

## PERSEUS MINING UPDATES MINERAL RESOURCES AND ORE RESERVES

### EXECUTIVE SUMMARY

Perth, Western Australia/August 30, 2022/Perseus Mining Limited (ASX/TSX: PRU) wishes to update the estimates of the Mineral Resources and Ore Reserves at each of its West African operations as summarised in **Table 1** and **Table 2** below, and detailed in this report. Foreign/Historical Estimates are stated for Block 14 Mineral Resource and Mineral Reserves in the 'Foreign/Historical Estimate' subsection.

### HIGHLIGHTS

- Perseus Mining has delivered another year of strong exploration drilling, resulting in an increase to the Mineral Resource and replenishment of the Ore Reserve ensuring the long-term sustainability of the Group's production profile.
- The Group's total Measured and Indicated (M&I) Mineral Resources as at June 30, 2022 are estimated to be 132.9 Mt grading 1.19 g/t gold, containing 5,079 ounces of gold, compared with the estimate of June 30, 2021 of 130 Mt grading at 1.18 g/t Au for 4,942k ounces of gold.
- Resource definition drilling at the CMA Underground deposit at Yaouré resulted in an upgrade to Mineral Resources and a maiden Ore Reserve of 2.2 Mt at 3.58 g/t gold, containing 259,000 ounces of gold. The addition of CMA underground to the Yaouré Gold Mine has the potential to significantly extend the life of the mine.
- Drilling at the Nkosuo Project at the Edikan Gold Mine during the year resulted in a maiden Mineral Resource and an Ore Reserve of 10.0 Mt at 1.04 g/t gold, containing 332,000 ounces of gold. Nkosuo is a substantial addition to the Edikan Gold Mine, extending the life of the mine by 18 – 24 months to FY2027.

**Table 1: Perseus Mining Mineral Resources<sup>1,2,4,6</sup>**

PROJECT	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED RESOURCES			INFERRED RESOURCES		
	QUANTITY	GRADE	GOLD	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	Mt	g/t gold	'000 oz
Edikan <sup>5</sup>	18.2	1.06	620	52.3	1.00	1,686	70.5	1.02	2,306	6.2	1.6	310
Sissingué <sup>3</sup>	3.9	1.64	204	2.6	1.79	151	6.5	1.70	355	0.3	1.8	15
Yaouré	2.7	0.97	83	53.2	1.36	2,335	55.9	1.35	2,418	42.0	1.2	1,580
<b>Total</b>	<b>24.7</b>	<b>1.14</b>	<b>907</b>	<b>108.2</b>	<b>1.20</b>	<b>4,173</b>	<b>132.9</b>	<b>1.19</b>	<b>5,079</b>	<b>48.6</b>	<b>1.2</b>	<b>1,910</b>

**Table 2: Perseus Mining Ore Reserve<sup>1,4,6</sup>**

PROJECT	PROVED			PROBABLE			PROVED AND PROBABLE		
	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
Edikan <sup>5</sup>	8.7	1.16	325	28.1	1.13	1,019	36.9	1.13	1,344
Sissingué <sup>3</sup>	3.6	1.68	193	1.2	2.02	77	4.8	1.77	271
Yaouré	2.7	0.97	83	27.4	1.77	1,559	30.0	1.70	1,642
<b>Total</b>	<b>15.0</b>	<b>1.25</b>	<b>601</b>	<b>56.7</b>	<b>1.46</b>	<b>2,655</b>	<b>71.7</b>	<b>1.41</b>	<b>3,256</b>

Notes for Tables 1 and 2:

- Refer to Notes to individual tables of Mineral Resources and Ore Reserves in respect of each project presented below.
- Mineral Resources are inclusive of Ore Reserves.
- Sissingué Mineral Resources and Ore Reserves include the Fimbiasso and Bagoé Projects in addition to the Sissingué Gold Mine.
- The Company holds 90% of Edikan Gold Mine (EGM), 86% of Sissingué Gold Mine (SGM) and 90% of Yaouré Gold Mine (YGM).

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- 5 Inclusive of Nkosuo.  
6 Excludes Foreign/Historical Estimates

## MINERAL RESOURCE ESTIMATES

The Group's total Measured and Indicated (M&I) Mineral Resources as at 30 June 2022 are estimated to be 132.9 Mt grading 1.19 g/t gold, containing 5,079k ounces of gold, compared with the estimate of 30 June 2021 of 130 Mt grading at 1.18 g/t Au for 4,942k ounces of gold. The Mineral Resource Statement as at 30 June 2022 accounts for mining depletion of in situ Mineral Resources and are reported inclusive of Mineral Reserves. Tonnes are reported as dry metric tonnes. All tabulated tonnes, grade and metal have been rounded to reflect appropriate precision in the estimate and may cause some discrepancies in totals. The Group M&I Mineral Resources as at 30 June 2022 are detailed in **Table 3**.

Foreign/Historical Estimates for the recently acquired Block 14 Mineral Resource in Northern Sudan, announced on 28 February 2022 (see news release "Perseus enters into agreement to acquire Orca Gold Inc.") are stated in the 'Foreign/Historical Estimate' subsection of this report and are reported separately from the Group's Mineral Resources detailed below.

**Table 3: Perseus Mining Group M&I Mineral Resources** <sup>1,2,3</sup>

PROJECT	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED RESOURCES		
	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
Edikan	18.2	1.06	620	52.3	1.00	1,686	70.5	1.02	2,306
Sissingué	3.9	1.64	204	2.6	1.79	151	6.5	1.70	355
Yaouré	2.7	0.97	83	53.2	1.36	2,335	55.9	1.35	2,418
<b>Total</b>	<b>24.7</b>	<b>1.14</b>	<b>907</b>	<b>108.2</b>	<b>1.20</b>	<b>4,173</b>	<b>132.9</b>	<b>1.19</b>	<b>5,079</b>

- 1 Refer to Notes to individual tables of Mineral Resources in respect of each project presented below.  
2 Mineral Resources are inclusive of Ore Reserves  
3 Excludes Foreign/Historical Estimates

Key change to the M&I Mineral Resources are:

- The addition of an Indicated maiden Mineral Resource at the Nkosuo Deposit at the Edikan Mine, containing 14.4 Mt at 0.92g/t Au for 421k ounces of gold.
- The CMA underground Indicated Mineral Resource increased by 537k ounces for 3.73Mt at 4.48g/t Au after the inclusion of recent resource definition drilling.

As at 30 June 2022, Inferred Resources are 48.6 Mt grading at 1.2 g/t Au for 1,910k ounces of gold. The Group Inferred Mineral Resources are detailed in **Table 4**.

**Table 4: Perseus Mining Group Inferred Mineral Resources** <sup>1,2,3</sup>

PROJECT	Inferred Resources		
	Quantity Mt	Grade g/t gold	Gold '000 oz
Edikan	6.2	1.6	310
Sissingué	0.3	1.8	15
Yaouré	42.0	1.2	1,580
<b>Total</b>	<b>48.6</b>	<b>1.2</b>	<b>1,910</b>

- 1 Refer to Notes to individual tables of Mineral Resources in respect of each project presented below.  
2 Mineral Resources are inclusive of Ore Reserves  
3 Excludes Foreign/Historical Estimates

The Group 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, 2014).

