



20 February 2020

NEWS RELEASE

## PERSEUS MINING UPDATES EDIKAN GOLD MINE'S MINERAL RESOURCE & ORE RESERVES

Perseus Mining Limited (ASX/TSX: PRU) ("Perseus") has updated its estimates of the Mineral Resources and Ore Reserves at its Edikan Gold Mine in Ghana as at 31 December 2019, highlighted by the following:

- Estimated Measured and Indicated Mineral Resources total 2.699 million ounces of gold at 31 December 2019, and Inferred Mineral Resources were estimated at 0.348 million ounces of gold.
- All Mineral Resource estimations were based on a US\$1,800 per ounce gold price.
- Proved and Probable Ore Reserves were estimated at 1.608 million ounces of gold, calculated as follows:

Proved and Probable Reserves as at 30 June 2019	1.390 million ounces
Plus: Net Additions	0.303 million ounces
Less: Depletions	0.085 million ounces
<b>Proved and Probable Reserves as at 31 December 2019</b>	<b>1.608 million ounces</b>

- Represents a 22% increase in Proved and Probable Ore Reserves before depletion relative to last reported Ore Reserve estimate or a 16% increase after depletion.
- The Ore Reserve estimates were based on a gold price of US\$1,300 per ounce.
- Details of Measured and Indicated Mineral Resources and Ore Reserves are as follows:

### Edikan Measured and Indicated Mineral Resources as at 31 December 2019<sup>1</sup>

Project	Type	Measured Resources			Indicated Resources			M & I Resources		
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	Koz	Mt	g/t gold	koz	Mt	g/t gold	koz
AF Gap <sup>1, 2, 3</sup>	Open Pit	10.2	1.00	326	21.8	0.92	645	32.0	0.94	971
Esujah North <sup>2, 3, 4</sup>	Open Pit	3.3	0.80	85	4.8	0.74	114	8.1	0.77	199
Fetish <sup>1, 2, 3, 5</sup>	Open Pit	7.7	1.00	248	14.1	0.92	418	21.8	0.95	666
Bokitsi South <sup>2, 3, 6</sup>	Open Pit	1.3	1.81	73	1.6	1.30	65	2.8	1.53	139
Sub-Total		22.5	1.01	732	42.2	0.91	1,242	64.7	0.95	1,975
Esujah South <sup>7</sup>	U/ground	0.0	0.0	0	9.0	1.8	530	9.0	1.8	530
Heap Leach <sup>2, 8</sup>	Stockpile	-	-	-	3.6	0.6	75	3.6	0.6	75
Stockpiles	Stockpile	5.9	0.63	119	-	-	-	5.9	0.63	119
<b>Total</b>		<b>28.4</b>	<b>0.93</b>	<b>852</b>	<b>54.8</b>	<b>1.05</b>	<b>1,848</b>	<b>83.3</b>	<b>1.01</b>	<b>2,699</b>

Notes:

1. Refer to notes to individual tables of Mineral Resources for each project presented below.

**Perseus Mining Limited**

ABN 27 106 808 986

Level 2, 437 Roberts Road Subiaco WA 6008

Telephone: +61 8 6144 1700

Email: [info@perseusmining.com](mailto:info@perseusmining.com)

PO Box 1578 Subiaco WA 6008

Facsimile: +61 8 6144 1799

Website: [www.perseusmining.com](http://www.perseusmining.com)

**Edikan Ore Reserves as at 31 December 2019<sup>1, 2</sup>**

Project	Type	Proved			Probable			Proved and Probable		
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	koz	Mt	g/t gold	koz	Mt	g/t gold	koz
AF Gap <sup>1</sup>	Open Pit	6.8	1.14	248	11.9	1.05	402	18.6	1.09	650
Esujah North <sup>1</sup>	Open Pit	0.4	0.91	11	0.6	0.86	17	1.0	0.88	28
Fetish <sup>1</sup>	Open Pit	4.4	1.18	165	7.1	1.09	248	11.4	1.13	414
Bokitsi South <sup>1</sup>	Open Pit	0.9	2.11	58	0.4	1.70	24	1.3	1.97	82
<b>Subtotal</b>		<b>12.3</b>	<b>1.22</b>	<b>482</b>	<b>20.0</b>	<b>1.08</b>	<b>690</b>	<b>32.3</b>	<b>1.13</b>	<b>1,173</b>
Esujah South	U/ground	-	-	-	3.8	1.96	241	3.8	1.96	241
Heap Leach <sup>5</sup>	Stockpile	-	-	-	3.6	0.6	75	3.6	0.6	75
Stockpile <sup>2</sup>	Stockpile	5.9	0.63	119	-	-	-	5.9	0.63	119
<b>TOTAL</b>		<b>18.3</b>	<b>1.02</b>	<b>601</b>	<b>27.4</b>	<b>1.14</b>	<b>1,007</b>	<b>45.7</b>	<b>1.10</b>	<b>1,608</b>

Notes:

1. Refer to Notes to individual tables of Ore Reserves in respect of each project presented below.

***Perseus's Managing Director and CEO, Jeff Quartermaine, commented as follows:***

*"Since the last release of Edikan's Mineral Resources and Ore Reserves in June 2019, the gold price has consolidated at a higher level than that recorded in prior years and several key operating initiatives identified as part of ongoing continuous improvement programmes, have been successfully implemented at Edikan, including a revised mining strategy and initiatives to improve processing plant throughput and performance reliability.*

*Perseus has identified that at the slightly higher gold price of US\$1,300 per ounce and lower cost base than previously assumed, two of its open pits, namely the AFG and Fetish pits can be significantly increased in size and provide the cash margin consistent with our overall strategy of cash generation.*

*The reconciliation between contained metal forecast by our block models and the metal we recover continues to be robust and is certainly within the limits of normal operating practice. The demonstrated predictive reliability of our Mineral Resource and Ore Reserve models continues to provide a sound basis on which to plan our future.*

*The Esujah South deposit has been included in previous Ore Reserve estimates, but not in prior Life of Mine forecasts for Edikan. Following an update of the Feasibility Study for the deposit, the Ore Reserve estimate has been updated and risks associated with mining of the deposit have now been sufficiently reduced for the underground mine to proceed with development and therefore an underground mining operation at Esujah South will be included in the next Edikan Life of Mine forecast.*

*The inclusion of the increased open pit Ore Reserves and the Esujah South Underground Mine will result in an increase in the expected mine life of the Edikan Gold Mine. Details of the updated Life of Mine Plan for Edikan are planned to be released by the end of the March 2020 quarter."*

## MINERAL RESOURCE ESTIMATES

The Mineral Resource estimates are reported in accordance with the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). The classification categories of Measured, Indicated and Inferred under the JORC Code are equivalent to the CIM categories of the same names (CIM, 2010).

Edikan's Mineral Resources comprise four components:

- Remaining in situ mineralisation in the Abnabna-AF Gap, Esuajah North, Fetish 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 2019.

The updated Measured and Indicated Mineral Resource for the Edikan Gold Mine is now estimated as 83.3Mt grading at 1.01 g/t gold, containing 2,699 koz of gold as shown in **Table 1**. A further 7.3 Mt of material grading at 1.48 g/t gold and containing a further 348 koz of gold are classified as Inferred Resources. Details of these estimates are shown below in **Table 2**.

Refer to **Appendix 1** for the JORC Table 1 criteria for open pit resources and **Appendix 2** for the criteria for Esuajah South underground resources. The updated estimates reflect new resource models for the Bokitsi South and Esuajah South deposits, removal of the Fobinso resource following completion of mining and backfilling of the pit with waste from the AFG deposit, a change to the size of the \$1,800/oz pit shell on which resources are constrained based on reduced operating costs and mining depletion. Readers are referred to ASX release "Perseus Mining Updates Mineral Resources & Ore Reserves" dated 29 August 2019 and the notes contained therein. The Company confirms that it is not aware of any information that would, in any other respect, result in a material change to the estimates of Mineral Resources previously released.

### **Geology**

The Edikan gold deposits occur near the western flank of the Ashanti Greenstone Belt in south-western 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-arsenopyrite 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 to more than 550 metres (AF Gap, Esuajah South).

