were not available for assay (e.g. destroyed in processing, listed as not received) and intervals that were deliberately not sampled are allotted a gold grade of -9 in the master database assay table.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine	Holes drilled by AGC were surveyed on local grid by qualified mine surveyors. No details are available concerning the methods and equipment used.
	workings and other locations used in Mineral Resource estimation.	PRU drill hole collars have been surveyed by qualified surveyors using total station survey equipment.
		The majority of PRU drill holes are surveyed down-hole at 10m to 30m intervals using either Reflex or Flexit multi-shot equipment. Historical RC holes have not been down-hole surveyed and are assumed to be straight. Historical diamond holes were down-hole surveyed using either acid tubes or a single shot camera at 60m intervals and at the end of the hole.

	Specification of the grid system used.	Prior to 2012, a local grid, including baseline, was established at Edikan by Cluff Mining plc using licensed surveyors.
		For recent PRU drill programs, collars have been located in UTM, WGS84, Zone 30N co-ordinates and transformed to local grids – one for the AAF-Fobinso area and one for the "Eastern Pits".
		Local elevations were adjusted by adding 1,000m to avoid negative values.
	Quality and adequacy of topographic control.	Topographic surfaces are based on ground survey points of the natural surface (in areas not yet disturbed by mining), surveys of historic pits previously mined by AGC and surveys of the active open pit operations at end of December 2016, all by qualified PRU mine surveyors.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<b>The Abnabna – AFGap – Fobinso</b> mineral resource estimates are informed by reverse circulation (RC) and diamond core (DD) drilling on 20-40m spaced N-S (local grid) oriented traverses with 20-40m hole spacing (plan view) on those traverses. The central portions of each of the higher-grade portions of the deposits have drill coverage at predominantly 20m by 20m spacing. Holes are generally inclined at 60 degrees toward grid south, resulting in 25-40m down-dip intercept spacing in cross-section view.
		<b>The Fetish and Bokitsi North</b> mineral resource estimate is informed by RC and DD drilling on 20m-40m spaced E-W (local grid) oriented traverses with holes generally at 40m spacing on those traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 25-35m down-dip spacing in cross-section view.
		<b>The Chirawewa North</b> mineral resource estimate is informed by RC and DD drilling at 20m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 25-40m down-dip spacing in cross-section view.
		<b>The Chirawewa South</b> mineral resource estimate is informed by RC and DD drilling at 20m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees toward grid west, resulting in 15-25m down-dip spacing in cross-section view.
		<b>The Esuajah North</b> mineral resource estimate is informed by RC and DD drilling at 20-40m spacings on 40m spaced E-W traverses. Holes are generally inclined at 60 degrees to either grid east or grid west, resulting in 15-40m down-dip spacing in cross-section view.
		<b>The Bokitsi South</b> mineral resource estimate is informed by RC and DD drilling at 20-40m spacings on 20m spaced E-W traverses. Holes are generally inclined at 50 degrees toward grid west, resulting in 15-35m down-dip spacing in cross-section view.
	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.	The data spacing and distribution is sufficient to demonstrate spatial and grade continuity of the mineralised domains to support the definition of Measured, Indicated and Inferred Mineral Resources conforming to the 2012 JORC code.
	Whether sample compositing has	All PRU RC samples were collected at drill sites at 1m intervals and split using a multi-stage riffle splitter to produce

	been applied.	subsamples of approximately 3kg mass. The majority of PRU RC holes were assayed in 2m intervals, with each two consecutive sample splits composited into one bag.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling at each of the deposits was oriented to intersect mineralisation at as near optimal orientation as was practicable.
	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.	Diamond drilling confirmed that drilling orientation did not introduce any bias regarding the orientation of the mineralised domains.
Sample security	The measures taken to ensure sample security.	Chain of custody was managed by PRU. Samples were stored on site and collected by Intertek and ALS employees. Perseus personnel had no further involvement in the preparation or analysis of the samples.  Considering that the tenor of mineralisation at each deposit other than Bokitsi South has been confirmed by detailed grade control sampling and by mining, the Competent person is satisfied that sample security is not a significant risk to the reliability of the resource estimates.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Reviews of sampling techniques and QAQC data for each of the deposits have been undertaken by PRU personnel and also by previous workers Runge Pincock Minarco at various times between 2010 and 2014 with acceptable conclusions. Given that the sampling data upon which the resource estimates rely are now supported by mining at each of the deposits other than Bokitsi South, the Competent Person is satisfied that drill hole and assay data validity are not significant risks to the reliability of the resource estimates.

#### JORC 2012 Table 1 – Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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.  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.	The Abnabna – AFGap – Fobinso deposits are located on the Nanankaw Mining Lease granted on 31 December 2009 for a period of 15 years and renewable thereafter.  The Fetish, Chirawewa North, Chirawewa South, Esuajah North and Fetish deposits are located on the Ayanfuri Mining Lease granted on 31 December 2009 for a period of 15 years and renewable thereafter.  The Government of the Republic of Ghana retains 10% non-contributing
		beneficial ownership in each of the mining leases.  The tenements are in good standing with all requisite operating permits In place.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Near-surface portions of the Edikan deposits have previously been delineated and mined by Cluff Mining plc and by AGC. Both of those companies mined the near-surface, oxidised portions of the deposits and extracted gold by heap leaching.
Geology	Deposit type, geological setting and style of mineralisation.	The Edikan deposits occur near the western flank of the Ashanti Greenstone Belt along the Obuasi-Akropong gold corridor. The Central Ashanti property is underlain principally by Paleoproterozoic Birimian metasediments of the Kumasi-Afema basin, positioned between the Ashanti and Sefwi Greenstone Belts. The flysch type metasediments consist of dacitic volcaniclastics, greywackes plus argillaceous (phyllitic) sediments, intensely folded, faulted and metamorphosed to upper green schist facies. Minor cherty and manganiferous exhalative sediments are locally present, and graphitic schists coincide with the principal shear (thrust) zones. Numerous small Basin-type or Cape Coast-type granitoids have intruded the sediments along several regional structures. Structurally controlled gold mineralisation occurs in two principal modes: disseminated pyrite-arsenopyrite mineralisation associated with quartz veining and sericite alteration hosted by granitoids and shear-zone hosted mineralisation associated with pyrite-arsenpoyrite mineralisation in and adjacent to quartz veins in deformed metasedimentary rocks.
Drill hole Information	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:	Not applicable as there are no exploration results reported as part of this statement.

Criteria	JORC Code explanation	Commentary
	<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> 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.	Other relevant drill hole information can be found in Section 1 – "Sampling techniques, "Drilling techniques" and "Drill sample recovery".
Data aggregation methods	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.  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.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable. This report is in relation to the update of Mineral Resources, with no exploration results being reported.
Relationship between mineralization widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Drill hole intercepts are not being reported. This report is in relation to the update of Mineral Resources, with no exploration results being reported.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	This report is in relation to the update of Mineral Resources, with no exploration results being reported. Resource estimation reports for each of the deposits contain diagrams of drill hole and sample locations and resource estimation domains.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration results are not being reported. This report is in relation to the update of Mineral Resources.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	With the exception of Bokitsi South deposit, the tenor and spatial continuity of mineralisation at each of the deposits has been confirmed by substantial amounts of quality RC grade control sampling and by mine production.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not	No further exploration or resource definition work is presently proposed in proximity to the deposits subject of this report.  This release is in relation to the update of Mineral Resources, with no exploration results being reported.

Criteria	JORC Code explanation	Commentary
	commercially sensitive.	

#### JORC 2012 Table 1 – Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	The resource drill hole data base is systematically audited by PRU geologists. All drill logs are validated digitally by the database geologist once assay results are returned from the laboratory. In 2010, an independent geologist reviewed the logging of several holes and validated the records in the database against the drill core and logging boards. No significant errors were noted.
	Data validation procedures used.	Following importation, the data goes through a series of digital and visual checks for duplication and non-conformity, followed by manual validation by a company geologist and database administrator.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Nicolas Johnson of MPR Geological Consultants Pty Ltd (MPR) has visited the Edikan Gold Mine on several occasions, the most recent being January 2017 to review the operation as part of the 2017 Mineral Resource estimate update.
		In addition to the above site visit, all exploration and resource development drilling programmes are subject to review by experienced senior PRU technical staff. These reviews have been completed from the commencement of drilling and continue to the present.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The confidence in the geological interpretation is considered to be good and is based on good quality drilling and ongoing mapping of open pit mine exposures.
	Nature of the data used and of any assumptions made.	The deposits comprise two styles: diffuse disseminated mineralisation over broad widths hosted by steeply dipping granite bodies and steeply dipping shear zone hosted mineralisation hosted by metasediments. Grade control drilling and mine geological mapping have supported and refined the geological model and the current interpretation is considered robust.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geology and interpretation of the deposits is considered robust. There is no apparent alternative to the interpretation in the competent person's opinion.
	The use of geology in guiding and controlling Mineral Resource estimation.	The logging in the geological data base of lithology and weathering were considered during the mineralisation domain interpretations, and where available, the logging of grade control drilling used to aid these interpretations. Outcropping of mineralisation and host rocks within the open pits currently being mined confirms the geometry of the mineralisation.
	The factors affecting continuity both of grade and geology.	Infill and grade control drilling have confirmed geological and grade continuity.