For the purpose of satisfying "reasonable prospects for eventual extraction" (JORC Code 2012), open pit Mineral Resources are reported above optimised open pit shells developed with actual and estimated operating costs and a long-term gold price assumption of US\$1,800 per ounce. Underground Mineral Resources at CMA are constrained to below the CMA Stage 3 pit design and a 1.5g/t Au cut-off. Underground Mineral Resources at Edikan are constrained to a depth of 600mRL at Esujah South and are all exclusive of open pit Mineral Resources.

Technical Reports associated with these Mineral Resources, have been prepared in accordance with NI 43-101 for the following operations:

- Yaouré Operations, Côte d'Ivoire, NI 43-101 Technical Report, dated 18 December 2017
- Sissingué Operations, Côte d'Ivoire, NI 43-101 Technical Report, dated 29 May 2015
- Edikan Operations, Ghana, NI 43-101 Technical Report, dated 7 April 2022

These reports can be found on Perseus's website at [www.perseusmining.com](http://www.perseusmining.com) and on the System for Electronic Document Analysis and Retrieval (SEDAR) website [www.sedar.com](http://www.sedar.com).

## YAOURÉ GOLD MINE, CÔTE D'IVOIRE

The combined M&I Mineral Resource for the Yaouré Gold Mine ("YGM" or "Yaouré") is estimated at 55.9 Mt grading 1.35 g/t Au, containing 2,418k ounces of gold (Table 5). A further 42 Mt of material grading 1.2g/t gold, containing a further 1,580k ounces of gold are classified as Inferred Mineral Resources (Table 6).

The CMA open pit and the Yaouré open pit Mineral Resource estimates for the Yaouré Gold Mine were updated to include all recent CMA resource drilling and are depleted to 30 June 2022 surveyed mining surfaces. The inclusion of additional resource drilling at CMA resulted in a minor conversion of Inferred Mineral Resources to Indicated Mineral Resources in the open pit as the drilling was focussed primarily on targets beneath the open pit horizon. After accounting for mine depletion and the inclusion of additional CMA resource drilling the Mineral Resource estimate remains materially unchanged from the previous CMA and Yaouré estimate previously reported at 30 June 2019 and readers are referred to ASX release "Perseus Updates Mineral Resource and Ore Reserve Estimates" dated 28 August 2019 for additional details.

The Yaouré satellite deposits are reported for mine depletion as at 30 June 2022. Readers are referred to in the ASX release "Perseus Mining Updates Mineral Resource and Reserve Estimates" dated 24 August 2021.

The CMA underground Mineral Resource estimate is reported at 30 June 2022 based on an updated Mineral Resource Estimate and includes all recent CMA resource drilling. Readers are referred to news release "Perseus Mining announces maiden Underground Ore Reserve at Yaouré" dated 30 August 2022.

**Table 5: Yaouré Measured and Indicated Mineral Resources** <sup>8, 9, 10</sup>

DEPOSIT	DEPOSIT TYPE	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED 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
CMA <sup>1, 2, 3, 5</sup>	Open Pit	-	-	-	23.6	1.43	1,090	23.6	1.43	1,090
Yaouré <sup>1, 2, 3, 5</sup>	Open Pit	-	-	-	18.8	0.80	483	18.8	0.80	483
Satellite deposits <sup>4, 5</sup>	Open Pit	-	-	-	6.7	1.01	217	6.7	1.01	217
Sub Total		-	-	-	49.1	1.13	1,790	49.1	1.13	1,790
CMA <sup>7</sup>	U/Ground	-	-	-	3.7	4.48	537	3.7	4.48	537
Heap Leach <sup>2, 6</sup>	Stockpile	-	-	-	0.4	0.61	8	0.4	0.61	8
Stockpiles	Stockpile	2.7	0.97	83	-	-	-	2.7	0.97	83
<b>TOTAL</b>		<b>2.7</b>	<b>0.97</b>	<b>83</b>	<b>53.2</b>	<b>1.36</b>	<b>2,335</b>	<b>55.9</b>	<b>1.35</b>	<b>2,418</b>

Notes:

- 1 Based on June 2022 Mineral Resource estimate.
- 2 Depleted for previous mining and to 30 June 2022 mining surface.
- 3 0.4g/t gold cut-off applied to in situ open pit material.
- 4 Based on Angovia 2 April 2021, Govisou May 2021 and CMA SW August 2021 Mineral Resource models
- 5 In situ open pit resources constrained to US\$1,800/oz pit shells
- 6 Heap leach resources are stated at 0g/t gold cut-off; only heap components with average grade above 0.4g/t included.
- 7 June 2022 Mineral Resource estimate, below Stage 3 pit and above 1.5g/t block grade cut-off.
- 8 Mineral Resources current as of 30 June 2022.
- 9 Measured and Indicated Mineral Resources are inclusive of Ore Reserves.
- 10 Rounding of numbers to appropriate precisions may result in summary inconsistencies.

**Table 6: Yaouré Inferred Mineral Resources** <sup>7, 8</sup>

DEPOSIT	DEPOSIT TYPE	INFERRED RESOURCES		
		QUANTITY	GRADE	GOLD
		Mt	g/t gold	'000 oz
CMA <sup>1, 2, 3, 5</sup>	Open Pit	3.8	0.9	105
Yaouré <sup>1, 2, 3, 5</sup>	Open Pit	33	0.9	938
Satellite deposits <sup>4, 5</sup>	Open Pit	1.7	0.9	50

DEPOSIT	DEPOSIT TYPE	INFERRED RESOURCES		
		QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
CMA <sup>6</sup>	Underground	3.7	4.1	488
<b>Total</b>		<b>42</b>	<b>1.2</b>	<b>1,580</b>

Notes:

- 1 Based on June 2022 Mineral Resource estimate.
- 2 Depleted for previous mining and to 30 June 2022 mining surface.
- 3 0.4g/t gold cut-off applied to in situ open pit material.
- 4 Based on Angovia 2 April 2021, Govisou May 2021 and CMA SW August 2021 Mineral Resource models
- 5 In situ open pit resources constrained to US\$1,800/oz pit shells
- 6 June 2022 Mineral Resource estimate, below Stage 3 pit and above 1.5g/t block grade cut-off.
- 7 Mineral Resources current as of 30 June 2022.
- 8 Rounding of numbers to appropriate precisions may result in summary inconsistencies.

## STOCKPILES

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

Closing Yaouré stockpiles at 30 June 2022 were estimated as shown in **Table 7**.

**Table 7: Yaouré Closing Stockpiles<sup>1</sup>**

MATERIAL	QUANTITY tonnes	GRADE g/t gold	GOLD Ounces
Low grade oxide	1,033,396	0.68	22,471
Low grade fresh	1,226,924	0.84	33,253
Medium grade oxide	10,367	1.99	663
Medium grade fresh	200,288	1.39	8,920
High grade transition	3,812	1.78	218
High grade fresh	161,345	2.77	14,383
Crushed ore stockpile	29,581	3.00	2,853
<b>Total</b>	<b>2,665,712</b>	<b>0.97</b>	<b>82,761</b>

Notes:

- 1 Stockpile tonnage and grade estimates are considered sufficiently accurate to support their classification as Measured Mineral Resources.