**Table 1: Edikan Measured and Indicated Mineral Resources – 31 December 2019<sup>9, 10, 11</sup>**

Project	Type	Measured Resources			Indicated Resources			M & I Resources		
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	'000 oz	Mt	g/t gold	'000 oz	Mt	g/t gold	'000 oz
AF Gap <sup>1, 2, 3</sup>	Open Pit	10.2	1.00	326	21.8	0.92	645	32.0	0.94	971
Esujah North <sup>2, 3, 4</sup>	Open Pit	3.3	0.80	85	4.8	0.74	114	8.1	0.77	199
Fetish <sup>1, 2, 3, 5</sup>	Open Pit	7.7	1.00	248	14.1	0.92	418	21.8	0.95	666
Bokitsi South <sup>2, 3, 6</sup>	Open Pit	1.3	1.81	73	1.6	1.30	65	2.8	1.53	139
<b>Sub-Total</b>		<b>22.5</b>	<b>1.01</b>	<b>732</b>	<b>42.2</b>	<b>0.91</b>	<b>1,242</b>	<b>64.7</b>	<b>0.95</b>	<b>1,975</b>
Esujah South <sup>7</sup>	U/ground	0.0	0.0	0	9.0	1.8	530	9.0	1.8	530
Heap Leach <sup>2, 8</sup>	Stockpile	-	-	-	3.6	0.6	75	3.6	0.6	75
Stockpiles	Stockpile	5.9	0.63	119	-	-	-	5.9	0.63	119
<b>Total</b>		<b>28.4</b>	<b>0.93</b>	<b>852</b>	<b>54.8</b>	<b>1.05</b>	<b>1,848</b>	<b>83.3</b>	<b>1.01</b>	<b>2,699</b>

Notes:

1. Based on January 2017 Mineral Resource models constrained to US\$1,800/oz pit shells.
2. Depleted to 31 December 2019 mining surfaces.
3. 0.4g/t gold cut-off applied.
4. Based on June 2019 Mineral Resource model constrained to US\$1,800/oz pit shell.
5. Includes Bokitsi North lode.
6. Based on November 2019 Mineral Resource model constrained to US\$1,800/oz pit shell.
7. Based on July 2019 Mineral Resource model, 0.8g/t gold cut-off applied.
8. At zero cut-off grade.
9. All Mineral Resources are current as at 31 December 2019.
10. Mineral Resources are inclusive of Ore Reserves.
11. Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

**Table 2: Edikan Inferred Mineral Resources – 31 December 2019<sup>8, 9</sup>**

Deposit	Deposit Type	Inferred Resources		
		Quantity	Grade	Gold
		Mt	g/t gold	'000 oz
AF Gap <sup>1, 2, 3</sup>	Open Pit	0.3	0.95	10
Esujah North <sup>2, 3, 4</sup>	Open Pit	0.03	0.96	1
Fetish <sup>1, 2, 3, 5</sup>	Open Pit	0.7	0.95	22
Bokitsi South <sup>2, 3, 6</sup>	Open Pit	0.3	1.06	9
Esujah South <sup>7</sup>	U/ground	6	1.6	307
<b>Total</b>		<b>7.3</b>	<b>1.48</b>	<b>348</b>

Notes:

1. Based on January 2017 Mineral Resource models constrained to US\$1,800/oz pit shells.
2. Depleted to 31 December 2019 mining surfaces.
3. 0.4g/t gold cut-off applied.
4. Based on June 2019 Mineral Resource model constrained to US\$1,800/oz pit shell.
5. Includes Bokitsi North lode.
6. Based on November 2019 Mineral Resource model constrained to US\$1,800/oz pit shell.
7. Based on July 2019 Mineral Resource model, 0.8g/t gold cut-off applied.
8. All Mineral Resources are current as at 31 December 2019.
9. Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

### **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 2019 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 were 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***

Estimates of open pit Mineral Resources reported herein are based on resource models compiled by Mr Nicolas Johnson of MPR Geological Consultants Pty Ltd. The Company confirms that other than for depletion to 31 December 2019 surveyed mining surfaces and an update of the Bokitsi South model after infill drilling during 2019, there have been no material changes to estimates of open pit Mineral Resources previously reported.

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), 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 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, and Esuajah North were compared to recent mine site grade control outcomes. The grade control modelling undertaken for validation was performed using 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.

#### ***Esujah South Mineral Resource***

##### ***Estimation Methodology***

A wireframe was constructed representing a single mineralised domain using cross sectional interpretations based on geological logging of granite contacts. Drill hole sample intervals were composited to uniform 2m down-hole lengths and all composites lying within the granite wireframe were selected to inform estimates of gold grade, i.e. a hard boundary approach was applied. A 20g/t gold top cut was applied to composite grades.

A parent block dimension of 10mN x 10mE x 10mRL was selected on the basis of being approximately 50% of average drill hole spacing in the better drilled portion of the deposit.

Gold grades were interpolated into parent blocks by Ordinary Kriging. A three-pass search strategy was applied. First pass search radii were 30mN x 30mE x 10mRL, being approximately 1.5 x hole spacing, and requiring a minimum of 16 data in 4 octants. Search pass 2 applied an ellipsoid expanded by 50% in each direction, i.e. 45m x 45m x 15m and the same data constraints. Search pass 3 applied an ellipsoid expanded by 100% in each direction, 60m x 60m x 20m, and halved the data constraint requirements to a minimum of 8 data in 2 octants.

Parent blocks were sub-blocked to minimum 2.5mN x 2.5mE x 2.5mRL against the granite wireframe and weathering surfaces to accurately represent the volume of mineralisation and material types.

Bulk densities of 1.8, 2.2 and 2.7 t/cu m were applied to weathered, partially weathered and fresh mineralisation respectively. The bulk densities of the mineralisation have been determined with a high degree of confidence from extensive sampling and mining of other deposits at Edikan. The stated Mineral Resource consists entirely of fresh rock (sulphide) mineralisation.

#### ***Criteria for Resource Classification***

Estimated Mineral Resources were classified as Indicated and Inferred Mineral Resource based on data quality, drill hole spacing, and continuity of mineralisation. The portion of the granite where drill spacing is 20m by 20m or less and the majority of parent blocks received estimates in search passes 1 and 2 was classified as Indicated Mineral Resource. This was confined to approximately 1080 to 830mRL. The portion of the deposit below 830mRL, where the drill spacing is generally greater than 20m by 20m, and blocks that received estimates using search passes 2 and 3, was classified as Inferred Mineral Resource.

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

The Mineral Resource estimate has been constrained by the wire-framed mineralisation envelope, is undiluted by external waste and reported above a 0.8g/t gold cut-off grade. The cut-off grade of 0.8g/t for the stated Esujah South Mineral Resource estimate reflects the shut-off grade for underground mass mining based on anticipated mining costs, processing costs and gold recoveries.

### ***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 of the original resource estimate 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. The estimate of the remaining resource has been depleted to the 31 December 2019 mining surface.

A dry in-situ density estimate of 1.32 t/m<sup>3</sup> 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 2019 were estimated as shown in Table 3.

**Table 3: Edikan Closing Stockpiles – 31 December 2019**

<b>Material</b>	<b>Quantity (Tonnes)</b>	<b>Grade (g/t gold)</b>	<b>Gold (Ounces)</b>
High grade oxide	61,769	1.57	3,113
High grade transition	224,250	0.99	7,739
High grade fresh	13,996	0.90	403
Low grade oxide	503,495	0.48	7,778
Low grade fresh	5,045,125	0.61	98,734
Crushed ore stockpile	60,178	0.86	1,662
<b>TOTAL</b>	<b>5,926,813</b>	<b>0.63</b>	<b>119,429</b>

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<sup>st</sup> December 2019 and updated pit optimisation, design and scheduling of the Bokitsi South open pit Mineral Resource, updated pit optimisation, design and scheduling of the AFG and Fetish deposits based on reduced operating costs and Esujah South Ore Reserve following an update of the feasibility study for the deposit based on underground mining methods. All Ore Reserves are reported in accordance with the JORC Code. Refer to **Appendix 1** for the JORC Table 1 assessment criteria for open pit reserves and Appendix 2 for criteria for Esujah South underground reserves. 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 Gold Mine Proved and Probable Ore Reserves as at 31 December 2019<sup>3,6,7</sup>**

Deposit	Deposit Type	Proved			Probable			Proved + Probable		
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	koz	Mt	g/t gold	koz	Mt	g/t gold	koz
AF Gap <sup>1,4</sup>	Open Pit	6.8	1.14	248	11.9	1.05	402	18.6	1.09	650
EsujahNorth <sup>1,4</sup>	Open Pit	0.4	0.91	11	0.6	0.86	17	1.0	0.88	28
Fetish <sup>1,4</sup>	Open Pit	4.4	1.18	165	7.1	1.09	248	11.4	1.13	414
Bokitsi South <sup>1,4</sup>	Open Pit	0.9	2.11	58	0.4	1.70	24	1.3	1.97	82
<b>Sub-total</b>	<b>Open Pit</b>	<b>12.3</b>	<b>1.22</b>	<b>482</b>	<b>20.0</b>	<b>1.08</b>	<b>690</b>	<b>32.3</b>	<b>1.13</b>	<b>1,173</b>
Esujah South	U/ground				3.8	1.96	241	3.8	1.96	241
Heap Leach <sup>5</sup>	Stockpile				3.6	0.6	75	3.6	0.6	75
ROM Stockpiles <sup>2</sup>	Stockpile	5.9	0.63	119				5.9	0.63	119
<b>Total</b>		<b>18.3</b>	<b>1.02</b>	<b>601</b>	<b>27.4</b>	<b>1.14</b>	<b>1,007</b>	<b>45.7</b>	<b>1.10</b>	<b>1,608</b>

**Notes:**

1. Based on December 2019 Mineral Resource estimate which is depleted to 31<sup>st</sup> December 2019.
2. Based on stockpile balance as at 31<sup>st</sup> December 2019.
3. All Ore Reserves current as at 31<sup>st</sup> December 2019.
4. Variable gold grade cut-off based on recovery of each material type in each deposit: Oxide 0.35 – 0.40 g/t, Transition 0.50 – 0.70 g/t and Fresh 0.50 – 0.55 g/t.
5. Based on 0.40 g/t gold grade cut-off.
6. Inferred Mineral Resource is considered as waste, t : t.
7. Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

Proven and Probable Ore Reserves are found within the economic limits of four 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\$1,300/oz and mining, processing and general and administration parameters derived from recent operating experience.