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Criteria	JORC Code explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Abnabna – AFGap – Fobinso Mineral Resource area extends over a strike length of 2,000m (from 25,750mE – 27,750mE), has an outcropping (within the existing pit) average width of 100m (13,680mN – 13,780mN) and includes the 600m vertical interval from 1,150mRL to 550mRL.
		The Fetish Mineral Resource area extends over a strike length of 760m (from 4,830mN – 5,590mN), has a typical width of 140m. It includes the 595m vertical interval from 1,180mRL to 585mRL. The Fetish Mineral Resource area includes the Bokitsi North lode; the two are being mined in one open pit.
		The Chirawewa Mineral Resource area extends over a strike length of 1,120m (from 3,780mN to 4,900mN) and a plan width of 620m (from 3,670mE to 4,290mE). Typical widths of individual lodes are less than 100m. Vertically, the Mineral Resource extends 290m from surface at around 1,190m to 900m RL. Mineralisation is believed to continue at depth.
		The Esuajah North Mineral Resource area extends over a strike length of 500m (from 7,000mN to 7,500mN), and includes the 470m vertical interval from 1,170mRL to 700mRL. The overall plan width of the mineralised lodes is 275m and extends from 2,225mE to 2,500mE.
		The Bokitsi South Mineral Resource area extends over a strike length of 880m from 3,930mN to 4810mN. The vertical extent of the Mineral Resource is 170m from surface at 1,180mRL to 1010mRL.
Estimation and modeling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	MPR used the method of Multiple Indicator Kriging (MIK) with block support adjustment to estimate gold resources into blocks with dimensions of 20m (east) by 20m (north) by 5m (elevation). MIK of gold grades used indicator variography based on the two metre resource composite sample grades. Gold grade continuity was characterised by indicator variograms at 14 indicator thresholds spanning the global range of grades. A block support adjustment was used to estimate the recoverable gold resources at Edikan deposits. The shape of the local block gold grade distribution has been assumed lognormal and an additional adjustment for the "Information Effect" has been applied to arrive at the final Mineral Resource estimates.
		MIK was used as the preferred method for estimation of gold resources at Edikan as the approach has been demonstrated to work well in a large number of deposits of diverse geological styles. The gold mineralisation seen at the Edikan deposits is typical of that seen in most structurally controlled gold deposits where the MIK method has been found to be of most benefit.
		In the MPR study data viewing, compositing and wire-framing have been performed using Micromine software. Exploratory data analysis, variogram calculation and modelling, and Resource estimation have been performed using FSSI Consultants (Australia) Pty Ltd (FSSI) GS3M software. GS3M is designed specifically for estimation of recoverable resources using MIK. The grade control modelling undertaken for validation by MPR in the current study was performed using the MP3 grade control software which is also produced by FSSI.

Criteria	JORC Code explanation	Commentary
		The sample data set containing all available assaying were composited to two metre intervals each located by their mid-point co-ordinates and assigned a length weighted average gold grade. The composite length of two metres was chosen because it is a multiple of the most common sampling interval (1.0 metre) and is also an appropriate choice for the kriging of gold into the model blocks where open pit mining is undertaken on 2.5 metre benches.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	PRU provided grade control drilling data and reconciliation data as part of the Mineral Resource estimate update. Grade control drilling is not utilised in the estimation but is used for validation purposes. The 2017 Mineral Resource estimates were compared to recent grade control at Abnabna – AFGap – Fobinso, Fetish, Chirawewa and Esuajah North. The mined tonnes and grade of ROM ore for the three months to December 2016 compared favourably.
	The assumptions made regarding recovery of by-products.	No by-products are present or modelled.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements were estimated or assumed.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block dimensions are 20m (east) by 20m (north) by 5m (elevation) and was chosen as it approximates the average drill hole spacing in the horizontal direction, with the 5m elevation being a multiple of the mining bench height of 2.5m. The interpolation utilised a 3 pass octant search strategy with search radii generally in the order of category 1 searching 20m in the x and y direction and 10m in the z direction, 16 minimum composites used, a maximum of 4 composites per octant and a minimum of 4 octants with data. Category 2 uses a 100% search distance increase but otherwise the same parameters and category 3 uses the same search distance as category 2 but only requires 8 minimum composites and only 2 octants require data. The search ellipse on each category is consistently orientated. Rotations to orientate the search ellipse are customised to the general orientation of the mineralisation at each deposit.
	Any assumptions behind modelling of selective mining units.	A block support adjustment was used to estimate the recoverable gold resources at each deposit. The shape of the local block gold grade distribution has been assumed lognormal and an additional adjustment for the "Information Effect" has been applied to arrive at the final Resource estimates. Selective mining unit assumed to be in the general range 6mE by 10mN by 2.5mRL.
	Any assumptions about correlation between variables.	No correlated variables have been investigated or estimated.
	Description of how the geological interpretation was used to control the resource estimates.	The 2m resource composites were initially coded by the mineralisation domain interpretations and the resultant primary domain coding further subdivided using the weathering surfaces to form subdomains. Sample composites in each primary and sub-domain combination were reviewed for their univariate and indicator statistics and spatial continuity and were the basis of grade modelling.
	Discussion of basis for using or not using grade cutting or capping.	A combination of outlier high grade composites being ignored for each sub-domain for the generation of the indicator statistics, and selection of the median instead of mean for the highest indicator threshold were used to guard against a few higher grades within the population from having

Criteria	JORC Code explanation	Commentary
		a disproportional influence on the gold estimation.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The grade estimate was checked against the input exploration drilling/composite data both visually on section (cross and long section) and in plan at the time of creation. Independent MP3 grade control models were constructed where grade control data was available. The comparisons of the grade control models to the Mineral Resource estimates are good.
		Comparisons of the Mineral Resource estimates to recent mine site grade control outcomes at Abnabna – AFGap – Fobinso, Fetish, Chirawewa and Esuajah North have also been conducted. The mined tonnes and grade of ROM ore for the three month to December 2016 compared favourably.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The resource tonnage is reported using a dry bulk density and therefore represents dry tonnage excluding moisture content.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The cut-off grade of 0.4g/t for the stated Mineral Resource estimate is determined from economic parameters that reflect geotechnical, mining and processing parameters and costs established during mining operations to date at Edikan.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The Resource model assumes open cut mining is completed and a moderate level of mining selectivity is achieved in mining. It has been assumed that high quality grade control will be applied to ore/waste delineation processes using RC drilling, or similar, at a nominal (and no greater) spacing of 8 metre by 8 metre and applying a pattern sufficient to ensure adequate coverage of the mineralisation zones.  This is consistent with current mining practises at Edikan
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Extensive metallurgical test work was completed on material from a number of deposits within the Edikan Project area, by AMMTEC Pty Ltd in Perth for Cluff Mining Plc in the early 1990's. This focussed on CIL test work on both oxide and sulphide material and later to heap leach. Preliminary amalgamation and cyanidation results using bottle roll methodology confirmed the free milling nature of both the oxide and sulphide mineralisation.  Metallurgical test work was undertaken by PRU in 2011 as part of the DFS. Ore metallurgical characteristics have subsequently been demonstrated by processing since the commencement of mining at Edikan.
Environmental	Assumptions made regarding possible waste and process	The Project is not subject to any environmental liabilities except for a progressive decommissioning

Criteria	JORC Code explanation	Commentary
factors or assumptions	residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	and reclamation plan for the closed Ayanfuri heap leach mine.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk densities at Edikan have been derived through extensive measurements determined by wax coating samples and immersing in water of primarily drill core samples both on site and submissions to commercial laboratories for analysis. The representativeness of the bulk density determinations are deemed reasonable and have been confirmed through mining.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	The bulk density of the mineralisation has been determined with a high degree of confidence from extensive sampling and measurements undertaken since commencement of mining at Edikan.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	There have been no assumptions concerning bulk densities of the various materials comprising the Mineral Resources.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Resource model uses a classification scheme producing a resource code based on the number and location of gold composites used to estimate proportions and gold grade of each block. This is based on the principle that larger numbers of composites, which are more evenly distributed within the search neighbourhood, will provide a more reliable estimate.
		The strategy adopted in the current study uses category 1 and 2 from the 3 pass octant search strategy as Measured and Indicated, respectively, and category 3 as Inferred. This results in a geologically sensible classification whereby Category 1 and 2 are surrounded by data in close proximity. Category 3 blocks may occur on the peripheries of drilling but are still related to drilling data within reasonable distances.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The Mineral Resource classification method which is described above has also been based on the quality of the data collected (geology, survey and assaying data), the density of data, the confidence in the geological models and mineralisation model, and the grade estimation quality.
	Whether the result appropriately reflects the Competent	The reported Mineral Resource estimate is consistent with the Competent Person's view of the