## SISSINGUÉ GOLD MINE, CÔTE D'IVOIRE

The combined M&I Mineral Resource for the Sissingué Gold Mine ("SGM" or "Sissingué") is estimated as 6.5 Mt grading 1.70 g/t gold, containing 355k ounces of gold. A further 0.3 Mt of material grading 1.8g/t gold, containing a further 15k ounces of gold are classified as Inferred Mineral Resources. Details of these estimates are shown below in **Table 8** and **Table 9**.

Sissingué Mineral Resources comprise the remaining in situ mineralisation at the Sissingué mine, Fimbiasso East and West deposits, and mineralisation at the Antoinette, Juliette, and Veronique deposits at the Bagoé Project. These Mineral Resources also include material on stockpiles at Sissingué mine as at 30 June 2022.

The following geological models remain unchanged from the Mineral Resource Statement (see news release 'Perseus Mining Updates Life of Mine Plan for Sissingué Gold Mine and Satellite Deposit' dated 28 of March 2022): Sissingué, Fimbiasso and Bagoé.

The Sissingué Mineral Resource has been depleted to the 30 June 2022 using the surveyed mining surface. Mining has not commenced at the Fimbiasso and Bagoé Mineral Resources.

**Table 8: Sissingué Measured and Indicated Mineral Resources<sup>8, 9, 10</sup>**

DEPOSIT	DEPOSIT TYPE	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED RESOURCES		
		QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
Sissingué <sup>1, 2, 3</sup>	Open Pit	0.8	1.41	38	1.2	1.39	55	2.1	1.40	93
Fimbiasso <sup>4, 5</sup>	Open Pit	1.7	1.69	95	0.4	1.78	23	2.1	1.71	118
Bagoé <sup>6, 7</sup>	Open Pit	0.7	2.24	53	1.0	2.28	73	1.7	2.26	126
Stockpiles	Open Pit	0.5	1.04	18	-	-	-	0.5	1.03	18

DEPOSIT	DEPOSIT TYPE	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED 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
<b>Total</b>		<b>3.9</b>	<b>1.64</b>	<b>204</b>	<b>2.6</b>	<b>1.79</b>	<b>151</b>	<b>6.5</b>	<b>1.70</b>	<b>355</b>

Notes:

- 1 Based on February 2022 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 2 Depleted to 30 June 2022 mining surface.
- 3 0.6g/t gold cut-off applied to in situ material.
- 4 Based on March 2022 Mineral Resource models constrained to US\$1,800/oz pit shells.
- 5 0.8g/t gold cut-off applied.
- 6 Based on May 2022 Mineral Resource models constrained to US\$1,800/oz pit shells.
- 7 0.8g/t gold cut-off applied to oxide, 1g/t applied to transition, 1.2g/t applied to fresh (Veronique deposit only).
- 8 Mineral Resources current at 30 June 2022.
- 9 Measured and Indicated Mineral Resources are inclusive of Ore Reserves.
- 10 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

**Table 9: Sissingué Inferred Mineral Resources <sup>8,9</sup>**

DEPOSIT	DEPOSIT TYPE	INFERRED RESOURCES		
		QUANTITY	GRADE	GOLD
		Mt	g/t gold	'000 oz
Sissingué <sup>1, 2, 3</sup>	Open Pit	0.1	1.1	2
Fimbiasso <sup>4, 5</sup>	Open Pit	0.1	1.8	6
Bagoé <sup>6, 7</sup>	Open Pit	0.1	2.2	6
<b>Total</b>		<b>0.3</b>	<b>1.8</b>	<b>15</b>

Notes:

- 1 Based on February 2022 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 2 Depleted to 30 June 2022 mining surface.
- 3 0.6g/t gold cut-off applied to in situ material.
- 4 Based on March 2022 Mineral Resource models constrained to US\$1,800/oz pit shells.
- 5 0.8g/t gold cut-off applied.
- 6 Based on May 2021 Mineral Resource models constrained to US\$1,800/oz pit shells.
- 7 0.8g/t gold cut-off applied to oxide, 1g/t applied to transition, 1.2g/t applied to fresh (Veronique deposit only).
- 8 Mineral Resources current at 30 June 2022.
- 9 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

## STOCKPILES

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

Closing Sissingué stockpiles at 30 June 2022 are shown in **Table 10**.

**Table 10: Sissingué Closing Stockpiles <sup>1</sup>**

MATERIAL	QUANTITY tonnes	GRADE g/t gold	GOLD ounces
Low grade oxide	214,128	0.58	4,004
Low grade fresh	253,567	1.33	10,872
High grade fresh	25,030	1.52	1,223
Crushed ore stockpile	37,875	1.28	1,562
<b>TOTAL</b>	<b>530,600</b>	<b>1.04</b>	<b>17,662</b>

Notes:

- 1 Stockpile tonnage and grade estimates are considered sufficiently accurate to support their classification as Measured Mineral Resources.

## EDIKAN GOLD MINE, GHANA

The updated M&I Mineral Resource for the Edikan Gold Mine (“EGM” or “Edikan”) in Ghana is now estimated as 70.5 Mt grading 1.02 g/t gold, containing 2,306k ounces of gold, as at 30 June 2022 (**Table 11**). A further 6.2Mt of material grading 1.6 g/t Au and containing a further 310k ounces of gold are classified as an Inferred Mineral Resource (**Table 12**). The previous Mineral Resource as at 30 June 2021 was estimated at Measured and Indicated 70.9 Mt grading at 1.04 g/t gold, containing 2,326k ounces of gold and an additional 5.6 Mt grading 1.6g/t for 300k ounces of gold of Inferred Mineral Resources.

The increase in Indicated Mineral Resources is due to the addition of the maiden Mineral Resource at Nkosuo, comprising an Indicated Mineral Resource of 14.4 Mt at 0.91 g/t for a total of 421,000 ounces of contained gold and a further Inferred Mineral Resource of 0.9 Mt at 0.9g/t Au for 27k ounces of gold. This was added in July 2022 through the completion of a feasibility study and readers are referred to news release “Perseus Increases Edikan’s Inventories of Mineral Resources and Ore Reserves” dated 19 July 2022.

Mineral Resources at AF Gap and Fetish have been depleted to the 30 June 2022 mining survey surfaces. The Company confirms that in all other respects it is not aware of any other information that would result in a material change to the estimates of remaining Mineral Resources.

The Mineral Resource estimate for the Esujah North and South deposit remains unchanged. The Company confirms that in all other respects it is not aware of any other information that would result in a material change to the estimates of remaining Mineral Resources.

The Heap Leach Mineral Resource has been depleted to the 30 June 2022 mine survey surface.