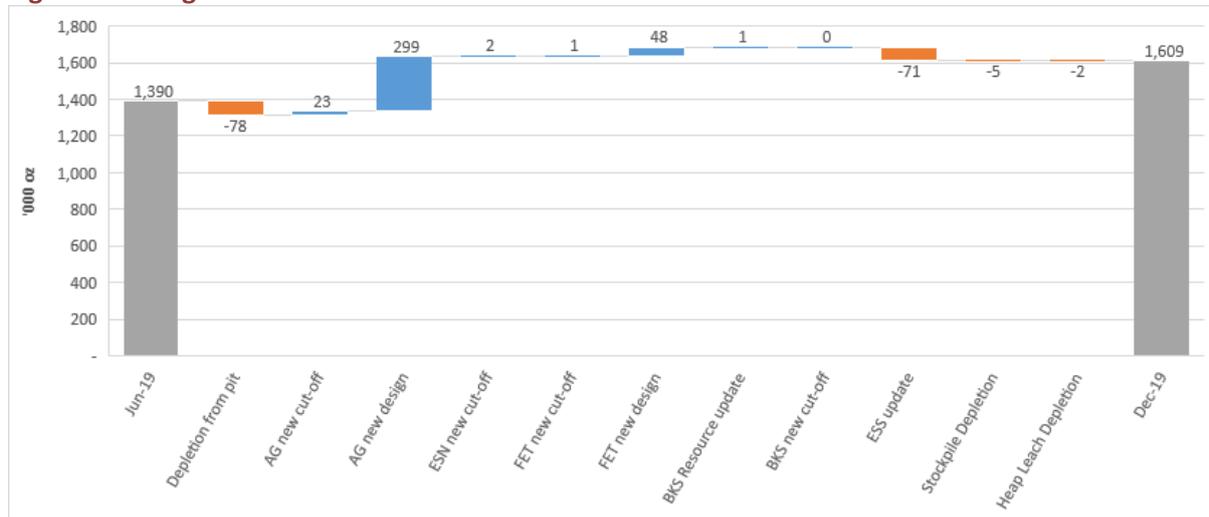
The changes in the Ore Reserve from that last quoted in August 2019 are associated with ore depletion from mining since 30 June 2019, updated gold price along with updated Bokitsi South Resource model. As shown below in **Table 5** and in the waterfall graph (**Figure 1**) below, the following changes have occurred:

- Ore depletion due to mining activities from 30 June 2019 to 31 December 2019;
- New pit optimisation based on \$1,300/oz gold price, latest actual costs and processing parameters;
- Updated pit design and cut-offs subsequent to pit optimisation result;
- Updated Bokitsi South Resource model based on the ongoing reconciliation;
- Updated Esuajah South Feasibility Study including new resource model.

**Table 5: Comparison of Ore Reserves as at 30 June 2019 and 31 December 2019**

Deposit	P&P Reserves (Jun 2019)			P&P Reserves (Dec 2019)			Difference		
	Quantity (Mt)	Grade (g/t gold)	Gold (koz)	Quantity (Mt)	Grade (g/t gold)	Gold (koz)	Quantity (Mt)	Grade (g/t gold)	Gold (koz)
AF Gap	8.3	1.23	329	18.6	1.09	650	10.3	0.97	321
Esuajah North	3.0	0.96	94	1.0	0.88	28	-2.1	0.99	-66
Fetish	10.1	1.12	364	11.4	1.13	414	1.3	1.17	49
Bokitsi South	1.0	2.71	90	1.3	1.97	82	0.3	-0.83	-8
Esuajah South	4.9	1.99	312	3.8	1.96	241	-1.1	2.10	-71
HL Stockpile	3.7	0.60	77	3.6	0.60	75	-0.1	0.56	-2
ROM Stockpile	6.3	0.62	124	5.9	0.63	119	-0.3	0.43	-5
	<b>37.4</b>	<b>1.16</b>	<b>1,390</b>	<b>45.7</b>	<b>1.10</b>	<b>1,608</b>	<b>8.3</b>	<b>0.82</b>	<b>219</b>

**Figure 1: Change in Edikan's Ore Reserves – June 2019 to December 2019**



### **Economic Assumptions**

- Gold metal price US\$1,300/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 operating costs**

Mining (Open Pit and Underground)			Selling	Royalties
	Processing	G&A		
US\$4.42t/mined	US\$8.31/milled	US\$2.48t/milled	US\$2.24t/oz sold	8.25%

### **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 pit optimisation software (“Whittle”) 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 CAT 777 truck fleet and are set at 16 metres (single lane) to 24 metres (dual lane), except for Bokitsi South pit where the ramps are designed for 40 tonne ADT trucks with a design ramp width of 14 metres for dual lane and 8 metres for single lane.
- Vertical mining advance has been capped based on Perseus’s operating experience.
- Minimum mining width of 40 metres was generally applied to the pit cutback designs and reduced to 20 metres for Bokitsi South pit where mining is carried out by smaller fleet.
- 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: Open Pit Cut-off Grades**

Deposit	Cut-Off Grade by Ore Type (g/t gold)		
	Oxide	Transition	Fresh
AF Gap	0.35	0.70	0.50
Esujah North	0.40	0.60	0.55
Fetish	0.40	0.65	0.55
Bokitsi South	0.35	0.50	0.50

### **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 similar to a standard sub level caving method. 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, 85% of the designed ring tonnes are extracted the remaining 15% is left behind and is mixed with the external dilution and/ore the introduced fill. About 60% of the total volume mined from the stope zone is replaced with waste introduced into the pit as part of the SURF method, none of this material is planned to be drawn. Only swell is drawn in sub-economic rings and this improves the remaining grade that is drawn and also the dilution grade for future rings. In total, the mined grade is 116% of the average in-situ grade, which includes lower grade zones that are broken but only partially extracted.
- 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 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 ( $\leq 260$  m below natural surface), rock stress magnitudes are not expected to be a limiting factor to proposed underground mining.
- 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 Mine open pit operations. 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 Mine open pit schedules.

### Processing Parameters

- The process metallurgical recovery for gold is fixed by material type in each deposit. Gold recovery rates range from 61-67% for oxide ore and 82-91% 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**

Deposit	Recovery by Ore Type (%)		
	Oxide	Transition	Fresh
AF Gap	61.0	73.0	88.0
Esuajah North	61.0	73.0	90.0
Fetish	61.0	73.0	91.0
Bokitsi South	66.0	74.0	82.1 <sup>1</sup>
Esuajah South	-	-	90.0
Heap Leach	67.0	-	-

<sup>1</sup> Average value, the recovery for Bokitsi South 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 based on the material blending schedule and all the material is rehandle on the ROM stockpile. The ROM stockpiles that existed at 31<sup>st</sup> December 2019 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 Resource 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.

This announcement has been approved for release by the Board.

**Jeffrey Quartermaine**  
**Chief Executive Officer and Managing Director**  
**20 February 2020**

To discuss any aspect of this announcement, please contact:

**Managing Director:** Jeff Quartermaine at telephone +61 8 6144 1700 or email [jeff.quartermaine@perseusmining.com](mailto:jeff.quartermaine@perseusmining.com)

**General Manager BD & IR:** Andrew Grove at telephone +61 8 6144 1700 or email [andrew.grove@perseusmining.com](mailto:andrew.grove@perseusmining.com)

**Media Relations:** Nathan Ryan at telephone +61 4 20 582 887 or email [nathan.ryan@nwrcommunications.com.au](mailto:nathan.ryan@nwrcommunications.com.au) (Melbourne)

### **Competent Persons' Statements:**

*The December 2019 re-estimate of Esuajah South underground Mineral Resources at Edikan was undertaken by Mr Gary Brabham, FAusIMM, MAIG. Mr Brabham is 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 Brabham also compiled and reviewed the consolidated information in this report concerning the Mineral Resources at the Edikan Gold Mine.

The December 2019 estimate of Bokitsi South open pit Mineral Resources at Edikan was undertaken by Mr Nicolas Johnson MAIG, of MPR Geological Consultants Pty Ltd. Mr Johnson has sufficient experience, that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person, as defined in the JORC Code 2012 and a Qualified Person as defined in NI43-101. 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.