Criteria	JORC Code explanation	Commentary
	Person's view of the deposit.	deposits.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resource estimate has been audited and reviewed internally.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource estimate has been classified based on the quality of the data collected, the density of data, the confidence of the geological models and mineralisation models, and the grade estimation quality. This has been applied to a relative confidence based on data density and zone confidence for resource classification. No relative statistical or geostatistical confidence or risk measure has been generated or applied.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The reported Mineral Resource estimates for Edikan are limited by the extents of drill coverage.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Reconciliation comparisons against production were performed as part of the Mineral Resource update process. The competent person is of the opinion that the global resource will perform in line with industry standard tolerances for Measured and Indicated Resources. The Mineral Resource is considered a global Resource estimate however additional close spaced drilling will be required to improve the understanding of variations at local scale.

#### JORC 2012 Table 1 – Section 4 Estimation and Reporting of Ore Reserves

This section has been prepared by RPM to support the Statement Ore Reserves for Edikan as of 31 December 2016

Criteria		JORC Code explanation				Comme	ntary		
Mineral Resource estimate for conversion to Ore Reserves	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	Member of the Aus Geological Consulta estimate. The Heap	ces for Edikan we stralasian Institute nts Pty Ltd and Leach and ROM of Brabham respons Brining Limited.	re compi e of Geo is the ( Stockpile ectively,	led by Nicolas oscientists, is Competent Pe Resource est both of who	a full ti erson for imates w are Co	n. Mr Johnson, who is a me employee of MPR the Mineral Resource ere prepared by Steffen ompetent Persons and
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.	•		lertaken at the E	dikan Op	peration in Au	igust 201	3. The site confirmed
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.  The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	including economic a	ssessment. e study were te	chnically	achievable p	oit desigr	ns of a Life of Mine planns based on Pit Limit viability.
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•					eveloped	for the Operation. The
parameters			cut-off grade varies b		Oxide	Transition	Fresh		
					Pit	Au g/t	Au g/t	Au g/t	
					AF Gap	0.35	0.50	0.45	
					Fobinso	0.35	0.50	0.45	
					Fetish	0.40	0.65	0.55	
					Esuajah North	0.40	0.55	0.45	
					Esuajah South	0.40	0.55	0.45	
					Chirawewa	0.40	0.50	0.45	
					Bokitsi	0.40	0.50	0.45	
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate	•	The chosen method and trucks, mining be rock dilution.					

Criteria	JORC Code explanation		Commentary	
	<ul> <li>factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	•	<ul> <li>The economic pit shell was defined using Whittle 4X pit optimisation software ("Whittle 4X") with inputs such as geotechnical parameters, ore loss and dilution, metallurgical recovery and mining costs.</li> <li>The pit optimisation was run with revenue generated only by Measured and Indicated Mineral Resources. No value was allocated to Inferred Mineral Resources.</li> <li>Whittle 4X input parameters were generally based on Perseus's site operating experience and supporting technical studies.</li> <li>The pit slope design assumptions are based on a geotechnical study by George, Orr and Associates. Overall pit slopes 30 to 50 degrees inclusive of berms spaced at between 5 and 20m vertically and berm widths of 5 to 12 m.</li> <li>Appropriate mining modifying factors such as ore loss, dilution and design parameters were used to convert the Mineral Resource to an Ore Reserve</li> <li>The geological block models used in planning employed multiple indicator kriging (MIK) estimation to assign block grades that also represented the ore mining loss and dilution.</li> <li>Minimum mining width of 40 m was generally applied to the pit designs.</li> </ul>	i
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	•	<ul> <li>The Edikan processing plant uses crushing, grinding, gravity, flotation, concentrate regrind and cyanide leaching to extract gold. The plant has a nominal capacity of 7Mtpa. The technology used in the processing plant is well proven, and the plant has been operating successfully since 2011.</li> <li>The processing test work is representative of the different material types throughout the Mining area</li> </ul>	

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Criteria	JORC Code explanation	Commentary		
		AFRICA Heap Leach Stockpile 67  Average value, the recovery for Bokitsi is variable based on the input grade		
Environment	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	No environmental issues are known to exist which will prevent open pit mining and ore processing to continue to operate. Perseus appears to have sufficient space available for waste dumps to store the expected quantities of mine waste rock associated with the Edikan open pit Ore Reserve. Based on testing to date there is no risk of acid rock drainage as any potentially acid generating material is encapsulated within acid neutralising material.		
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	<ul> <li>Power supply is from grid system supplied by Ghanaian electricity company, GRIDCO</li> <li>Water supply is largely from groundwater extracted from dedicated boreholes and supplemented decant water for processing plant</li> <li>Access to site is via public road from Ayanfuri town</li> <li>A camp is established to accommodate non-local employees</li> <li>Workshops, offices, storage of reagents and laboratory is established at the processing plant</li> </ul>		
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>The mining cost as based on a schedule of rates provided by two Perseus mining contractors. All other operating costs have been provided by Perseus and its Consultants</li> <li>Non deleterious materials have been identified and costed</li> <li>Gold is the only metal considered in the Ore Reserves</li> <li>All costs are in US\$</li> <li>The transportation and Refining cost of US\$0.61/oz was applied in the optimisation</li> <li>A royalty of 6.75% of the metal price was applied</li> </ul>		
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul> <li>A gold price of US\$1,150/oz was provided by Perseus for mine planning and is considered to err on the conservative compared to currently published metal price forecasts at US\$1,200/oz.</li> <li>Economic modelling by Perseus is at US\$1,200/oz.</li> <li>Bullion and Refining cost of US\$0.61/oz was applied</li> <li>A royalty of 6.75% of the metal price was applied</li> </ul>		
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and</li> </ul>	<ul> <li>The demand for gold is considered in the gold price used.</li> <li>It was considered that gold will be marketable for beyond the processing life.</li> <li>The processing forecast and mine life are based on life of mine plans.</li> <li>The commodity is not an industrial metal.</li> </ul>		

Criteria	JORC Code explanation	Commentary
Economic	<ul> <li>acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present</li> </ul>	A schedule and economic model has been completed by Perseus on a pre-tax basis using the
	<ul> <li>value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	Ore Reserves published in this Statement. The inputs used are as per those stated in the relevant sections of this Statement. The assessment used a discount rate of 10% which is considered appropriate by RPM  The Base Case results from the financial model confirm that the Project is economically viable  Note that as the gold price changes so too will the economic limits of the pits and their Reserves. Consequently, the size of the Project will therefore adjust to suit the revised economics
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>Perseus has established relevant agreements with local stakeholders.</li> <li>Perseus has and will continue to use skilled expatriate workers and locally sourced skilled workers.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	The estimate of Ore Reserves for the Edikan Open Pits are not, to RPM's knowledge, materially affected by any other known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors other than that described in the preceding text. It is believed that the classification of Ore Reserves as set out in the following sections is reasonable.
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>Ore Reserves have been classified based on the underlying Mineral Resources classifications and the level of detail in the mine planning. The Mineral Resources were classified as Measured, Indicated and Inferred. The Ore Reserves, based only on the Measured and Indicated Resources, have been classified as Proven and Probable Ore Reserves, respectively</li> <li>Ore Reserves have been classified based on the underlying Mineral Resources classifications and the level of detail in the mine planning. The Mineral Resources were classified as Measured, Indicated and Inferred. The Ore Reserves, based only on the Measured and Indicated Resources, have been classified as Proven and Probable Ore Reserves, respectively.</li> <li>The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the Mineral Resource classifications of Measured and Indicated and taking into account other factors where relevant. The deposit's geological model is well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposit, the moderate grade variability, drilling density, structural complexity and mining history. Therefore it was deemed appropriate to use Measured Mineral Resources as a basis for Proven</li> </ul>