**Table 11: Edikan Measured and Indicated Mineral Resources <sup>10,11,12</sup>**

DEPOSIT	DEPOSIT TYPE	MEASURED RESOURCES			INDICATED RESOURCES			MEASURED & INDICATED 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	9.7	1.04	187	16.4	0.92	487	22.0	0.95	674
Esujah North <sup>2, 3, 4</sup>	Open Pit	2.8	0.79	72	4.0	0.74	95	6.9	0.76	168
Fetish <sup>2, 3, 5</sup>	Open Pit	5.9	0.91	172	9.0	0.82	238	14.9	0.86	410
Nkosuo <sup>6,7</sup>	Open Pit	-	-	-	14.4	0.91	421	14.4	0.91	421
<b>Sub-Total</b>		<b>14.3</b>	<b>0.94</b>	<b>432</b>	<b>43.8</b>	<b>0.88</b>	<b>1,241</b>	<b>58.2</b>	<b>0.89</b>	<b>1,673</b>
Esujah South <sup>8</sup>	U/ground	3.1	1.70	168	5.9	2.09	393	8.9	1.95	561
Heap Leach <sup>2, 9</sup>	Stockpile	-	-	-	2.6	0.62	51	2.6	0.62	51
Stockpiles	Stockpile	0.8	0.84	21	-	-	-	0.8	0.84	21
<b>Total</b>		<b>18.2</b>	<b>1.06</b>	<b>620</b>	<b>52.3</b>	<b>1.00</b>	<b>1,686</b>	<b>70.5</b>	<b>1.02</b>	<b>2,306</b>

Notes:

- 1 Based on March 2020 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 2 Depleted to 30 June 2022 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 Based on December 2016 Mineral Resource model constrained to US\$1,800 pit shell, includes Bokitsi North lode.
- 6 Based on June 2022 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 7 0.3g/t gold cut-off applied.
- 8 Based on November 2020 Mineral Resource model, 1g/t gold cut-off applied.
- 9 At zero cut-off grade.
- 10 All Mineral Resources are current as at 30 June 2022.
- 11 Measured and Indicated Mineral Resources are inclusive of Ore Reserves.
- 12 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

**Table 12: Edikan Inferred Mineral Resources <sup>9,10</sup>**

DEPOSIT	DEPOSIT TYPE	INFERRED RESOURCES		
		QUANTITY	GRADE	GOLD
		Mt	g/t gold	'000 oz
AF Gap <sup>1, 2, 3</sup>	Open Pit	0.2	0.9	6
Esujah North <sup>2, 3, 4</sup>	Open Pit	0.0	1.0	1
Fetish <sup>2, 3, 5</sup>	Open Pit	0.2	0.6	4
Nkosuo <sup>6,7</sup>	Open Pit	0.9	0.9	27
Esujah South <sup>8</sup>	U/ground	4.8	1.8	270
<b>Total</b>		<b>6.2</b>	<b>1.6</b>	<b>310</b>

Notes:

- 1 Based on March 2020 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 2 Depleted to 30 June 2022 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 Based on May 2021 Mineral Resource model constrained to US\$1,800 pit shell, includes Bokitsi North lode.
- 6 Based on June 2022 Mineral Resource model constrained to US\$1,800/oz pit shell.
- 7 0.3g/t gold cut-off applied.
- 8 Based on November 2020 Mineral Resource model, 1g/t gold cut-off applied.
- 9 All Mineral Resources are current as at 30 June 2022.
- 10 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

## STOCKPILES

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

Closing stockpiles at 30 June 2022 were estimated as shown in **Table 13**.

**Table 13: Edikan Closing Stockpiles <sup>1</sup>**

MATERIAL	QUANTITY tonnes	GRADE g/t gold	GOLD ounces
Low grade oxide	212,768	0.54	3,720
Low grade fresh	24,776	0.61	484
High grade transition	208,171	0.99	6,601
High grade fresh	256,692	1.02	8,395
Crushed ore stockpile	59,491	0.76	1,453
<b>TOTAL</b>	<b>761,898</b>	<b>0.84</b>	<b>20,653</b>

Notes:

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

## ORE RESERVE ESTIMATE

### YAOURÉ GOLD MINE, CÔTE D'IVOIRE

The Open Pit Ore Reserve estimate for Yaouré includes depletion and update of the CMA deposit, changes on several Near-Mine Satellite deposits and addition of a maiden CMA Underground Ore Reserve. The Ore Reserve Estimates for the CMA deposit is based on updated Mineral Resource estimates referred to in ASX release “Perseus Mining announces maiden Underground Ore Reserve at Yaouré” dated 30 August 2022. The basis of the Open Pit Ore Reserve Estimates for CMA and Yaouré deposits remains materially unchanged from those reported at 30 June 2021. Readers are referred to news release “Perseus Updates Mineral Resource and Ore Reserve Estimates” dated 24 August 2021 and the notes contained therein. Details on the changes of Ore Reserves from the Near-Mine Satellite deposits are covered in the following section.

The Proved and Probable Ore Reserves for Yaouré are estimated as 30.0Mt, grading 1.70g/t gold and containing 1,642k ounces of gold. Details of the estimate are shown in **Table 14**.

**Table 14: Yaouré Proved and Probable Ore Reserves<sup>7</sup>**

DEPOSIT	DEPOSIT TYPE	PROVED			PROBABLE			PROVED + PROBABLE		
		QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
CMA <sup>1,4,5</sup>	Open Pit	-	-	-	15.6	1.95	980	15.6	1.95	980
Yaouré <sup>1,2,4,5</sup>	Open Pit	-	-	-	4.9	1.03	162	4.9	1.03	162
Near-Mine Satellites <sup>2,3,4,8,5</sup>	Open Pit	-	-	-	4.6	1.06	158	4.6	1.06	158
Sub-Total	Open Pit	-	-	-	25.1	1.61	1,300	25.1	1.61	1,300
CMA Underground <sup>9</sup>	Underground	-	-	-	2.2	3.58	259	2.2	3.58	259
Stockpiles <sup>6</sup>	Stockpile	2.7	0.97	83	-	-	-	2.7	0.97	83
<b>TOTAL</b>		<b>2.7</b>	<b>0.97</b>	<b>83</b>	<b>27.4</b>	<b>1.77</b>	<b>1,559</b>	<b>30.0</b>	<b>1.70</b>	<b>1,642</b>

Notes:

- 1 Based on depletion to 30 June 2022 mining surfaces.
- 2 Based on Mineral Resource estimates current at 30 June 2022.
- 3 Based on July 2022 Ore Reserve estimation.
- 4 Variable gold grade cut-offs for each material type, ranging from 0.40 g/t to 0.70 g/t.
- 5 Inferred Mineral Resource is considered as waste.
- 6 Based on EOM June 2022 stockpile balance report.
- 7 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.
- 8 Combined several small near-mine pits, namely Angovia 2, Govisou and CMA South West.
- 9 Based upon cut-off for development and stoping of 0.50 g/t and 2.5 g/t respectively.