The December 2019 estimate of Esuajah South underground Ore Reserve at Edikan was undertaken by Mr Andrew Gasmier BEng (Mining) MAusIMM, of Mining Plus Pty Ltd. Mr Gasmier has sufficient experience, that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person, as defined in the JORC Code 2012. Mr Gasmier 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.

Mr Paul Thompson FAusIMM and an employee of Perseus Mining Limited has compiled and reviewed the consolidated information on the Ore Reserves of the Bokitsi South, Fetish and AFG deposits at the Edikan Gold Mine in this report. 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. Mr Thompson also compiled and reviewed the consolidated information in this report concerning the Ore Reserves at the Edikan Gold Mine.

The information in this report that relates to Mineral Resources and Ore Reserves for the Esuajah North deposit was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement entitled "Perseus Mining Updates Mineral Resources & Ore Reserves" released on 29 August 2019. The information in this report that relates to the Mineral Resources for the Edikan deposits (other than the Bokitsi South, Esuajah North and Esuajah South deposits) was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement released on 29 August 2018. The information in this report that relates to Ore Reserves for the Edikan deposits (other than the Fetish, AFG, Bokitsi South, Esuajah North and Esuajah South deposits) was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement entitled "Perseus Mining Updates Mineral Resources & Ore Reserves" released on 29 August 2018.

This report includes an update for mining depletion as at 31 December 2019. The Company confirms that it is not aware of any new information or data that materially affect the information in those market releases and that all material assumptions underpinning those estimates and the production targets, or the forecast financial information derived therefrom, continue to apply and have not materially changed. The Company confirms that material assumptions underpinning the estimates of Mineral Resources and Ore Reserves described in "Technical Report – Central Ashanti Gold Project, Ghana" dated 30 May 2011 continue to apply.

### **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 and the Sissingué Gold Mine without any major disruption, development of a mine at 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. Forward-looking 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.*

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

### 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	<i>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.</i>	<p>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 AGC, 477 derive from RC holes drilled by PRU and 19,771 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.</p> <p>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.</p> <p>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</p>

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

		<p>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.</p> <p>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. An additional 20 RC holes totalling 1,893m were drilled in 2019 to infill drill coverage in the southern part of the deposit. In total, 11,183 2m composite samples are available to inform the resource estimate. Of the 2,664 sample composites that represent mineralisation, 475 derive from RC holes drilled by AGC, none derive from diamond core holes drilled by AGC, 2,396 derive from RC holes drilled by PRU and 268 derive from diamond core holes drilled by PRU. Grade control samples were not used to inform the resource estimate.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>	<p>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 surveyed at nominal 30 metre intervals.</p>
	<p><i>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.</i></p>	<p>RC samples were collected as 4m composites until potential mineralisation was expected at which time samples were collected at 1m intervals from a rig mounted cyclone into large numbered plastic bags. Recently, PRU drilling has used 2m composite samples, and then 1m samples through potential mineralisation. Diamond core was generally sampled at uniform 1m intervals. Sampling and QAQC procedures were carried out to industry standards.</p> <p>Rig mounted riffle splitters were used to split RC samples and minimise bias. Diamond core was cut in half using a diamond saw and the right-hand side of the core consistently submitted for analysis with the left side being stored in trays on site.</p> <p>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 finish. Samples were sent to Intertek Laboratories (Gh) Ltd at Tarkwa/Ghana (24%), ALS (35%), TWL (18%), and SGS laboratories (2%). Sampling and assaying methods for samples collected by AGC are unknown.</p>
<p><i>Drilling techniques</i></p>	<p><i>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.).</i></p>	<p>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</p> <p>Diamond drilling was carried out with HQ and NQ2 sized equipment. DD have collar azimuth and down-hole surveys at nominally 30m intervals, using a Reflex tool.</p> <p>Diamond core was generally oriented using a spear.</p>
<p><i>Drill sample recovery</i></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<p>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.</p>

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

		<p>RC samples were logged visually for recovery, moisture and contamination. Sample recoveries were not quantitatively measured.</p> <p>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.</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>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.</p> <p>RC samples were logged visually for recovery, moisture and contamination. Sample recoveries were not quantitatively measured.</p>
	<i>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.</i>	<p>Investigations by previous workers have found no relationship between sample recovery and grade.</p>
<i>Logging</i>	<i>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.</i>	<p>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.</p> <p>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.</p> <p>Only lithological logs are available for historic holes drilled by AGC.</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	<p>Logging was qualitative (descriptive) and semi-quantitative (estimates).</p> <p>All diamond core was photographed in the core boxes. RC drill chips were glued to chip boards for visual reference for each hole.</p>
	<i>The total length and percentage of the relevant intersections logged.</i>	<p>All PRU drill holes (RC &amp; DD) were logged in full. Only lithological logs are available for historic holes drilled by AGC.</p>
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<p>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.</p>
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<p>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.</p> <p>At each deposit, 3-5% of RC samples are recorded as having been wet.</p>

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

		Sample quality of AGC RC holes is unknown.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	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.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Sampling Field QC procedures included the use of certified reference materials (1 in 20) and field duplicates (1 in 20).
	<i>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.</i>	Field duplicate splits of PRU RC samples were produced for 1 in 20 samples. Duplicate splits of diamond core samples were not submitted.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	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	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	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.
	<i>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.</i>	No geophysical tools were used to determine any element concentrations.
	<i>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.</i>	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.  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	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not relevant. The validity of drill hole intercepts has been demonstrated by mining exposures and by close-spaced grade control sampling.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

<i>and assaying</i>	<i>The use of twinned holes.</i>	No RC holes have been specifically twinned by diamond core holes.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<p>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.</p> <p>Down-hole survey data and collar survey data are provided by drilling contractors and surveyors respectively in digital format.</p> <p>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.</p> <p>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.</p>
	<i>Discuss any adjustment to assay data.</i>	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.
<i>Location of data points</i>	<i>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.</i>	<p>Holes drilled by AGC were surveyed on local grid by qualified mine surveyors. No details are available concerning the methods and equipment used.</p> <p>PRU drill hole collars have been surveyed by qualified surveyors using total station survey equipment.</p> <p>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.</p>
	<i>Specification of the grid system used.</i>	<p>Prior to 2012, a local grid, including baseline, was established at Edikan by Cluff Mining plc using licensed surveyors.</p> <p>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".</p> <p>Local elevations were adjusted by adding 1,000m to avoid negative values.</p>
	<i>Quality and adequacy of topographic control.</i>	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.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	<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.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

		<p><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.</p> <p><b>The Esujah 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.</p> <p><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.</p>
	<i>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.</i>	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.
	<i>Whether sample compositing has been applied.</i>	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. The majority of PRU RC holes were assayed in 2m intervals, with each two consecutive sample splits composited into one bag.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Drilling at each of the deposits was oriented to intersect mineralisation at as near optimal orientation as was practicable.
	<i>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.</i>	Diamond drilling confirmed that drilling orientation did not introduce any bias regarding the orientation of the mineralised domains.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<p>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.</p> <p>Considering that the tenor of mineralisation at each deposit 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.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	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 2019 with acceptable conclusions. Given that the sampling data upon which the resource estimates rely are now supported by mining at each of the deposits, the Competent Person is satisfied that drill hole and assay data validity are not significant risks to the reliability of the resource estimates.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

### 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
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	<p>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.</p> <p>The Fetish, Esuajah North and Bokitsi South deposits are located on the Ayanfuri Mining Lease granted on 31 December 2009 for a period of 15 years and renewable thereafter.</p> <p>The Government of the Republic of Ghana retains 10% non-contributing beneficial ownership in each of the mining leases.</p> <p>The tenements are in good standing with all requisite operating permits in place.</p>
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	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 volcanoclastics, greywackes plus argillaceous (phyllitic) sediments, intensely folded, faulted and metamorphosed to upper green schist facies. Minor cherty and manganeseiferous 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-arsenopyrite mineralisation in and adjacent to quartz veins in deformed metasedimentary rocks. .
<i>Drill hole Information</i>	<i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> </ul>	Not applicable as there are no exploration results reported as part of this statement.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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> <p>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.</p>	Other relevant drill hole information can be found in Section 1 – “Sampling techniques, “Drilling techniques” and “Drill sample recovery”.
Data aggregation methods	<p>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.</p> <p>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.</p>	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	<p>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.</p> <p>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’).</p>	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.	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).	No further exploration or resource definition work is presently proposed in proximity to the deposits subject of this report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	This release is in relation to the update of Mineral Resources, with no exploration results being reported.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