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Criteria	JORC Code explanation	Commentary
		Reserves and Indicated Mineral Resources as a basis for Probable Reserves
		No Inferred Mineral Resources were included in the Ore Reserve estimate
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>RPM has completed an internal review of the Ore Reserve estimate.</li> <li>The JORC Code provides guidelines which set out minimum standards, recommendations and guidelines for the Public Reporting of exploration results, Mineral Resources and Ore Reserves. Within the JORC Code is a "Checklist of Assessment and Reporting Criteria" (Table 1 – JORC Code). This checklist has been used as a systematic method to undertake a review of the underlying Study used to report in accordance with the JORC Code</li> <li>A high level LOM Plan was prepared based on the ROM mineable ore contained with the pit designs. RPM reviewed the LOM Plan for reasonableness and accuracy and confirmed that it was suitable for estimation of Ore Reserves. An economic model was prepared in conjunction with Perseus that confirmed the Operation to be economically viable</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The accuracy and confidence of the inputs are, as a minimum, of a pre- feasibility level (for the global open pit Ore Reserves)</li> <li>The key factors that are likely to affect the accuracy and confidence in the Ore Reserves are:         <ul> <li>Accuracy of the underlying Resource Block Models;</li> <li>Changes in gold prices and sales agreements;</li> <li>Changes in metallurgical recovery; and</li> <li>Mining loss and dilution</li> </ul> </li> <li>The Ore Reserve has utilised all parameters provided by site as made available.</li> <li>The accuracy of the underlying Mineral Resources is defined by the Resource Category that the Mineral Resources are assigned to. Only the highest categories of Resource classification, Measured and Indicated, have been used as a basis for estimating Ore Reserves.</li> </ul>

#### JORC 2012 Table 1 – Section 1 sampling techniques and data

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

Criteria	JORC Code explanation	Commentary	
Sampling techniques	Nature and quality of sampling (e.g. 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.	Circulation (RC) and diamond drill (DD) holes on a nominal 20m by 20m grid spacing. A total of 151 holes were included in the resource for a total 13,503m within the resource wireframes. Holes were angled between 45° and 80° towards grid west or east to optimally intersect the mineralised zones.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>Perseus's drill hole collars were picked up by the company's surveyors.</li> <li>Downhole survey was carried out by the drilling contractors. RC samples were collected by a riffle splitter at 1m intervals. Diamond core was cut in half using a core saw with sampling at geological boundaries. All samples were collected from the same side of the core.</li> </ul>	
	• Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Sampling and QAQC procedures were carried out to industry standards.</li> <li>RC samples drilled by Perseus sent to Transworld Laboratory for 24hr bottle roll with AAS finish. Diamond half core samples analysed by 50g Fire Assay and AAS finish, at Transworld Laboratory or ALS Kumasi. Assaying facilities and methods for drill samples from historic drilling is not known in detail. Historic drilling was generally limited to the oxide zone which has been mined out by AGC.</li> </ul>	
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	RC drilling comprising 105mm diameter face sampling bit. Diamond drilling carried out with HQ2 and NQ2 sized equipment.	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Recoveries from historical drilling are unknown. Actual recoveries from PRU diamond drilling recorded in the database and averaged 96.7% with no significant issues noted.</li> </ul>	
	<ul> <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>	RC samples were visually checked for recovery, moisture and contamination.	
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> </ul>	<ul> <li>All holes were field logged by company geologists. Weathering, lithology, alteration, structure, mineralogy and veining information were recorded. RC chips are glued to boards as a visual reference of every hole.</li> <li>Logging of diamond core also recorded recovery, core strength, orientation, roughness, and infill type. Diamond core was</li> </ul>	

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	photographed.  • All drill holes were logged in full.
Sub-sampling techniques and sample 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>	<ul> <li>NQ2 core was cut in half using a core saw. All samples were collected from the same side of the core. HQ core was usually not sampled as the oxidised sediments beside the granite are deemed barren.</li> <li>RC samples were collected at the rig using riffle splitters. Samples were predominantly wet but very few occur within the Mineral Resource wireframes.</li> <li>Sampling of diamond core and RC chips uses industry standard techniques. After drying the sample is subject to a primary crush, then pulverised so that 90% passes a -75um sieve.</li> <li>Field QC procedures involved the use of certified reference materials (1 in 20), and field duplicates (1 in 20).</li> <li>Field duplicates were taken on 1m composites for RC using a riffle splitter.</li> </ul>
Quality of assay data and laboratory 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	The analytical techniques used Fire Assay on 50g samples or BLEG bottle roll on 1kg samples both with AAS finish. This method approaches total dissolution of most minerals.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intersections of mineralisation. have not been independently verified, but various consultants, including RPM, and independent personnel have inspected selected drill core</li> <li>AGC twinned two of their RC holes. No twin holes were drilled by PRU as more than 95% of the informing samples are good quality diamond core.</li> <li>Primary data is entered on hardcopies in the field and then entered digitally using Log Chief Software (Maxwell GeoServices). This data is then directly imported into the PRU central database (DataShed/Maxwell GeoServices).</li> </ul>

Criteria	JORC Code explanation	Commentary
		Assay values that were below detection limit were adjusted to equal half of the detection limit value. Intervals with no samples were left blank (while recorded as -9 value in the database)
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Grid system used is a metric local mine grid that is 43° rotated east of true north, established by Cluff and AGC to have a grid that is aligned parallel to the geometry of the ore bodies. Drill collars were surveyed by the company's surveyor. Local RL elevations were adjusted by adding 1,000m to avoid negative values.</li> <li>The first 13 Diamond holes were surveyed down hole at 60m intervals and at the end of hole, using acid tests.</li> <li>PRU drill holes are surveyed down hole at 10m to 30m intervals using either Reflex or Flexit multi-shot equipment. Historical RC holes have not been down hole surveyed and are assumed to be straight. The average depth of these holes is 57m. Historical diamond holes were down hole surveyed using either acid tubes or a single shot camera.</li> <li>Topographic surface based on 1,407 survey points of the old pit surveyed in during mining of the pit. A further 630 points were surveyed including all drill collars, by PRU surveyors.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal drill hole spacing is 20m by 20m.</li> <li>The mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource, and the classifications applied under the 2012 JORC Code.</li> <li>Samples have been composited to 1m lengths using best fit techniques. Two residual sample lengths were excluded.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drill holes are angled to grid east and west, which is approximately perpendicular to the orientation of the granitic intrusion.</li> <li>No orientation based sampling bias has been identified in the data.</li> </ul>
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by PRU. Samples are stored on site and collected by Intertek employees. PRU employees have no further involvement in the preparation or analysis of the samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A review of sampling techniques was carried out on each site visit by RPM, the latest in 2010. Since then, no further RC and only 21 additional diamond core holes have been drilled on the prospect.

#### JORC 2012 Table 1 – Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The deposit is located within the Nanankaw Mining Lease granted on 31 December 2009 for a period of 15 years and renewable thereafter which is wholly owned by PRU's subsidiary Perseus Mining (Ghana) Limited.</li> <li>The tenement is in good standing.</li> </ul>	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous companies to have held the ground include Cluff Mining Plc and Ashanti Goldfields. Exploration activities included RC and Diamond drilling.</li> </ul>	
Geology	Deposit type, geological setting and style of mineralisation.	• The Edikan deposits occur near the western flank of the Ashanti Greenstone Belt along the Obuasi-Akropong gold corridor. The Central Ashanti property is underlain principally by Paleoproterozoic Birimian metasediments of the Kumasi-Afema basin, positioned between the Ashanti and Sefwi Greenstone Belts. The flysch type metasediments consist of dacitic volcaniclastics, greywackes plus argillaceous (phyllitic) sediments, intensely folded, faulted and metamorphosed to upper greenschist facies. Minor cherty and manganiferous exhalative sediments are locally present, and graphitic schists coincide with the principal shear (thrust) zones. Numerous small Basin-type or Cape Coast-type granitoids have intruded the sediments along several regional structures. Gold mineralisation has been identified within, or is associated with, the margins of a granitoid intrusive which has intruded into a sequence of metasediments. Mineralisation is typically 20-120m wide and remains open at depth. Mineralisation is associated with minor quartz veining and sulphides which are predominantly pyrite.	
Drill hole information	<ul> <li>A summary of all information material to the under-standing 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>down hole 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> </ul>		

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Exploration drill results are not being reported.</li> <li>No aggregation of intercepts was carried out. Drilling intervals are predominantly even 1m, or composites of 2m or 4m. Mineralised composites are re-split to 1m for re-assay.</li> <li>Metal equivalent values are not being reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	Drill holes are angled to local grid which is approximately perpendicular to the orientation of the mineralised trend.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	A plan showing Esuajah South drilling is included within this Mineral Resource report.
Balanced Reporting	<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>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>Drill holes have been accurately located by PRU surveyors using the local grid system.</li> <li>Exploration results have been previously reported to the ASX and are not being reported for this Mineral Resource update.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	existing stored drill core. A total of 567 samples were analysed. Results
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>No further drilling currently planned for the Esuajah South deposit.</li> <li>Down dip lode extensions have been highlighted in the body of this Mineral Resource report. PRU are currently studying the economic viability of underground mining options at the deposit.</li> </ul>