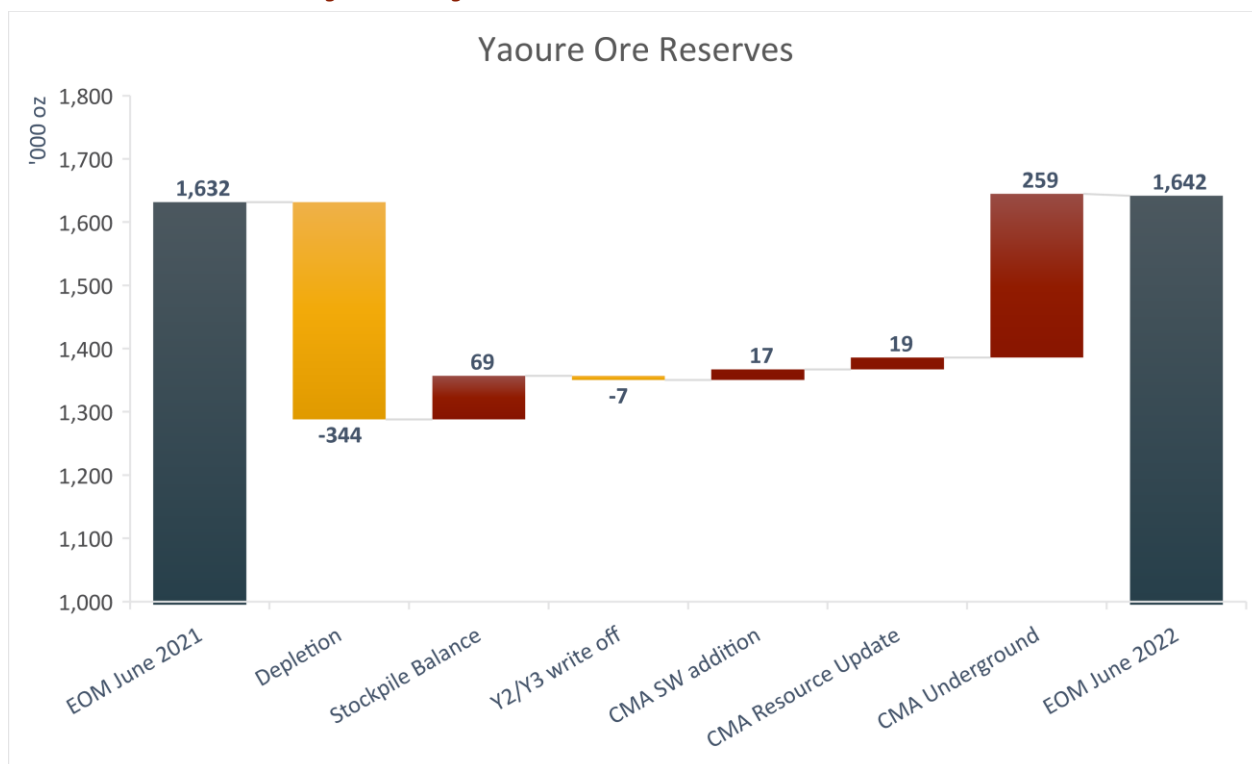
The changes in the Ore Reserve from that last quoted in June 2021 are associated with:

- Ore depletion from open pit mining activities in CMA pit up to 30 June 2022;
- Update in CMA deposit Mineral Resource based on the recent resource drilling activities;
- Addition of new CMA Southwest satellite pit, driven by an updated resource model from grade control activities;
- The Y2 and Y3 smaller satellite pits write-offs due to operational constraints; and
- The addition of the maiden CMA Underground Ore Reserve.

The waterfall graph (**Figure 1**) below summarises the changes in the Yaouré Ore Reserves.



Figure 1: Change in Yaouré Ore Reserves – June 2021 to June 2022



## ECONOMIC ASSUMPTIONS

- Gold metal price of US\$1,300/oz used for open pit and US\$1,500 for underground.
- Un-escalated average costs used in optimising pit designs are as shown in **Table 15** below.
- A discount rate of 10% (real) has been assumed to calculate net present values of forecast cash flows.

Table 15: Assumed average operating costs (Open Pit)

MINING	PROCESSING	G&A	SELLING	ROYALTIES
US\$2.85 /t mined	US\$13.49 /t milled	US\$6.09 /t milled	US\$3.42 /oz sold	4%

## OPEN PIT MINING PARAMETERS

- The chosen method for the Open Pit Ore Reserves is conventional open pit mining utilising hydraulic excavators and trucks. A mining bench height of 10 metres is used, with loading on 2.5 metres flitches to minimise ore loss and dilution.
- The economic pit shell was defined using Whittle pit optimisation software (“Whittle”) with inputs such as geotechnical parameters, ore loss and dilution, metallurgical recoveries, operating costs, and gold price.
- 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 Pitt & Sherry Consultants. Inter-ramp pit slopes are 40 to 60 degrees varied by material weathering level and wall sector. Inter-ramp slopes are excluding ramp but including berms spaced at between 10 and 20 metres vertically and berm widths of 5 to 7 metres.
- Pit ramps have been designed for a 100-tonne payload truck fleet and are set at 24 metres (dual lane) to 16 metres (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.

- 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, based on metallurgical recoveries, ore costs and gold price, are as shown in **Table 16**.

**Table 16: Open Pit Cut-Off Grades**

DEPOSIT	CUT-OFF GRADE BY ORE TYPE (G/T GOLD)			
	Oxide	Transition	Fresh Basalt	Fresh Granodiorite
CMA	0.40	0.45	0.55	-
Yaouré	0.40	0.45	0.65	0.70
Near-Mine Satellites				
Angovia 2	0.40	0.45	0.65	-
Govisou	0.40	0.40	0.50	-
CMA South West	0.40	0.45	0.55	-

## PROCESSING PARAMETERS

- The process metallurgical recovery for gold is fixed by material type in each deposit. Gold recovery rates range from 91.0% – 93.4% for oxide ore, 91.9% – 94.5% for transition ore and 89.5% – 93.8% for fresh ore. Recovery is a function of the differing metallurgical properties of different material type of ores in each deposit and is determined from metallurgical test work for each deposit and material type. Recoveries are as shown in **Table 17**.
- No deleterious material has been identified.
- Average annual processing throughput rate of ore is dependent on deposit, rock type and weathering state. The weighted average throughput rate for all materials is nominally 3.5 Mtpa.
- The processing circuit involves single stage crushing, semi-autogenous grinding, gravity recovery and CIL.

**Table 17: Metallurgical Recoveries by Material Type for Open Pit Ore Reserves**

DEPOSIT	RECOVERY BY ORE TYPE (%)			
	Oxide	Transition	Fresh Basalt	Fresh Granodiorite
CMA	92.5	92.0	91.5	-
Yaouré	93.4	94.5	92.6	93.8
Near-Mine Satellites				
Angovia 2	92.9	92.0	91.1	-
Govisou	91.0	91.9	91.7	-
CMA South West	93.4	94.5	89.5	-

## UNDERGROUND MINING PARAMETERS

The maiden CMA underground Probable Ore Reserve is based upon a Pre-Feasibility level mining study, and readers are referred to ASX release “Perseus Mining announces maiden Underground Ore Reserve at Yaouré”, dated 30 August 2022” for further details.

## STOCKPILE AND HEAP LEACH PARAMETERS

The stockpiles that existed on 30 June 2022 will be all fed to the processing plant over the mine life based on the blending strategy and associated rehandle costs for all material are 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 Proved 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 considering other factors where relevant. The deposits’ geological models are well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposits, 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 Proved Reserves and Indicated Mineral Resources as a basis for Probable Reserves.

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

Underground Ore Reserves include an incidental amount (accounting for 2% of ounces) of mineralised development material of lower classification categories (Inferred and Unclassified material) within mining shapes. This incidental mineralisation is not considered material to the CMA underground Ore Reserve

## SISSINGUÉ GOLD MINE, CÔTE D'IVOIRE

The updated Ore Reserve estimate for Sissingué Gold Mine is a depletion of the previous Sissingué deposit Ore Reserve with an update on the Bagoé Oxide pit design at Sissingué. All previous changes at Fimbiasso and Bagoé Project are included in the ASX release “Perseus Mining Updates Mineral Resource and Reserve Estimates” dated 24 August 2021 and the notes contained therein.