### 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	<i>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.</i>	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.
	<i>Data validation procedures used.</i>	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	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	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	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	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.
	<i>Nature of the data used and of any assumptions made.</i>	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.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	The geology and interpretation of the deposits is considered robust. There is no apparent alternative to the interpretation in the competent person's opinion.
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	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.
	<i>The factors affecting continuity both of grade and geology.</i>	Infill and grade control drilling have confirmed geological and grade continuity.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
<i>Dimensions</i>	<i>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.</i>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<i>Estimation and modeling techniques</i>	<i>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.</i>	<p>Multiple Indicator Kriging (MIK) with block support adjustment was used 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.</p> <p>MIK was used as the preferred method for estimation of open pit 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 structurally controlled gold deposits where the MIK method has been found to be of most benefit.</p> <p>In the MPR study data viewing, 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. GS3M is designed specifically for estimation of recoverable resources using MIK. The grade control modelling undertaken for validation was performed using the MP3 grade control software which is also produced by FSSI.</p> <p>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.</p>
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	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. Ongoing reconciliations between resource models, grade control and mining outcomes indicate that the 2017

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
		Mineral Resource models are reliable estimates of recoverable resources after application of appropriate modifying factors.
	<i>The assumptions made regarding recovery of by-products.</i>	No by-products are present or modelled.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	No deleterious elements were estimated or assumed.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	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.
	<i>Any assumptions behind modelling of selective mining units.</i>	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.
	<i>Any assumptions about correlation between variables.</i>	No correlated variables have been investigated or estimated.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	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 sub-domains. 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.
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	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 a disproportional influence on the gold estimation.
	<i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	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.  Ongoing reconciliations between resource models, grade control and mining outcomes indicate that the 2017 Mineral Resource models are reliable estimates of recoverable resources after application of appropriate modifying factors.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
<i>Moisture</i>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The resource tonnage is reported using a dry bulk density and therefore represents dry tonnage excluding moisture content.
<i>Cut-off parameters</i>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The cut-off grade of 0.4g/t for the stated open pit Mineral Resource estimates is determined from economic parameters that reflect geotechnical, mining and processing parameters and costs established during open pit mining operations to date at Edikan.
<i>Mining factors or assumptions</i>	<i>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.</i>	<p>The Resource models assume that a moderate level of mining selectivity is achieved in open pit 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.</p> <p>This is consistent with current mining practises at Edikan.</p>
<i>Metallurgical factors or assumptions</i>	<i>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.</i>	<p>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.</p> <p>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.</p>
<i>Environmental factors or assumptions</i>	<i>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.</i>	The Project is not subject to any environmental liabilities except for a progressive decommissioning and reclamation plan for the closed Ayanfuri heap leach mine.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
Bulk density	<i>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.</i>	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 is deemed reasonable and have been confirmed through mining.
	<i>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.</i>	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.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	There have been no assumptions concerning bulk densities of the various materials comprising the Mineral Resources.
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	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.
	<i>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).</i>	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.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The reported Mineral Resource estimate is consistent with the Competent Person's view of the deposits.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The Mineral Resource estimate has been audited and reviewed internally.
Discussion of relative accuracy/confidence	<i>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</i>	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.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<i>of the factors that could affect the relative accuracy and confidence of the estimate.</i>	
	<i>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.</i>	The reported open pit Mineral Resource estimates for Edikan are constrained to material lying within optimal pit shells generated using the same cost parameters as were applied to delineate Ore Reserves and a gold price of US\$1,800/oz.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	Reconciliation comparisons against production are routinely performed at Edikan Gold Mine. The competent person is of the opinion that the resource models perform in line with industry standard tolerances for Measured and Indicated Resources. The Mineral Resource is considered a global Resource estimate and additional close spaced (grade control) drilling will be required to improve the understanding of variations at local scale.

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

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

This section has been prepared by Perseus Mining Limited to support the Statement Ore Reserves for Edikan as of 31 December 2019

Criteria	JORC Code explanation	Commentary																				
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The open pit Mineral Resources for Edikan were compiled by Gary Brabham FAusIMM MAIG. Mr Brabham is a full-time employee of Perseus Mining Limited and is the Competent Person for the Mineral Resource estimates.</li> <li>The Heap Leach and ROM Stockpile Resource estimates were prepared by Steffen Brammer who is a Chartered Professional of the Australasian Institute of Mining and Metallurgy and Gary Brabham respectively, both of whom are Competent Persons and employees of Perseus Mining Limited.</li> <li>Mineral Resources quoted in this report are inclusive of Ore Reserves.</li> </ul>																				
<b>Site visits</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Mr Paul Thompson as the Competent Person for the purpose of a JORC Ore Reserve has visited the mine regularly over the past five years.</li> </ul>																				
<b>Study status</b>	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resources have been converted to Ore Reserves by means of a Life of Mine plan including economic assessment.</li> <li>Key aspects of the study were technically achievable pit designs based on Open Pit Optimisation. These designs were also assessed to ensure economic viability.</li> </ul>																				
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The cut-off grade is based on the economic parameters developed for the Operation. The cut-off grade varies by material types as follows;</li> </ul> <table border="1"> <thead> <tr> <th>Pit</th> <th>Oxide Au g/t</th> <th>Transition Au g/t</th> <th>Fresh Au g/t</th> </tr> </thead> <tbody> <tr> <td>AF Gap</td> <td>0.35</td> <td>0.70</td> <td>0.50</td> </tr> <tr> <td>Esujah North</td> <td>0.40</td> <td>0.60</td> <td>0.55</td> </tr> <tr> <td>Fetish</td> <td>0.40</td> <td>0.65</td> <td>0.55</td> </tr> <tr> <td>Bokitsi South</td> <td>0.35</td> <td>0.50</td> <td>0.50</td> </tr> </tbody> </table>	Pit	Oxide Au g/t	Transition Au g/t	Fresh Au g/t	AF Gap	0.35	0.70	0.50	Esujah North	0.40	0.60	0.55	Fetish	0.40	0.65	0.55	Bokitsi South	0.35	0.50	0.50
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<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected</li> </ul>	<ul style="list-style-type: none"> <li>The chosen method of mining is conventional open pit mining utilising hydraulic excavators and trucks, mining bench heights of 5 m with 2.5m flitches to minimise ore loss and waste rock dilution.</li> <li>The economic pit shell was defined using Whittle pit optimisation software (“Whittle”) with inputs such as geotechnical parameters, ore loss and dilution, metallurgical recovery and mining costs.</li> </ul>																				

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary																												
	<p><i>mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<ul style="list-style-type: none"> <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 input parameters were generally based on Perseus's site operating experience and supporting technical studies.</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 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>Pit ramps have been designed for a CAT 777 truck fleet and are set at 16 metres (single lane) to 24 metres (dual lane), except for Bokitsi South pit, where the ramps are designed for 40 tonne ADT trucks with a design ramp width of 14 metres for dual lane and 8 metres for single lane</li> <li>Minimum mining width of 40 m was generally applied to the pit designs and reduced to 20 m for Bokitsi South pit where mining is carried out by smaller fleet.</li> <li>Inferred Resources have not been included in this mining study.</li> <li>As the mine has been in operation and the mining method is not changed, only infrastructure costs needed to access new mining areas is required due to the selected mining method.</li> <li>No 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</li> </ul>																												
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>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.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <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> <li>No deleterious material has been identified.</li> <li>The process metallurgical recovery for gold is fixed by material type in each deposit: <table border="1" data-bbox="1352 1029 1928 1268"> <thead> <tr> <th>Deposit</th> <th>Oxide %</th> <th>Transition %</th> <th>Fresh %</th> </tr> </thead> <tbody> <tr> <td>AF Gap</td> <td>61</td> <td>73</td> <td>88</td> </tr> <tr> <td>Esujah North</td> <td>61</td> <td>73</td> <td>90</td> </tr> <tr> <td>Fetish</td> <td>61</td> <td>73</td> <td>91</td> </tr> <tr> <td>Bokitsi</td> <td>66</td> <td>74</td> <td>82.1<sup>1</sup></td> </tr> <tr> <td>Esujah South</td> <td>-</td> <td>-</td> <td>90</td> </tr> <tr> <td>Heap Leach Stockpile</td> <td>67</td> <td></td> <td></td> </tr> </tbody> </table> </li> </ul> <p><sup>1</sup> Average value, the recovery for Bokitsi is variable based on the input grade</p>	Deposit	Oxide %	Transition %	Fresh %	AF Gap	61	73	88	Esujah North	61	73	90	Fetish	61	73	91	Bokitsi	66	74	82.1 <sup>1</sup>	Esujah South	-	-	90	Heap Leach Stockpile	67		
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<b>Environment</b>	<ul style="list-style-type: none"> <li><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock</i></li> </ul>	<ul style="list-style-type: none"> <li>No environmental issues are known to exist which will prevent open pit mining and ore processing to continue to operate. Perseus has sufficient space available for waste dumps</li> </ul>																												

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	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.
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Costs</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The mining costs are based on schedule of rates provided by Perseus mining contractor and Perseus actual performance. 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\$2.24/oz was applied.</li> <li>A royalty of 8.25% of the metal price was applied.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>A gold price of US\$1,300/oz was used for mine planning and pit optimisation.</li> <li>Economic modelling by Perseus is at US\$1,300/oz.</li> <li>Bullion and Refining cost of US\$2.24/oz was applied.</li> <li>A royalty of 8.25% of the metal price was applied.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <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 acceptance requirements prior to a supply contract.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Economic</b>	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> </ul>	<ul style="list-style-type: none"> <li>A schedule and economic model have been completed by Perseus on a pre-tax basis using the 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.</li> </ul>