#### JORC 2012 Table 1 – Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>from the laboratory. In 2010, RUL reviewed the logging of several holes and validated the records in the database against the drill core and logging boards. No significant errors were noted.</li> <li>RPM validated the 2013 data against previous data from the 2010 estimate. One drill hole (AKRDD256) had an incorrect prospect name so had not been used in previous estimates.</li> <li>The dip and depth intervals of down hole surveys for a number of drill holes differed from the 2010 database. PRU instructed RPM to use the 2010 data for those holes as the errors were attributed to converting of the PRU current database to Datashed format.</li> <li>PRU has since removed erroneous data from the database after conducting an internal audit.</li> <li>RPM also performed data audits in Surpac.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Site visits have been conducted by David Price (RUL) in January 2007, Paul Payne (RUL) in January 2008, and Aaron Green (RPM) in October 2010. On each occasion, the deposit area, the core logging and sampling facility, and drilling and sampling operations were viewed. Aaron Green inspected the main laboratory used by PRU. Notes and photos were taken. Discussions were held with site personnel regarding drilling and sampling procedures. No major issues were encountered.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>is based on good quality drilling.</li> <li>The deposit consists of a steeply dipping granite lode and mineralised sediment lodes. Infill drilling has supported and refined the model and the current interpretation is considered robust.</li> <li>Outcropping of mineralisation and host rocks within the previously mined open pit confirm the geometry of the mineralisation.</li> <li>The logging of 'granite' is consistent and closely matches the observed mineralisation.</li> <li>Infill drilling has confirmed geological and grade continuity.</li> </ul>
Dimensions	<ul> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul> <li>The Esuajah South resource area extends over a strike length of 300m (from 6,070mN – 6,370mN), has an outcropping (within the existing pit) average width of 50m (1,950mE – 2,000mE) and includes the 605m vertical interval from 1,160mRL to 555mRL.</li> </ul>
Estimation and modelling	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,</li> </ul>	Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades within the granite domain.

Criteria	JORC Code explanation	Commentary
techniques	interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of by-products.  Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Surpac software was used for the estimations.
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of</li> </ul>	<ul> <li>Only Au assay data was available, therefore correlation analysis was not possible.</li> <li>The deposit mineralisation was constrained by wireframes constructed using a 0.2g/t Au cut-off grade in association with logged lithology codes. The wireframes were applied as hard boundaries in the estimate.</li> <li>A three step process was used to validate the model. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average Au grades of the composite file input against the Au block model output for all the resource objects. A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the granite domain. This analysis was completed for 20m northings and 20m bench heights. Validation plots showed good correlation between the composite grades and the block model grades.</li> </ul>

Criteria	JORC Code explanation	Commentary	
	model data to drill hole data, and use of reconciliation data if available.		
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.	
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resource estimate has been constrained by the wireframed mineralisation envelopes, is undiluted by external waste and reported above a 0.7g/t Au cut-off grade. The cut-off grade of 0.7g/t for the stated Esuajah South Mineral Resource estimate reflects economic parameters deriving from anticipated underground mining practices, costs and recoveries derived from the Feasibility Study.	
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	RPM has assumed that the deposit could potentially be mined using large scale open pit and potentially underground techniques. Small scale open pit mining of the oxide material has previously occurred at Esuajah South.	
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Extensive metallurgical test work was completed on material from a number of deposits within Edikan Project area, by AMMTEC Pty Ltd in Perth for Cluff Mining Plc in the early 1990's. This focussed on CIL test work on both oxide and sulphide material and later to heap leach. Preliminary amalgamation and cyanidation results using bottle roll methodology confirmed the free milling nature of both the oxide and granite mineralisation.</li> <li>Metallurgical test work was undertaken by PRU in 2011 as part of the DFS.</li> </ul>	
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	The Project is not subject to any environmental liabilities except for a progressive decommissioning and reclamation plan for the closed Ayanfuri heap leach mine.	
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation</li> </ul>	<ul> <li>A total of 956 bulk density determinations have been undertaken at the Edikan Project, including 209 from the Esuajah South deposit. Average densities were determined from this analysis.</li> <li>814 samples were from primary rock, 48 were from slightly weathered to strongly weathered material, and 94 were from the transitional zone, which is a fair reflection on the proportion of sulphide Mineral Resources to oxide Mineral Resources.</li> </ul>	

Criteria	JORC Code explanation	Commentary	
	process of the different materials.	The bulk density of the mineralisation has been determined with a high degree of confidence from extensive sampling and measurements.	
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). The deposit was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, drill hole spacing, and continuity of mineralisation. The portion of the granite where the drill spacing was 20m by 20m or less and demonstrating good lode and grade continuity supported by high kriging efficiencies was classified as Measured Mineral Resource. This was confined to the central portion of the granite domain from surface down to 830mRL. The portion of the deposit where the drill spacing was generally greater than 20m by 20m but still demonstrated good lode and grade continuity was classified as Indicated Mineral Resource. The portion of the deposit classified as Inferred Mineral Resource included areas where the drill spacing was greater than 40m by 40m (generally the deeper portions of the granite), and the zones of mineralisation within the adjacent sediments that were defined by limited drilling.</li> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>The Mineral Resource estimate appropriately reflects the view of the</li> </ul>	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>Competent Person.</li> <li>Internal audits have been completed by RPM which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>	
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not	<ul> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The Mineral Resource statement relates to global estimates of tonnes and</li> </ul>	
	<ul> <li>deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The deposit is not currently being mined. Previous mining of oxide material has been reconciled with the resource model reported in 2010. The model reported a reduced grade compared to production. The mined portion of the model was based on the survey of the mined pit, which has not been accurately surveyed, and is therefore only an estimate of what was mined.</li> </ul>	

#### JORC 2012 Table 1 – Section 4 Estimation and Reporting of Ore Reserves

This section has been prepared by Snowden Mining Industry Consultants Pty Ltd to support the Statement of Ore Reserves for the Esuajah South Deposit at Edikan Gold Mine as of 21 February 2017.

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore	The Mineral Resource estimate used as the basis of this Ore Reserve is was compiled by RungePincockMinarco Limited.
conversion to Ore Reserves	Reserve.  • Clear statement as to whether the Mineral	The estimate is based on data from 151 surface reverse circulation and diamond holes and covers a 300 m lateral extent. The vertical extent of the Mineral Resource is 605 m from surface.
	Resources are reported additional to, or	The geological and mineralisation interpretations are robust and fit well with observed regional controls.
	inclusive of, the Ore Reserves.	The Mineral Resource estimate stated on 21 February 2017 is inclusive of this Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those	The competent person who prepared this section has not visited site. The competent person reviewing this section has visited the site on many occasions, lastly in January 2017.
	visits.	The current project has been in operation since 2011
	If no site visits have been undertaken indicate why this is the case.	The competent person for the Resources has visited site and reported no major issues with the Resource determination. A number of sites visits have been undertaken to site by senior Snowden staff over the past few years.
Study status	enable Mineral Resources to be converted to Ore Reserves.  The Code requires that a study to at least Prefeasibility Study level has been	The Esuajah South (ESS) deposit has been subject of extensive studies.
		There have been several studies and reviews carried out on this deposit. An open pit cutback was considered, however the amount and cost of relocation required proved to be prohibitive. A number of
		studies were then carried out considering underground mining.  The current Feasibility Study (FS) assessed all applicable modifying factors and has established technical and economic viability at the nominal long term gold price of US\$1,150/oz.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Attributes were added to the block model to track mass and metal by Resource Classification through the design and schedule to enable reporting of Ore Reserves by confidence classification.
		Revenue factors were assigned to each cell in the block model based on the contained Measured and Indicated fractions of metal.
		Inferred material (less than 1% of total tonnes) was reported in the final schedule, but was not included in the economical assessment of each ring to comply with Ore Reserve reporting standards.
		in the coordinated assessment of each mig to comply with the ineserve reporting standards.