The Sissingué Ore Reserve is based on the Mineral Resource from 28 March 2022 and readers are referred to news release “Perseus Mining Updates the Life of Mine Plan for Sissingué Gold Mine & Satellite Deposits” dated 28 March 2022 and the notes contained therein.

The combined Sissingué Gold Mine, Fimbiasso Project and Bagoé Project Ore Reserve is summarised below in **Table 18** and is estimated at 4.8 Mt of ore, grading 1.77 g/t gold and containing 271k ounces of gold. **Table 18** reports the Ore Reserves by category, project and type, above variable cut-off grades. The classification categories of Proved and Probable under the JORC Code are equivalent to the CIM categories Proven and Probable respectively (CIM, 2010).

**Table 18: Sissingué Gold Mine Proved and Probable Ore Reserves** <sup>5,7</sup>

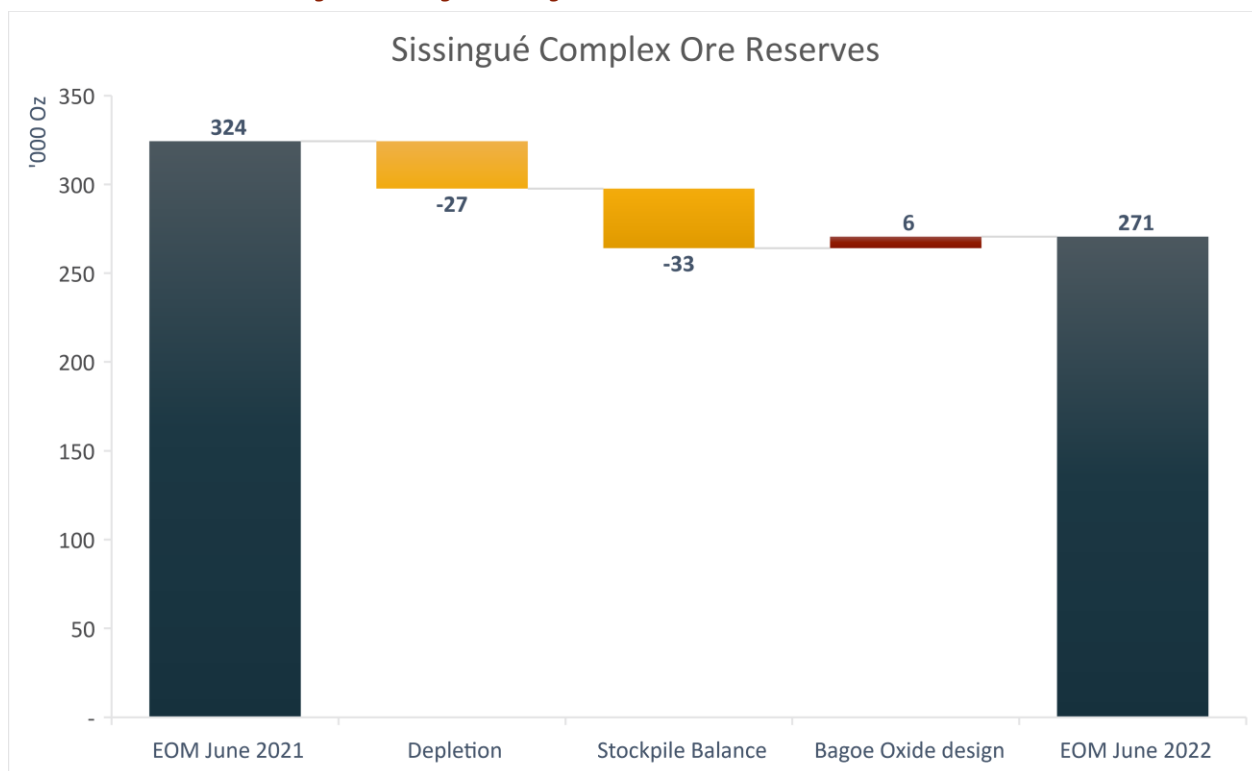
DEPOSIT	DEPOSIT TYPE	PROVED			PROBABLE			PROVED + PROBABLE		
		QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
Sissingué <sup>1,2,3,4</sup>	Open Pit	1.4	1.41	66	0.4	1.09	14	1.8	1.34	79
Fimbiasso <sup>2,4</sup>	Open Pit	1.1	1.95	70	0.2	2.15	13	1.3	1.98	82
Bagoé <sup>2,3,4</sup>	Open Pit	0.5	2.58	40	0.6	2.61	51	1.1	2.59	91
Sub-total	Open Pit	3.0	1.79	176	1.2	2.02	77	4.2	1.86	253
Stockpiles <sup>6</sup>	Stockpile	0.5	1.00	18	-	-	-	0.5	1.00	18
<b>TOTAL</b>		<b>3.6</b>	<b>1.68</b>	<b>193</b>	<b>1.2</b>	<b>2.02</b>	<b>77</b>	<b>4.8</b>	<b>1.77</b>	<b>271</b>

Notes:

- 1 Based on depletion to 30 June 2022 mining surfaces.
- 2 Based on Mineral Resource Estimates which were current at 30 June 2022.
- 3 Based on July 2022 Ore Reserve estimation.
- 4 Variable gold grade cut-off for each material type, ranging from 0.40 g/t to 1.05 g/t at Sissingué deposits, from 0.80 g/t to 1.50 g/t at Fimbiasso deposits and from 1.00 g/t to 3.00 g/t at Bagoé deposits.
- 5 Inferred Mineral Resource is considered as waste.
- 6 Based on EOM June 2022 stockpile balance report.
- 7 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

The changes in the Ore Reserve from that last quoted in June 2021 are associated with ore depletion from mining since 30 June 2021 along with revised Bagoé Oxide pit design driven by an updated resource model from resource definition and grade control activities. The resultant changes impacted both Bagoé and Sissingué. The waterfall graph (Figure 2) below summarises the changes in the Sissingué Gold Mine reserves.

Figure 2: Change in Sissingué Ore Reserves – June 2021 to June 2022



## ECONOMIC ASSUMPTIONS

- Gold metal price US\$1,600/oz for Sissingué and US\$1,300/oz for both Fimbiasso and Bagoé. The higher gold price used at Sissingué reflects the short mine life remaining for the deposit.
- Un-escalated average costs used in optimising pit designs are as shown in **Table 19** below.
- A discount rate of 10% (real) has been assumed to calculate net present values of forecast cash flows.

Table 19: Assumed average operating costs

MINING (OPEN PIT)	PROCESSING	G&A	SELLING	ROYALTIES
US\$5.82 /t mined	US\$15.96 /t milled	US\$12.23 /t milled	US\$3.75 /oz sold	4.8%

## OPEN PIT MINING PARAMETERS

- The chosen method for the Open Pit Ore 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 for Sissingué and Fimbiasso. For Bagoé deposits, the geotechnical study was completed by Pitt&Sherry Consultants. Overall pit slopes are 30 to 50 degrees inclusive of berms spaced at between 5, 10 and 20 metres vertically and berm widths of 4 to 7 metres.
- Pit ramps have been designed for a 40 tonne ADT truck fleet and are set at 17 metres (dual lane) to 11 metres (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.