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>The Base Case results from the financial model confirm that the Project is economically viable.</li> <li>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.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Other</b>	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: <ul style="list-style-type: none"> <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> </li> </ul>	<ul style="list-style-type: none"> <li>The estimate of Ore Reserves for the Edikan Open Pits is not materially affected by any other known environmental, permitting, legal, title, taxation, socio-economic, 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.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 Reserves and Indicated Mineral Resources as a basis for Probable Reserves.</li> <li>No Inferred Mineral Resources were included in the Ore Reserve estimate.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Perseus 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> </ul>

## APPENDIX 1 –JORC Table 1 for Edikan Open Pit Resources and Reserves

Criteria	JORC Code explanation	Commentary
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A LOM Plan was prepared based on the ROM mineable ore contained with the pit designs. The LOM Plan prepared by Perseus is reasonable and practical. This confirmed that it was suitable for estimation of Ore Reserves. An economic model was prepared that confirmed the Operation to be economically viable.</li> <li>• The accuracy and confidence of the inputs are, as a minimum, of a 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 style="list-style-type: none"> <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>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

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

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Esujah South deposit is delineated by diamond core drilling on a nominal 20m E x 20mN (local grid) spacing in plan view. Holes are generally angled at -50° toward grid west to provide optimal intersections of the mineralisation. Two diamond core holes totalling 268m were drilled by Ashanti Goldfields Corporation (AGC) prior to 2006. A total of 131 holes totalling 39,892m (including 3,248m in 27 RC pre-collars) were drilled by Perseus between 2006 and 2011.</li> <li>Samples from RC holes drilled by AGC prior to 2006 have been excluded from sample data that inform the resource estimate.</li> <li>Mineralisation is represented by 5,339 2m composites from diamond core samples and 109 2m composites from RC samples.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>HQ diameter core was drilled in weathered materials; NQ2 diameter core was drilled in fresh rock.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Core recoveries in holes drilled by AGC are not known. Core recoveries from Perseus diamond drilling recorded in the database and averaged 97% with no significant issues noted.</li> <li>There is no significant relationship between core recoveries and gold grades.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All holes were field logged by Perseus geologists. Weathering, lithology, alteration, structure, mineralogy and veining information were recorded.</li> <li>Logging of diamond core also recorded recovery, core strength, orientation, defect roughness, and infill type.</li> <li>Diamond core was photographed and half core remains stored at Edikan mine site.</li> <li>All drill holes were logged in full.</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• HQ and NQ2 core were cut in half using a core saw. All samples were collected from the same side of the core.</li> <li>• RC samples from pre-collars were collected at the rig using riffle splitters. Samples were predominantly wet, but RC samples comprise only 2% of 2m composites within the Mineral Resource wireframe.</li> <li>• Half core and RC sub-samples were despatched to commercial assay laboratories for sample preparation and assaying.</li> <li>• Sample preparation comprised drying, crushing the entire received sample 20 2mm, then pulverising to 90% passing -75µm.</li> <li>• Sample sizes are considered appropriate to correctly represent the moderately nuggetty gold mineralisation based on: the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for Au.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Of the 5,448 2m sample composites representing mineralisation, 5,207 derive from 50g fire assays with aqua regia digest finish, 167 derive from 1kg cyanide leach bottle roll assays and the assay method for 74 sample composites from the two core holes drilled by AGC is unknown.</li> <li>• Field QC procedures included insertion of certified reference materials (1 in 20), and field duplicates (1 in 20).</li> <li>• Field duplicates were taken of 1m RC samples using a riffle splitter.</li> <li>• Sample preparation checks for fineness were carried out by the laboratory as part of internal procedures to ensure the grind size of 90% passing 75µm was being attained. Laboratory QAQC includes the use of internal standards using certified reference material, and pulp replicates. Certified reference materials demonstrate that sample assay values are accurate.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Visual comparisons of gold grades in RC drill holes drilled by AGC indicates they contain significantly higher grades and greater widths of mineralisation than nearby diamond core holes. The Competent Person considers that the AGC RC data are not reliable and they have been excluded from data that inform the Mineral Resource estimate.</li> <li>• The Competent Person has viewed sufficient drill core to be satisfied that the extents of gold mineralisation indicated by assays is compatible with rock types, alteration and occurrence of sulphides visible in drill cores.</li> <li>• No twin holes were drilled although the east and west dipping holes on 20m spacing result in 'crossing' of drill traces at depth in places. The widths and tenor of mineralisation in holes of each orientation are compatible.</li> <li>• Primary data were entered on hardcopies in the field and then entered</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
		<p>digitally using Log Chief Software (Maxwell GeoServices). These data were then directly imported into the PRU central database (DataShed/Maxwell GeoServices). Drill hole data now reside in an aQuire® database supervised by Perseus's database administrator.</p> <ul style="list-style-type: none"> <li>Assay values that were below detection limit were adjusted to equal half of the detection limit value.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Prior to 2012, a local grid, including baseline, was established at Edikan by Cluff Mining Plc using licensed surveyors. Licensed surveyors located all drill collars in local grid co-ordinates.</li> <li>For subsequent drill programs, collars have been surveyed in UTM, WGS84, Zone 30N co-ordinates using DGPS equipment and transformed to local grid. True azimuths were converted to local by subtracting 43° from the true value.</li> <li>Local elevations were adjusted by adding 1,000m to avoid negative values.</li> <li>Down-hole surveys are not available for the two holes drilled by AGC.</li> <li>Perseus drill holes are surveyed down-hole at 10m to 30m intervals using either Reflex or Flexit multi-shot equipment.</li> <li>The topographic surface is based on 1,407 survey points of the abandoned AGC pit surveyed during mining of the pit and a further 630 points surveyed, including all drill collars, by Perseus surveyors.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The nominal drill hole spacing is 20m by 20m in plan view.</li> <li>Drilling has demonstrated that the mineralised domain has both geological and grade continuity to support the definition of a Mineral Resource, and the classifications applied under the 2012 JORC Code.</li> <li>Samples have been composited to 2m lengths using best fit techniques. Residual sample lengths less than 1m were excluded.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drill holes are angled to grid east and west, which is approximately perpendicular to the strike of the mineralisation.</li> <li>No orientation-based sampling bias has been identified in the data.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody was managed by Perseus. Samples were stored on site and collected by employees of commercial laboratories. Perseus employees had no further involvement in the preparation or analysis of the samples.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>A review of sampling techniques was carried out during Perseus's drilling program in 2010 by Runge Pincock Minarco.</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esuajah South Underground Resources and Reserves