Criteria	JORC Code explanation	Commentary	Commentary		
		Revenue factor input parameters	Revenue factor input parameters		
		Parameters	Value (US\$)	Units	
		Gold price	1,150	\$/oz Au	
		Metallurgical recovery	94	%	
		Royalties	6.75	%	
		TC/RC and insurance	1.30	\$/oz Au	
		Revenue factor	1,006.89	\$/oz Au	
		Revenue factor	32.372	\$/g/t Au	
		No adjustments were applied to the bi and recovery is applied as part of the			
		A cut-off grade of \$45/t was selected revenue under the current project ass		it returned the highest relative net	
Mining factors or assumptions	The method and assumptions used as reported in the Prefeasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	Various studies have been completed From these studies, sublevel mining upreferred method and forms the basis  Orebody geometry – Dimensions of to a transverse SURF layout.	Inderneath introduced rock fill (Si of this study for the following rea	URF) was identified as the asons:	
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	<ul> <li>Mechanisation – Mechanised minir worldwide.</li> <li>Production rate – SURF can delive annum (Mt/a) at much lower costs</li> </ul>	r the target production rate of ap	·	
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre- production drilling.	Surface influence – Any surface su of the Ayanfuri town. SURF will ens will further reduce the potential for	sure the void on surface is backfi		
	The major assumptions made and Mineral Resource model used for pit and stope	SURF is a bulk, semi-selective, under cave (SLC) in layout, but with waste b			
	optimisation (if appropriate).	The orebody is accessed through regularly spaced drawpoints on multiple levels. Drawpoints are offset between levels to provide a regular, honeycomb layout to ensure maximum recovery of blasted ore.			
	<ul> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> </ul>	In the SURF method, the ore is broken through drilling and blasting of regularly spaced, fan shaped up hole rings along each ore drive. As ore is extracted from the underground mine, waste fill will be introduced from surface to fill the resulting void.			
	The manner in which Inferred Mineral	Parallel rings are designed along the	length of each ore drive. The ring	gs are typically blasted and loaded	

Criteria	JORC Code explanation	Commentary
Criteria	Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.      The infrastructure requirements of the selected mining methods.	one at a time, in "choke blast" conditions (i.e. blasting is against the previously mined ring instead of into a free void).  In total, 79% of the designed ring tonnes are extracted, the remaining 21% is either left behind, or is replaced by the external dilution being mined. About 14% on average is mined from waste introduced into the pit as part of the SURF method. Since only swell is drawn in sub-economic rings, this improves the remaining grade that is drawn and also the dilution grade for future rings. In total, the mined grade is 91% of the insitu grade.  The orientation of geological structures measured from borehole cores, intact rock strengths and the likely in-situ rock stress field have been evaluated. No significant geotechnical factors or influences exist
		which would exclude the currently proposed ESS underground development and stoping.  The underground mining at ESS will encounter "low" to "moderate" in-situ rock stress conditions. Given that planned SLC operations will be carried out at relatively shallow depths (≤260 m below natural surface), rock stress magnitudes are not expected to be a limiting factor to proposed underground mining.  The ESS underground development and stoping within fresh rocks will be carried out in generally "fair" to "good" quality rock mass conditions. Current geotechnical conditions indicate better than average ground conditions, which is the major contributing factor in selecting the SURF mining method. If underground conditions are worse than expected, current assumptions will need to be reassessed.
		Detailed mine designs, development schedules and costs were created for the entire mine. These included the access decline, crosscuts, access drives, footwall drives, ore drives, ventilation drives and rises.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The Edikan processing plant uses industry standard processes for crushing, grinding, gravity, flotation, concentrate regrind and cyanide leaching to extract gold. The plant has a nominal capacity of 7 Mt/a.
		The Edikan process plant has been operational since late 2011 and is a tried and tested system.
	Whether the metallurgical process is well-tested technology or novel in nature.	The ore mined from the ESS deposit will be mixed with ore feed from the other open pit operations currently working. It is not expected that any changes, other than those previously planned, to the
	The nature, amount and representativeness of metallurgical test work undertaken, the	treatment process will be required as a result of treating this ore.  No deleterious material has been identified.
	nature of the metallurgical domaining applied	Based on tests to date, there are no recovery issues associated with the ores tested. The mass pull to
	and the corresponding metallurgical recovery factors applied.	concentrate is marginally higher than currently experienced but this is not likely to be an issue given that the ores will be a small fraction of total mill feed and there is currently excess capacity in the regrind and
	Any assumptions or allowances made for	carbon-in-leach (CIL) circuits.
	deleterious elements.	The predicted plant recovery through the Edikan circuit is 94% for the ESS ore.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environment	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock	A number of environmental studies have been undertaken across the Edikan Gold Project site, with the initial environmental baseline studies being the most comprehensive. Following these initial baseline studies, other environmental studies have been completed during the course of operations as required.
	characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	None of the studies completed to date have identified any environmental issues that could impact the mining or processing activities at Edikan.
		For mining operations to commence at ESS, a two-part process is required.
		Firstly, it is necessary to complete an application covering the environmental impact directly associated with the ESS planned operation
		Secondly, application must be made for permission to carry out mining activities.
		This latter application requires submission of the Feasibility Study covering the mining plan, methodology, schedules, all safety aspects and community related matters related to the underground mining activity and surface infrastructure.
		The only waste produced by mining will be from waste development. Waste will be trucked to surface and dumped into the existing ESS pit to act as backfill for the void created by mining.
		Existing tailings facility approvals give the operation sufficient capacity for the life of mine schedule.

Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure:     availability of land for plant development,	The study considered the following items and areas for the study, from which quantities were established and costs derived:
	power, water, transportation (particularly for bulk commodities), labour, accommodation;	Power line from existing 11 kV network at the processing facility.
	or the ease with which the infrastructure can	Integrated backup power generator to connect to ESS mine 11 kV substation.
	be provided, or accessed.	Communications – phone and IT network connection to processing facility.
		Radio repeater and radio system at ESS mine site.
		<ul> <li>Potable water for offices and change house for 70 people per dayshift and 50 people per nightshift.</li> <li>Derived from local boreholes and water treatment plant.</li> </ul>
		Sewerage treatment plant to cater for offices and ablutions.
		Desilting of underground water.
		Offices for 20 people.
		Change house for 42 people.
		Chop kitchen/dining room to serve 40 people per shift prepared off site and served in the kitchen.
		<ul> <li>Fuel farm 10,000 litres per day plus the standby power requirements. Capacity to allow for three days' backup.</li> </ul>
		Workshop with two bays for underground vehicle minor servicing.
		Warehouse and workshop store.
		The above includes all civil works, water reticulation, high voltage power reticulation and low voltage power reticulation.
		The life of mine was indicated to be approximately five years. Any structures selected would therefore be non-permanent in nature and be relocatable.
Costs	The derivation of, or assumptions made,	All costs are in US\$.
	<ul> <li>regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> </ul>	As Perseus Mining (Ghana) Limited (PGML) do not have any other underground operations with which to share equipment and maintenance or operation experience, the cost model was premised on most capital equipment being supplied by the contractor (and therefore being costed as an operating cost):
	<ul> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> </ul>	The study assumed a contractor operated cost model. Equipment was selected for productivity, scheduling and costing purposes to determine the potential economic viability of the project. The
		<ul> <li>contractor will supply its own equipment.</li> <li>The owner will only supply permanent, fixed equipment (like major pumps, substations, primary fan, surface infrastructure) and light vehicles for personal use.</li> </ul>
	<ul> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for</li> </ul>	New, modern mechanised equipment will be used in all areas.

Criteria	JORC Code explanation	Commentary
	failure to meet specification, etc.  The allowances made for royalties payable, both Government and private.	Ore to be delivered from underground to a run of mine pad (ROM) located near the portal. Rehandling from the ROM to the plant was costed at an equivalent \$/t rate based on current Edikan Gold Project haulage contracts, but details on equipment and labour were not considered.
		Waste to be delivered from underground into the ESS pit adjacent to the portal. Waste for backfill be trucked and delivered to dedicated tipping points on the ESS pit's edge – this was costed as an incremental cost per tonne hauled based on current Edikan Gold Project haulage contracts, but details on equipment and labour were not considered.
		Power and communications will be extended from the current process plant to near the underground portal – the cost of this extension was included and it was assumed that the current regional supply can accommodate the additional demand.
		Excess water produced as a result of underground workings not used by the process plant or underground will be treated and discharged into the local surface water network.
		Equipment to be imported attracted an additional 5% import duty.
		Mining capital costs are estimated from first principles based on equipment, labour, and development requirements indicated by the mine schedule. In addition, mining capital costs are also based on ventilation, dewatering, electrical and other engineering study work.
		Mining operating costs are estimated from first principles based on equipment, labour, development and stoping requirements indicated by the mine schedule.
		Mining capital and operating costs include an 11% allowance for contractor mark-up and margin.
		Process and general and administration (G&A) costs have been derived from current operating costs.
		A government royalty of 6.75% applies.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head	Estimated gold production is based on the head grade from detailed mine planning and process losses determined by metallurgical test work.
	grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Revenue for financial modelling has been based on current long term gold price forecasts of US\$1,150/oz Au.
	The derivation of assumptions made of metal	Hedging and forward sales agreements are in place as are refining contracts.
	or commodity price(s), for the principal	PRU have gold hedging in place with a number of forward sales contracts above US\$1,200/oz Au.
	metals, minerals and co-products.	A bullion and refining cost of US\$1.30/oz was applied.
Market assessment	The demand, supply and stock situation for	The demand for gold is considered in the gold price used.
	the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	Ghana allows for direct export of the gold doré to refiners with the proviso that all gold may be purchased by the Bank of Ghana at the standing sale price.
	A customer and competitor analysis along with the identification of likely market windows	All gold has been and shall continue to be sold on the open market after refining.