- There are no physical constraints to mining within the lease areas. No property, infrastructure or environmental issues are known to exist which may limit the extent of mining within the mining areas.
- Ore from Fimbiasso pits will be trucked to Sissingué with a maximum limit of 80 kt/month and from Bagoé pits will be trucked at a maximum limit of 60 kt/month.
- Ore cut-off grades, based on the gold price, cost and mining parameters, are as shown in **Table 20**.

**Table 20: Open Pit Cut-Off Grades**

DEPOSIT	CUT-OFF GRADE BY ORE TYPE (G/T GOLD)			
	Oxide	Transition	Fresh Granite	Fresh Sediment/Mafic
Sissingué	0.40	0.60	0.85	1.05
Fimbiasso	0.80	1.00	1.10	1.50
Bagoé				
Antoinette	1.00 – 1.20	1.20 – 2.70	1.60 – 3.00	-
Juliette	1.10	1.40	-	-
Veronique	1.10 – 1.20	1.40	-	-

## PROCESSING PARAMETERS

- The process metallurgical recovery for gold is fixed by material type in each deposit. Gold recovery rates range from 94% for oxide ore to 91% for fresh ore. Recovery variation is a function of differing metallurgical properties of different material type of ores from each deposit. The metallurgical recoveries are as shown in **Table 21**.
- No deleterious material has been identified.
- Fimbiasso ore processed is limited by a trucking limit of maximum 80kt/month and for Bagoé the trucking limit is 60kt/month.
- Average annual processing throughput rate of ore is nominally 1.2Mtpa of combined ore from all deposits, with throughput rates variable by material type. The processing circuit involves single stage crushing, semi-autogenous grinding, gravity recovery and CIL.

**Table 21: Metallurgical Recoveries by Material Type and Pit**

DEPOSIT	CUT-OFF GRADE BY ORE TYPE (G/T GOLD)			
	Oxide	Transition	Fresh Granite	Fresh Sediment/Mafic
Sissingué	97.0	95.0	92.0	83.3*
Fimbiasso	94.0	93.0	91.0	91.0
Bagoé				
Antoinette	93.0	82.8	87.5	-
Juliette	85.4	85.4	-	-
Veronique	92.8	89.7	-	-

Notes:

\* Average value based on formula  $(7.63 * \text{natural log (Au\_grade)} + 78.5)\%$

# Average value based on multiple recovery domains

## STOCKPILE PARAMETERS

Ore mined from both Fimbiasso and Bagoé will be temporarily stockpiled on site then trucked to Sissingué for processing. Ore from Fimbiasso and Bagoé will be blended with remaining ore from the Sissingué deposit in order to keep the processing plant full, thereby minimising unit processing and G&A costs.

## 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 Proved 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 considering other factors where relevant. The deposits' geological models are well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposits, 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 Proved Reserves and Indicated Mineral Resources as a basis for Probable Reserves.

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

## EDIKAN GOLD MINE, GHANA

The Ore Reserve is summarised below in **Table 22** and is based on the Edikan Mineral Resources as at 30 June 2022. The Open Pit Ore Reserve is a depletion of the previous Ore Reserve and readers are referred to ASX release “Perseus Updates Mineral Resource and Ore Reserve Estimates” dated 24 August 2021 and the notes contained therein. The Nkosuo Ore Reserve has been included based on the completion of a Feasibility Study and readers are referred to news release “Perseus Increases Edikan’s Inventories of Mineral Resources And Ore Reserves” dated 19 July 2022. All Ore Reserves are reported in accordance with the JORC Code and are reported 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 Proven and Probable respectively (CIM, 2010).

The updated Proved and Probable Ore Reserves for Edikan are now estimated as 36.9 Mt grading 1.13 g/t gold, containing 1,344k ounces of gold including 8.7 Mt of ore grading 1.16 g/t gold and containing 325k ounces of gold in the Proved category and a further 28.1 Mt of ore grading 1.13 g/t gold containing 1,019k ounces of gold classified as Probable Ore Reserves.

**Table 22: Edikan Gold Mine Proved and Probable Ore Reserves<sup>4,6</sup>**

DEPOSIT	DEPOSIT TYPE	PROVED			PROBABLE			PROVED + PROBABLE		
		QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz	QUANTITY Mt	GRADE g/t gold	GOLD '000 oz
AF Gap <sup>1,2,3</sup>	Open Pit	3.8	1.15	141	9.2	1.01	298	13.0	1.05	439
Fetish <sup>1,2,3</sup>	Open Pit	2.3	1.04	77	2.7	0.93	121	5.8	1.06	199
Nkosuo <sup>3</sup>	Open Pit	-	-	-	10.0	1.04	332	10.0	1.04	332
<b>Subtotal</b>		<b>6.0</b>	<b>1.13</b>	<b>219</b>	<b>22.8</b>	<b>1.03</b>	<b>751</b>	<b>28.8</b>	<b>1.05</b>	<b>970</b>
Esujah South <sup>2,4</sup>	U/ground	1.9	1.37	85	2.8	2.40	217	4.8	1.98	302
Heap Leach <sup>1,5</sup>	Stockpile	-	-	-	2.6	0.62	51	2.6	0.6	51
ROM Stockpiles <sup>5</sup>	Stockpile	0.8	0.84	21	-	-	-	0.8	0.84	21
<b>Total</b>		<b>8.7</b>	<b>1.16</b>	<b>325</b>	<b>28.1</b>	<b>1.13</b>	<b>1,019</b>	<b>36.9</b>	<b>1.13</b>	<b>1,344</b>

Notes:

- 1 Based on depletion to 30 June 2022 mining surfaces.
- 2 Based on Mineral Resource Estimates which were current at 30 June 2022.
- 3 Variable gold grade cut-off for each material type, ranging from 0.35 g/t to 0.70 g/t.
- 4 Inferred Mineral Resource is considered as waste.
- 5 Based on EOM June 2022 stockpile balance report.
- 6 Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