### 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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Esuajah South 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 Perseus Mining (Ghana) Limited, a 90% subsidiary of Perseus Mining Limited.</li> <li>The Government of the Republic of Ghana retains 10% non-contributing beneficial ownership of Perseus Mining (Ghana) Limited.</li> <li>The tenement is in good standing.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous companies to have held the ground include Cluff Mining Plc and Ashanti Goldfields Corporation. Exploration activities included RC and diamond drilling.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Edikan gold 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 volcanoclastics, 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-arsenopyrite mineralisation in and adjacent to quartz veins in deformed metasedimentary rocks.</li> <li>The Esuajah South deposit comprises mineralisation hosted by a single striking NE (geog) granitoid body measuring 250m along strike, typically 60-80m horizontal width and dipping approximately 75° toward NW. Drilling has confirmed that the body is continuous to at least 500m vertical depth below surface.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported. Significant drill hole intersections have been previously reported to the ASX and TSX.</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<p>holes:</p> <ul style="list-style-type: none"> <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>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Exploration drill results are not being reported.</li> <li>• Metal equivalent values are not being reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Exploration drill results are not being reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration drill results are not being reported.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration drill results are not being reported.</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<i>practiced to avoid misleading reporting of Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>There are no other material exploration data relating to the Esujah South deposit.</li> <li>Metallurgical test work has confirmed that gold mineralisation at Esujah South is essentially identical to that at the other Edikan granitoid-hosted gold deposits and is thus suitable for processing through the existing processing plant. Gold recoveries are expected to be about 90%.</li> <li>There are no known deleterious or contaminating substances associated with the Esujah South mineralization.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Perseus is presently updating the 2016 feasibility study for exploitation of Esujah South by decline access and bulk underground mining methods.</li> <li>The feasibility study considers mining down to 890RL, approximately 250m below surface. Indicated resources are defined to about 850RL and Inferred resources to about 700RL and drilling indicates that mineralisation continues to below that. Infill drilling below 850RL may define additional economic mineralization.</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
<b>Database integrity</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The data base is systematically audited by Perseus geologists. All drill logs are validated digitally by the database geologist once assay results are returned from the laboratory.</li> <li>The Competent Person has conducted sufficient checks to be satisfied that the drill hole data are sufficiently reliable to inform estimates of Mineral Resources.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Competent Person has visited the site on several occasions, the last being in January 2018. Drill core from several holes was examined and core photographs of the majority of Perseus core holes were viewed. No significant issues were encountered.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>The geological interpretation is simple, supported by quality drill hole information and compatible with mineralisation at other granitoid-hosted gold deposits at Edikan.</li> <li>Outcropping of mineralisation and host rocks within the previously mined open pit confirm the geometry of the</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esuajah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>mineralisation.</p> <ul style="list-style-type: none"> <li>The logging of 'granite' is consistent and closely matches the observed mineralisation.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Esuajah South deposit comprises mineralisation hosted by a single striking NE (geog) granitoid body measuring 250m along strike, typically 60-80m horizontal width and dipping approximately 75° toward NW. Drilling has confirmed that the body is continuous to at least 500m vertical depth below surface.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <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 model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>The boundaries of the mineralised granite body were digitised on 20m spaced drill cross-sections and a 3D wireframe of the granite developed using Micromine software. Based on drill hole data and experience at other granitoid-hosted gold deposits at Edikan, the entire granite body is considered to comprise the mineralised domain.</li> <li>Drill hole sample intervals were composited to uniform 2m down-hole lengths and all composites lying within the granite wireframe were selected to inform estimates of gold grade, i.e. a hard boundary approach was applied.</li> <li>Experimental variogram models were calculated and fitted with models using MP3@ software.</li> <li>A parent block dimension of 10mN x 10mE x 10mRL was selected on the basis of being approximately 50% of average drill hole spacing in the better drilled portion of the deposit.</li> <li>Gold grades were interpolated into parent blocks by Ordinary Kriging using MP3@ software.</li> <li>A three-pass search strategy was applied. First pass search radii were 30mN x 30mE x 10mRL, being approximately 1.5 x hole spacing, and requiring a minimum of 16 data in 4 octants. Search pass 2 applied an ellipsoid expanded by 50% in each direction, i.e. 45m x 45m x 15m and the same data constraints. Search pass 3 applied an ellipsoid expanded by 100% in each direction, 60m x 60m x 20m, and halved the data constraint requirements to a minimum of 8 data in 2 octants.</li> <li>Parent blocks were sub-blocked to minimum 2.5mN x 2.5mE x 2.5mRL against the granite wireframe and weathering surfaces to accurately represent the volume of mineralisation and material types.</li> <li>Estimates were conducted using no top assay cut and 20 and 30g/t top cuts. After comparison to independent check models, the estimates using a 20g/t top cut were adopted. The 20g/t top cut represents approximately the 99.5<sup>th</sup> percentile of gold grades</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esuajah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
		<p>and affects 22 data.</p> <ul style="list-style-type: none"> <li>No assumptions were made on selective mining units.</li> <li>The model was validated by visual inspection of block grade estimates over informing data in cross-section and plan views and using swathe plots.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The cut-off grade of 0.8g/t for the stated Esuajah South Mineral Resource estimate reflects the shut-off grade for underground mass mining based on anticipated mining costs, processing costs and gold recoveries derived from the Feasibility Study.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Perseus proposes to exploit the Esuajah South deposit using decline access and a mass mining method such as sub-level caving under rock fill. The method is appropriate for the type of mineralisation and its geometry.</li> <li>The Mineral Resource estimate does not incorporate any ore recovery, selectivity or ore loss factors. Such modify factors must be applied in estimation of Mineral Reserves.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical test work has confirmed that gold mineralisation at Esuajah South is essentially identical to that at the other Edikan granitoid-hosted gold deposits and is thus suitable for processing through the existing processing plant. Gold recoveries are expected to be about 90% using the float, regrind, CIL process.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <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 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.</li> </ul>	<ul style="list-style-type: none"> <li>The Project is not subject to any environmental liabilities except for a progressive decommissioning and reclamation plan for the closed Ayanfuri heap leach mine.</li> <li>Esuajah South lies within the area of current Edikan mine operations. Additional permits will be required prior to establishment of an underground mine to exploit the deposit. There are no known impedances to acquiring such permits.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Bulk densities of 1.8, 2.2 and 2.7 t/cu m were applied to weathered, partially weathered and fresh mineralisation respectively.</li> <li>The bulk densities of the mineralisation have been determined</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>with a high degree of confidence from extensive sampling and mining of other deposits at Edikan.</p> <ul style="list-style-type: none"> <li>The stated Mineral Resource consists entirely of fresh rock (sulphide) mineralisation.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). Estimated Mineral Resources were classified as 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 is 20m by 20m or less and the majority of parent blocks received estimates in search passes 1 and 2 was classified as Indicated Mineral Resource. This was confined to approximately 1080 to 830mRL. The portion of the deposit below 830RL, where the drill spacing is generally greater than 20m by 20m, and blocks received estimates using search passes 2 and 3 was classified as Inferred Mineral Resource.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Independent check estimates were undertaken by MPR Geological Consultants Pty Ltd using MIK and LMIK methods. Check models estimated approximately 5% lower tonnage and 10% lower metal than the 20g/t top cut Ordinary Kriged model. The differences are considered acceptable considering the methodologies applied.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 grade.</li> <li>The oxide portion of the deposit has been mined by previous owners of the property, but production records are not sufficiently reliable to permit a meaningful reconciliation against the Mineral Resource estimate.</li> </ul>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

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

This section has been prepared by Andrew Gasmier of Mining Plus to support the Statement of Ore Reserves for Edikan as of 31 December 2019

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<p>The Mineral Resource estimate used as the basis of this Ore Reserve is was compiled by Gary Brabham, and Employee of Perseus Mining Limited and a Competent Person as defined by the JORC Code, 2012 Edition, and a Qualified person as defined in NI 43-101.</p> <p>The estimate is based on data from two diamond core holes drilled by Ashanti Goldfields Corporation (AGC) prior to 2006 and 131 holes diamond core holes drilled by Perseus between 2006 and 2011.</p> <p>The geological and mineralisation interpretations are robust and fit well with observed mineralisation controls at other deposits mined at Edikan.</p>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<p>The competent person who prepared this section has not visited site.</p> <p>The current project has been in operation since 2011.</p>
<b>Study status</b>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li><i>The Code requires that a study to at least Prefeasibility 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.</i></li> </ul>	<p>The Esujah South (ESS) deposit has been subject of a feasibility study completed in 2016.</p> <p>A recent options study has been completed that considered a combination of open pit and underground mining versus a standalone underground operation. Based in the options study work the selected approach to mining the ESS deposit is by underground methods only. A number of studies were then carried out considering underground mining.</p> <p>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\$1,300/oz.</p>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<p>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.</p> <p>Revenue factors were assigned to each cell in the block model based on the contained Indicated fractions of metal.</p> <p>Inferred material (less than 1% of total tonnes) was reported in the final schedule, but was not included in the economic assessment of each ring to comply with Ore Reserve reporting standards.</p>

## APPENDIX 2 –JORC Table 1 for Esujah South Underground Resources and Reserves

Criteria	JORC Code explanation	Commentary																					
		<p><b>Revenue factor input parameters</b></p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Value (US\$)</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>Gold price</td> <td>1,300</td> <td>\$/oz Au</td> </tr> <tr> <td>Metallurgical recovery</td> <td>90</td> <td>%</td> </tr> <tr> <td>Royalties</td> <td>8.25</td> <td>%</td> </tr> <tr> <td>TC/RC and insurance</td> <td>2.24</td> <td>\$/oz Au</td> </tr> <tr> <td>Revenue factor</td> <td>1,212.25</td> <td>\$/oz Au</td> </tr> <tr> <td>Revenue factor</td> <td>38.97</td> <td>\$/g/t Au</td> </tr> </tbody> </table> <p>No adjustments were applied to the block model geometry or estimated attributes and grades. Dilution and recovery were applied as part of the PCSLC modelling process and is not applied to the block model.</p> <p>The mineable envelope used for the PCSLC mine design was generated based on a cut-off grade of 1.5g/t.</p> <p>A shut-off grade of \$40/t (1.14g/t) was selected during the PCSLC cave modelling as it returned the highest relative net revenue under the current project assumptions</p>	Parameters	Value (US\$)	Units	Gold price	1,300	\$/oz Au	Metallurgical recovery	90	%	Royalties	8.25	%	TC/RC and insurance	2.24	\$/oz Au	Revenue factor	1,212.25	\$/oz Au	Revenue factor	38.97	\$/g/t Au
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<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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).</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> </ul>	<p>Various studies have been completed to select the most suitable mining method for the ESS deposit. From these studies, sublevel mining underneath introduced rock fill (SURF) was identified as the preferred method and forms the basis of this study for the following reasons:</p> <ul style="list-style-type: none"> <li>Orebody geometry – Dimensions of up to 250 m by 100 m and dipping at around 70° are well suited to a transverse SURF layout.</li> <li>Mechanisation – Mechanised mining is well understood and has been used in many locations worldwide.</li> <li>Production rate – SURF can deliver the target production rate of approximately 1.3 million tonnes per annum (Mt/a) at much lower costs than other stoping methods.</li> <li>Surface influence – Any surface subsidence or large open void could cause concerns in the vicinity of the Ayanfuri town. SURF will ensure the void on surface is backfilled as mining progresses and will further reduce the potential for major surface subsidence.</li> </ul> <p>SURF is a bulk, semi-selective, underground mining method. The SURF method resembles a sublevel cave (SLC) in layout, but with waste being introduced from surface instead of the hangingwall caving. 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.</p>																					