Criteria	JORC Code explanation	Commentary
	for the product.	
	Price and volume forecasts and the basis for these forecasts.	
	For industrial minerals, the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the NPV in the study, the source and	A schedule and economic model has been completed using the Ore Reserves published in this statement. The inputs used are as per those stated in the relevant sections of this Statement.
	confidence of these economic inputs including estimated inflation, discount rate, etc.	The internal rate of return (IRR) and net present value (NPV) for the Project is calculated in a cash flow model prepared for the purpose.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The NPV of the Project is estimated using a real post-tax discount rate of 10% per annum.
	signineant assumptions and inputs.	The ESS underground deposit will produce 4.88 Mt of ore at 2.0 g/t Au (contained), for a total of 313.8 koz gold produced (293.6 koz Au recovered) over a mine life of approximately six years.
		The total net cumulative cash flow amounts to US\$57 million, with a NPV (10% per year discount) of approximately US\$28 million. The project is cash flow positive on a monthly basis after approximately 19 months, giving a project payback of 45 months on direct cash flow, and 50 months on discounted cash flow.
		Total cost of production is US\$877/oz gold recovered.
		A sensitivity analysis was conducted on a number of value drivers; mining operating costs, processing operating costs, administration costs, capital costs and metallurgical recovery. The project cash flow is most sensitive to factors affecting the revenue, such as metal price and grade or metal recovery. A reduction of 15% in revenue (gold price of approximately \$978/oz Au) has an 82% reduction in cumulative cash flow.
Social	The status of agreements with key stakeholders and matters leading to social	The Edikan Gold Project has been operated by PRU for several years and over this period, all relevant structures have been put in place to consider the community, their requirements and their expectations.
	licence to operate.	It is expected that a certain amount of disruption will take place, brought about by mining activities, and that adequate means of compensation will be made. Community and social programs are in place along with community liaison and communication systems.
		Perseus operates a well-designed resettlement plan, in line with Ghanaian legislative requirements and in consultation with the local community. The plan has been reviewed giving consideration to the requirements for an underground operation, which requires less surface disturbance than does an open pit operation.
		As a result of the underground planning, it will be necessary to relocate a number of residents. This has, however, been minimised by careful planning to be no more than five residences.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and	Naturally occurring risks (other than geological and geotechnical issues discussed above) include the possibility of high rainfall events leading to significant water inflow into the mine. This can be managed

Criteria	JORC Code explanation	Commentary
	classification of the Ore Reserves:  Any identified material naturally occurring risks.	by including development at the base of the mine that can be temporarily flooded and provision of additional pumping capacity. High rainfall events may also lead to road flooding and temporary loss of site road access.
	<ul> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Prefeasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	Overall, the cost risks, whilst real, are not assessed to be intractable and mitigation is not expected to incur costs exceeding the estimated allowance.  Snowden points out the potential full loss of the ESS Resource if the ESS production is not mined while the plant is operational with open pit material. The ESS underground project is not viable as a standalone underground project and is reliant on the processing and G&A costs associated with a combined Edikan Gold Project open pit and underground processing scenario and therefore can only be converted to Ore Reserves as part of the overall Edikan Gold Project production schedule and Ore Reserves.
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The Mineral Resource model classified the geological confidence as being mostly Measured material. Although open pit mining took place at ESS, no underground mining has yet been done undertaken. In Snowden's opinion, it is fair to convert both the Measured and Indicated Mineral Resource material contained in the mining inventory into Probable Mineral Reserves.  When actual underground mining has taken place and the performance of the proposed mine plan can be confirmed, it may be possible to upgrade part of this material to Proven Reserves in the future.  No Inferred Mineral Resources were included in the Ore Reserve estimate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Mineral Resource estimate methodology, parameters and results have been internally audited by RPM.  The Ore Reserve has been independently audited by a number of third parties.  The key recommendations include that PRU should;  • continue with the project;  • undertake additional geotechnical work for the mine access and to confirm the stability of the underground operations; and  • advance the permits required for the project as a priority.
Discussion of relative accuracy/ confidence		advance the permit required for the project do a phonty.

#### JORC 2012 Table 1 – Section 1 sampling techniques and data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <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>	was taken for analysis  - 184 RC holes drilled for 3,270m  - 2,752 samples submitted  • Reverse Circulation blade drilling ('AirCore' or 'AC') was used to collect 1m samples that were composited to 2m samples (by weighing of 2x 2.5kg sub-samples)  - 507 AC holes drilled for 8,719m  - 4,589 samples submitted  • First 54 drill holes assayed by 1kg 24h bottle roll, all subsequent RC and AC samples by 50g Fire Assay
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Reverse Circulation percussion drilling ('RC') with 5¼" hammer configuration         <ul> <li>max. depth 37m</li> <li>all vertical, no down hole survey</li> </ul> </li> <li>Reverse Circulation blade drilling ('AirCore' or 'AC') with a 75mm blade         <ul> <li>max. depth 44m</li> <li>all vertical, no down hole survey</li> </ul> </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>	RC and AC sample recovery was not recorded

Criteria	JORC Code explanation	Commentary
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>RC drill chips were logged geologically including rock type, estimated vein fragment percentage and grain size</li> <li>All sample intervals of the RC and AC drill holes were sampled and assayed</li> </ul>
Sub- sampling techniques and sample 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>	<ul> <li>All RC and AC samples were collected at the drill site at 1m interval and split using a multistage riffle splitter. When composited, each two consecutive samples were composited by equal weight in one bag</li> <li>Both RC and AC samples followed a standard path of drying, crushing and grinding. Samples were pulverized with a ring mill and thoroughly mixed on a rolling mat ("carpet roll"), then 200g of sub-sample was collected. Internal laboratory checks required at least 90% of the pulp passing -75 microns</li> <li>Sampling and samples size are considered appropriate and representative for the type of deposit, the grade distribution and grade ranges</li> </ul>
Quality of assay data and laboratory 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>Samples from the first 54 holes were assayed by bottle roll with AAS finish</li> <li>All subsequent samples were assayed by standard 50gr Fire Assay with AAS finish</li> <li>Nominally 1 field duplicate per drill hole was prepared and inserted</li> <li>Certified Reference Material (blank or standard) was inserted at rate of 1:15</li> <li>Internal laboratory standards, duplicates and repeats and various other tests have been carried out throughout the drilling programs</li> <li>QAQC shows no bias, but only moderate reproducibility. This is expected in a high gold nugget environment</li> <li>Overall assaying quality is considered acceptable</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures,</li> </ul>	<ul> <li>Significant intersections are not highlighted; all RC and AC intervals are systematically sampled</li> <li>There are no twinned holes; lack of these is not considered significant given the close drill spacing and the dry nature of the samples</li> </ul>

Criteria	JORC Code explanation	Commentary
	data verification, data storage (physical and electronic) protocols.  • Discuss any adjustment to assay data.	<ul> <li>Drill hole information for both RC and AC holes is captured at the drill site on paper. The information provided on paper is entered into the computer and transferred to the database administrator in Accra</li> <li>All hard copies are kept in Edikan mine office</li> <li>Collar survey data are provided by the surveyors in digital format</li> <li>Perseus maintains a centralized database for its various operations in Ghana and Ivory Coast. Database administration is based in Perseus' head office in Accra/Ghana and under the supervision of the company's Resource Geologist</li> <li>Assay values below detection limit (&lt;0.01g/t Au) are set to -1 in the dBase. No further adjustments are made to raw assay data</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes were surveyed by the company's surveyor using differential GPS equipment</li> <li>Grid system used is WGS84 UTM Zone 30 North</li> <li>The topography covering the extent of the Ayanfuri heap leach pads was created as a digital terrain model (DTM) in Surpac using the surveyed drill hole collar data and an additional 4,010 survey points along traverses across the prospect</li> <li>Pits of recent illegal mining activities carried out over the deposit have been surveyed by aerial photography and merged into the DTM</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing for resource estimation varies from 20 x 20m for the northern and central heaps and 40x40m for the southern heap</li> <li>Data spacing is considered appropriate for the resource estimation procedures and classifications applied</li> <li>Samples have been taken at 1m length (2,920 samples) or composited to 2m lengths (4,421 samples)</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	Orientation of drill holes is vertical and drilling continued until the base of the heaps was penetrated, easily identified by a plastic liner
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by PRU. Samples are stored on site and collected by ALS employees or send by PRU to the Intertek laboratory . PRU personnel have no further involvement in the preparation or analysis of the samples
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Several reviews of sampling techniques were carried out by the Competent Person during site visits between 2011 and 2015, with acceptable conclusions

#### JORC 2012 Table 1 – Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation Commentary	
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Ayanfuri heap leach pads are located within the Nanankaw Mining Lease granted on 31 December 2009 for a period of 15 years and renewable thereafter which is wholly owned by PRU's subsidiary Perseus Mining (Ghana) Limited.</li> <li>The tenement is in good standing with no known impediment</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Ayanfuri heap leach pads are the product of Ashanti Goldfields ('AGC', now AngloGold Ashanti) oxide mining and heap leach operation. AGC has not assessed the economic potential of the heaps after mine closure in 2001
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Ayanfuri heap leach pads are the product of Ashanti Goldfields ('AGC', now AngloGold Ashanti) oxide mining and heap leach operation. The material in the heaps consists of 85% granitic ore and 15% metasedimentary ore</li> <li>Primary mineralisation in the granitic lithologies is disseminated with low to moderate grades (1-2g/t Au). Gold is predominantly associated with quartz veining and sulphide mineralization. Gold in and along the vein contacts is often nuggety. PRU is currently mining the primary ores from the same deposits</li> <li>Primary mineralization in the meta-sediments is Ashanti-style, shear-zone hosted, including graphitic units. Grades are elevated (&gt;2g/t Au), but gold is believed to be partly refractory. Recoveries by heap leaching are assumed to be lower than those from granitic ores</li> <li>Some broad grade zoning within the heaps is interpreted to reflect the historical mining sequence</li> </ul>
Drill hole Information	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:  a easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  dip and azimuth of the hole  down hole length and interception depth  hole length.  If the exclusion of this information is justified on the basis that the	Exploration results are not being reported for the Mineral Resource

Criteria	JORC Code explanation Commentary	
	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.	
Data aggregation 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>	Exploration results are not being reported for the Mineral Resource
Relationship between minerali- sation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Exploration results are not being reported for the Mineral Resource
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	A plan showing the drilling over the Ayanfuri heap leach pads is included in this Mineral Resource report
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration results are not being reported for the Mineral Resource
Other substantive data	Other exploration data, if meaningful and material, should be reported including	Exploration results are not being reported for the Mineral Resource
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>	No further drilling is planned. The deposit is considered to be sufficiently drilled without any upside potential left. The size of the heaps is well delineated in all directions

#### JORC 2012 Table 1 – Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Perseus maintains a centralized database for its various operations in West Africa. Database administration is based in Perseus' head office in Accra/Ghana and under the supervision of the company's Resource Geologist.</li> <li>All drill hole data was validated during data entry and data import</li> <li>Checks for duplicate collars (LogChief, Datashed, Surpac)</li> <li>Checks for missing samples (Datashed)</li> <li>Checks for down hole from-to interval consistency (LogChief, Datashed, Surpac)</li> <li>Checks for overlapping samples (LogChief, Datashed, Surpac)</li> <li>Checks for samples beyond hole depth (LogChief, Datashed, Surpac)</li> <li>Checks for inexistent or misspelt log items (LogChief)</li> <li>Check for missing assays (Datashed)</li> <li>Check for down-hole information beyond hole depth (Datashed, Surpac)</li> <li>Check for missing down-hole information (Surpac)</li> <li>Check for missing or erroneous collar survey (manual)</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The Competent Person visited the site on a regular basis.</li> <li>Last site visit was in November 2015 to inspect the current activities of illegal miners on the leach pads</li> </ul>
Geological interpre- tation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The Ayanfuri heap leach pads do not constitute an in-situ gold deposit. It is man-made and the residual of formerly processed ores. Short range grade distribution within the heaps is considered random, while broad zones of variations in mean grade are attributed to the primary source of the material dumped. Occasional high grade samples (up to 93.2g/t Au) are believed to represent individual and isolated gold nuggets that haven't dissolved during heap leaching, without any lateral grade continuity
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The footprint of the Ayanfuri heap leach pads covers an area of approximately 1km²</li> <li>Mean thickness (height) of the heaps is 17.5m as identified by drilling. Maximum height in the middle of the central heap is 44m</li> <li>Total volume of the heaps is 6,234,000m³</li> </ul>
Estimation and	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including	3 separate domains were used to control estimation – northern, central and southern heap     – due to different mean grades within these heaps

Criteria	JORC Code explanation	Commentary
modelling techniques	treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of byproducts.  Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	<ul> <li>4 different estimates were carried out</li> <li>Sequential Gaussian Simulation (SGS). E-type mean value used from 10 simulation runs with 1m (central) and 2m (northern heaps) composite data</li> <li>Ordinary Kriging (OK) with top-cut applied on 5m composite data</li> <li>Simple Kriging (SK) with top-cut applied on 5m composite data</li> <li>Simple Kriging (SK) with top-cut applied on 5m composite data and using a stationary mean</li> <li>Inverse Distance, squared (ID²), with top-cut applied on 5m composite data</li> <li>SGS was used to estimate gold grade of the northern and central heaps. SK interpolation was used for the southern heap (due to the broader sample spacing)</li> <li>For the simulation of the northern and central heaps, top-cutting was not considered necessary as the method uses normal-score transformed values</li> <li>For the interpolation methods, a top-cut of 5g/t Au was used to reduce the influence of high-grade outliers. No composite sample at the southern heap exceeds 5g/t Au. As the interpolation methods elsewhere were only used for validation purposes, top-cutting has no effect on the reported Mineral Resource</li> <li>Variography was carried out on normal-score transformed data to determine kriging parameters and search ranges. These parameters are not intrinsic to the mineralization, but interpreted to reflect the various sources of ore as they have been progressively dumped on the heaps</li> <li>Search ellipse orientations for the estimation were based on the assumed dumping sequence, ie. horizontally with thicknesses of approximately 10m per vertical lift</li> <li>Block size was 20m (N-S) by 20m (E-W) by 5m (Vertical) with sub-cells to 10m x 10m x 2.5m. This corresponds to the drill spacing at the northern and central heaps and ½ of the drill spacing at the southern heaps</li> <li>Validation of the grade estimate has been carried out through:         <ul> <li>Comparison of results across the 4 different estimation</li></ul></li></ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are reported on a dry in-situ basis
Cut-off	The basis of the adopted cut-off grade(s) or quality	The Mineral Resource is reported at 0g/t cut-off, assuming no, or very low, selectivity and

Criteria	JORC Code explanation	Commentary
parameters	parameters applied.	no additional ore control procedures
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>The resource does not have any specific factors for mining dilution or ore loss as it is reported at 0g/t cut-off.</li> <li>Mining selectivity is expected to be minimal, if any at all</li> </ul>
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Metallurgic test work has been carried out on a total of 60 samples taken from the central heaps ('Africa')</li> <li>Test work included         <ul> <li>Head grade assay</li> <li>Specific gravity measurement</li> <li>NaSH assessment</li> <li>Variability tests</li> <li>Blend test work</li> <li>Cyanidation test work</li> </ul> </li> <li>The heap leach material has been tested for treatment through the existing processing facility at Edikan by blending it with primary ore coming from the active pits</li> </ul>
Environmen- tal factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	A progressive decommissioning and reclamation plan for the Ayanfuri heap leach pads is required as part of the Mining Licence. The removal of the heaps by processing them through the plant is a valid option
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used,	<ul> <li>Bulk density values were determined from 30 test pits by independent consultants</li> <li>Depths of the test pits vary between 2-4m. At the bottom, a 100mm large and 200mm deep</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	hole was dug and the material removed and weighted, then oven-dried and weighted again to determine density and moisture content. The volume of the hole was determined accurately by filling it with graded sand  The mean value determined from the test pits (1.32 t/m³ for dry in-situ material) was used and assigned to the heap leach material  The resulting tonnage of the heaps corresponds excellently with production figures provided by AGC
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Ayanfuri heap leach pads Mineral Resource has been classified as Indicated, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code), after the consideration of  Data quality  Drill spacing  Quality of topographic survey  Confidence in the result based on quantitative model validation processes  The Mineral Resource estimate reflects appropriately the view of the Competent Person
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resource estimation procedure and results have been peer reviewed within the company
Discussion of relative accuracy/confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The Mineral Resource statement relates to global estimates of tonnes and grade</li> <li>Confidence levels of the Mineral Resource estimate are reflected in the resource classification</li> <li>Volume and tonnes of the Mineral Resource compare well with production figures provided by AGC</li> <li>According to production figures provided by AGC, the difference between mined and recovered ounces is 100,000oz. This figure is lower than the estimated figure in this report (144,000oz). The difference can be plausibly attributed to an initial under-estimate by AGC of the head grades by 9% of processed ore due to         <ul> <li>conservative top-cutting during grade control modelling</li> <li>use of bottle roll analysis that typically under-reports samples containing coarse gold</li> </ul> </li> </ul>