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	<ul style="list-style-type: none"> <li>• <i>The mining dilution factors used.</i></li> <li>• <i>The mining recovery factors used.</i></li> <li>• <i>Any minimum mining widths used.</i></li> <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li>• <i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p>In the SURF method, the ore is broken through drilling and blasting of regularly spaced, fan shaped up hole rings along each ore drive similar to a standard sub level caving method. As ore is extracted from the underground mine, waste fill will be introduced from surface to fill the resulting void.</p> <p>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).</p> <p>The modifying factors used for the SURF mining method are based on PCSLC modelling that was undertaken as part of the options study work. Dilution and recovery factors have been included in the PCSLC modelling, which is based on SURF extraction to a shut off grade of 1.14g/t in order to limit the draw of lower grade material from the cave zone. Due to the low-grade nature of parts of the deposit, the overall extraction is less than the total volume broken plus the introduced fill.</p> <p>In total, 85% of the designed ring tonnes are extracted the remaining 15% is either left behind or is replaced by the and is mixed with the external dilution and/or the introduced fill being mined. About 60% of the total volume mined from the stope zone is replaced with waste introduced into the pit as part of the SURF method, none of this material is planned to be drawn. Only swell is drawn in sub-economic rings and this improves the remaining grade that is drawn and also the dilution grade for future rings. In total, the mined grade is 116% of the average in-situ grade, which includes lower grade zones that are broken but only partially extracted. 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.</p> <p>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 (<math>\leq 260</math> m below natural surface), rock stress magnitudes are not expected to be a limiting factor to proposed underground mining.</p> <p>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.</p> <p>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.</p>

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<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>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.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<p>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.</p> <p>The Edikan process plant has been operational since late 2011 and is a tried and tested system.</p> <p>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 treatment process will be required as a result of treating this ore.</p> <p>No deleterious material has been identified.</p> <p>Based on tests to date, there are no recovery issues associated with the ores tested. The mass pull to 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 carbon-in-leach (CIL) circuits.</p> <p>The predicted plant recovery through the Edikan circuit is 90% for the ESS ore.</p>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p>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.</p> <p>None of the studies completed to date have identified any environmental issues that could impact the mining or processing activities at Edikan.</p> <p>For mining operations to commence at ESS, a two-part process is required.</p> <ul style="list-style-type: none"> <li>• Firstly, it is necessary to complete an application covering the environmental impact directly associated with the ESS planned operation</li> <li>• Secondly, application must be made for permission to carry out mining activities.</li> </ul> <p>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.</p> <p>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.</p> <p>Existing tailings facility approvals give the operation sufficient capacity for the life of mine schedule.</p>

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<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>The study considered the following items and areas for the study, from which quantities were established and costs derived:</p> <ul style="list-style-type: none"> <li>• Power line from existing 11 kV network at the processing facility.</li> <li>• Integrated backup power generator to connect to ESS mine 11 kV substation.</li> <li>• Communications – phone and IT network connection to processing facility.</li> <li>• Radio repeater and radio system at ESS mine site.</li> <li>• Potable water for offices and change house for 70 people per dayshift and 50 people per nightshift. Derived from local boreholes and water treatment plant.</li> <li>• Sewerage treatment plant to cater for offices and ablutions.</li> <li>• Desilting of underground water.</li> <li>• Offices for 20 people.</li> <li>• Change house for 42 people.</li> <li>• Chop kitchen/dining room to serve 40 people per shift prepared off site and served in the kitchen.</li> <li>• Fuel farm 10,000 litres per day plus the standby power requirements. Capacity to allow for three days' backup.</li> <li>• Workshop with two bays for underground vehicle minor servicing.</li> <li>• Warehouse and workshop store.</li> </ul> <p>The above includes all civil works, water reticulation, high voltage power reticulation and low voltage power reticulation.</p> <p>The life of mine was indicated to be approximately five years. Any structures selected would therefore be non-permanent in nature and be relocatable.</p>
<b>Costs</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of</i></li> </ul>	<p>All costs are in US\$.</p> <p>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):</p> <ul style="list-style-type: none"> <li>• 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 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> <li>• New, modern mechanised equipment will be used in all areas.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>treatment and refining charges, penalties for failure to meet specification, etc.</i></p> <ul style="list-style-type: none"> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ore to be delivered from underground to a run of mine pad (ROM) located near the portal. Re-handling 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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Equipment to be imported attracted an additional 5% import duty.</li> </ul> <p>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.</p> <p>Mining operating costs are estimated from first principles based on equipment, labour, development and stoping requirements indicated by the mine schedule.</p> <p>Mining capital and operating costs include an 11% allowance for contractor mark-up and margin.</p> <p>Process and general and administration (G&amp;A) costs have been derived from current operating costs.</p> <p>A government royalty of 8.25% applies.</p>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<p>Estimated gold production is based on the head grade from detailed mine planning and process losses determined by metallurgical testwork.</p> <p>Revenue for financial modelling has been based on current long-term gold price forecasts of US\$1,300/oz Au.</p> <p>Hedging and forward sales agreements are in place as are refining contracts.</p> <p>PRU have gold hedging in place with a number of forward sales contracts above US\$1,300/oz Au.</p> <p>A bullion and refining cost of US\$2.24/oz was applied.</p>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along</i></li> </ul>	<p>The demand for gold is considered in the gold price used.</p> <p>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.</p> <p>All gold has been and shall continue to be sold on the open market after refining.</p>

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	<p><i>with the identification of likely market windows for the product.</i></p> <ul style="list-style-type: none"> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> <li><i>For industrial minerals, the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	
<b>Economic</b>	<ul style="list-style-type: none"> <li><i>The inputs to the economic analysis to produce the NPV in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<p>A schedule and economic model have 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.</p> <p>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.</p> <p>The NPV of the Project is estimated using a real post-tax discount rate of 10% per annum.</p> <p>The ESS underground deposit will produce 4.01 Mt of ore at 1.9 g/t Au (contained), for a total of 248.4 koz gold produced (233.5koz Au recovered) over a mine life of approximately four years.</p> <p>The total net cumulative cash flow after tax amounts to US\$49 million, with an NPV (10% per year discount) of approximately US\$24 million.</p> <p>Total cost of production is US\$975/oz gold recovered.</p> <p>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 7.5% in revenue (gold price of approximately \$1,200/oz Au) has an 20% reduction in cumulative nett cash flow after tax.</p>
<b>Social</b>	<ul style="list-style-type: none"> <li><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Other</b>	<p><i>To the extent relevant, the impact of the following on the project and/or on the</i></p>	<p>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 by including development at the base of the mine that can be temporarily flooded and provision of</p>

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	<p><i>estimation and classification of the Ore Reserves:</i></p> <ul style="list-style-type: none"> <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 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>	<p>additional pumping capacity. High rainfall events may also lead to road flooding and temporary loss of site road access.</p> <p>Overall, the cost risks, whilst real, are not assessed to be intractable and mitigation is not expected to incur costs exceeding the estimated allowance.</p> <p>Mining Plus 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 stand-alone underground project and is reliant on the processing and G&amp;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.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <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>	<p>The Mineral Resource model classified the geological confidence as being mostly Indicated material. Although open pit mining took place at ESS, no underground mining has yet been done undertaken.</p> <p>In Mining Plus opinion, it is fair to convert both the Indicated Mineral Resource material contained in the mining inventory into Probable Mineral Reserves.</p> <p>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.</p> <p>No Inferred Mineral Resources were included in the Ore Reserve estimate.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<p>The Mineral Resource estimate has been compared to independent estimates by MPR Geological Consultants Pty Ltd.</p> <p>The Ore Reserve has been independently audited by a number of third parties.</p> <p>The key recommendations include that PRU should;</p> <ul style="list-style-type: none"> <li>• continue with the project;</li> <li>• undertake additional geotechnical work for the mine access and to confirm the stability of the underground operations; and</li> <li>• advance the permits required for the project as a priority.</li> </ul>
<b>Discussion of relative</b>	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in</li> </ul>	<ul style="list-style-type: none"> <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> </ul>

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<b>accuracy/ confidence</b>	<p><i>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.</i></p> <ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The key factors that are likely to affect the accuracy and confidence in the Ore Reserves are: <ul style="list-style-type: none"> <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>