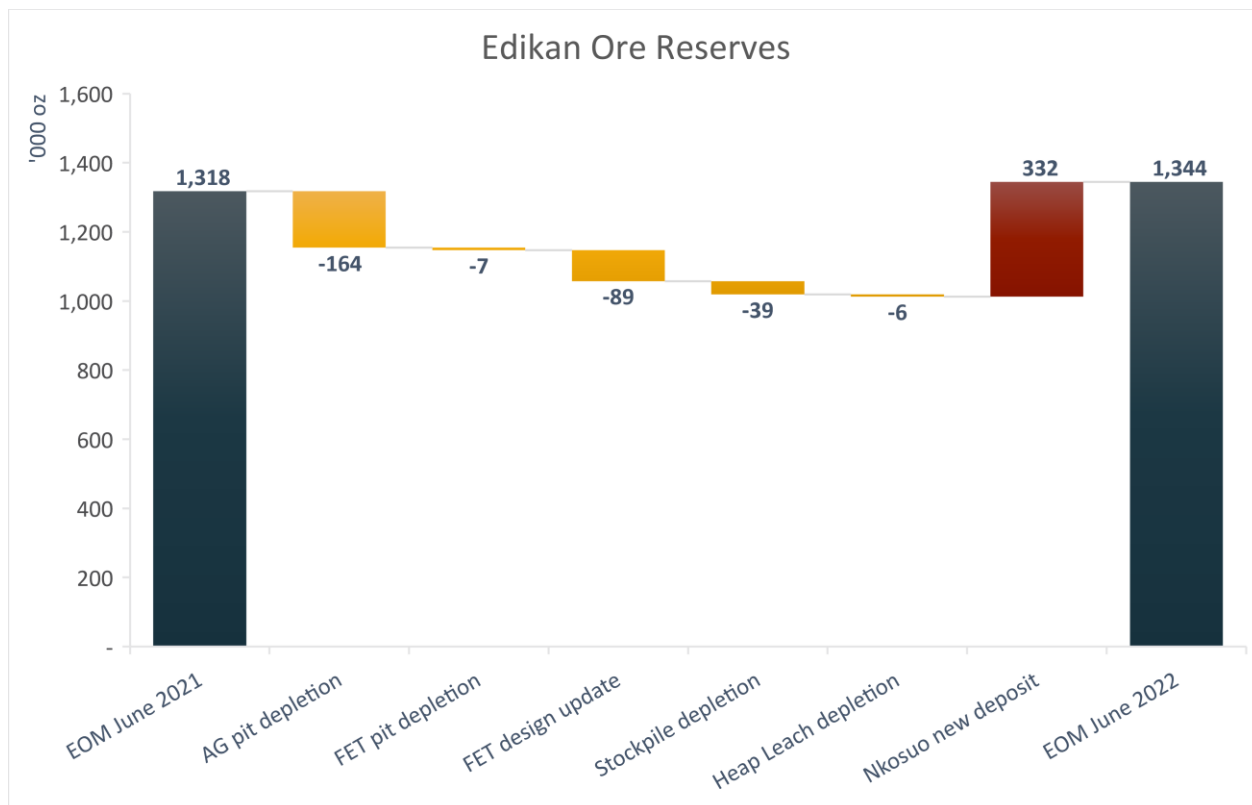
Proved and Probable Ore Reserves are found within the economic limits of three discrete open pits, an underground project and stockpiles that have been designed based on Measured and Indicated Mineral Resources that incorporated all available Resource in-fill drilling results, a gold price of US\$1,300/oz and mining, processing and general and administration parameters derived from recent operating experience.

The Ore Reserves at Edikan were last reported in the news release “Perseus Updates Mineral Resource and Ore Reserve Estimates” dated 24 August 2021 and the notes contained therein and comparisons made below are made to this last estimate. Readers are also referred to the NI 43-101 Technical Report for Edikan Operations dated 7 April 2022. Since the last reported, the following changes have occurred:

- Mining depletion has taken place in the AF Gap and Fetish Pits and through depletion of the old Heap Leach dumps;
- Stockpiles have been depleted in order to keep the processing plant at full capacity;
- Fetish pit Ore Reserve has a new pit design adjustment to comply with the blasting boundary constraints; and
- New deposit of Nkosuo is now included in the Edikan Ore Reserves after the completion of its Feasibility Study.

The changes mentioned above are summarised in Figure 3 below.

Figure 3: Change in Edikan Ore Reserves – June 2021 to June 2022



### ECONOMIC ASSUMPTIONS

- Gold metal price US\$1,300/oz.
- Un-escalated average costs used in optimising pit designs are as shown in **Table 24** below.
- A discount rate of 10% (real) has been used to calculate net present value of forecast cash flow.

Table 23: Assumed average operating costs

MINING (OPEN PIT)	MINING (UNDERGROUND)	PROCESSING	G&A	SELLING	ROYALTIES
US\$4.42 /t mined	US\$42 /t mined	US\$9.59 /t milled	US\$2.72 /t milled	US\$2.40 /oz sold	8.25% and 6.5% for Nkosuo

### OPEN PIT MINING PARAMETERS

- The chosen method for the Open Pit Ore 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 100-tonne payload truck fleet and are set at 24 metres (dual lane) to 16 metres (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.

- 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 24**.

**Table 24: 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
Fetish	0.40	0.65	0.55
Nkosuo	0.35	0.35	0.45
Heap Leach	0.40	-	-

## PROCESSING PARAMETERS

- The process metallurgical recovery for gold is fixed by material type in each deposit. Gold recovery rates range from 55% for oxide ore and 88-90% for primary ore. Recovery variation is a function of differing metallurgical properties of ores from different deposits as shown in **Table 25**.
- 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 25: Metallurgical Recoveries by Material Type and Pit**

DEPOSIT	RECOVERY BY ORE TYPE (%)		
	Oxide	Transition	Fresh
AF Gap	61.0	73.0	88.0
Fetish	61.0	73.0	90.0
Nkosuo	55.1	87.6	90.3
Esujah South	-	-	90.0
Heap Leach	67.0	-	-

## UNDERGROUND MINING PARAMETERS

The chosen method for the Underground Reserves at Esujah South is Sub-level mining under rock fill (“SURF”). SURF is a bulk, semi-selective, underground mining method like sublevel caving (“SLC”) in layout, but with waste being introduced from surface instead of the hanging wall 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, 69% of the designed ring tonnes are extracted the remaining 31% is left behind and is mixed with the external dilution and/or the introduced fill. About 91% 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 99% 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 Esujah 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.

## **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 30 June 2022 are all fed to the processing plant over the mine life and associated rehandle costs for all material are 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 Proved 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 deposits’ geological models are well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposits, 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 Proved Reserves and Indicated Mineral Resources as a basis for Probable Reserves.

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

## **FOREIGN/HISTORICAL ESTIMATES**

During the 2022 financial year, Perseus Mining Limited acquired Orca Gold Inc. (Orca) as announced on 28 February 2022, see news release “Perseus enters into agreement to acquire Orca Gold Inc.”. The transaction completed in May 2022.

The primary asset acquired from Orca is a 70% interest in the Block 14 Project that is in northern Sudan near the border with Egypt. Orca announced completion of a feasibility study in accordance with National Instrument 43-101 (“NI 43-101”) on the Block 14 Project on September 14, 2020.

The Block 14 Project is a large and scalable resource with a Mineral Resource Estimate<sup>1</sup> consisting of an Indicated Mineral Resource of 79.9Mt grading 1.3g/t Au for 3.3Moz Au and an Inferred Mineral Resource of 18.5Mt grading 1.2g/t Au for 0.7Moz Au. The Block 14 Project has a Probable Mineral Reserve Estimate<sup>1</sup> of 79.9Mt grading 1.1g/t Au for 2.9Moz Au.

The Information in this announcement relating to Mineral Resource Estimates for the Block 14 Project (“Block 14 Project”) is contained in a technical report (“Feasibility Study”) entitled “Feasibility Study, NI 43-101 Technical Report,

<sup>1</sup> These estimates including the tables set out below have been prepared by Orca in accordance with Canadian National Instrument 43-101 standards and have not been reported in accordance with the JORC Code. A competent person has not done sufficient work to classify the resource in accordance with the JORC Code and it is uncertain that following evaluation and/or further exploration work that the estimate will be able to be reported as a mineral resource or ore reserve in accordance with the JORC Code. Please refer to further disclosure required by the ASX Listing Rules together with a more detailed resource table at the conclusion of this announcement. Orca Ore Reserve and Mineral Resource figures are stated on 100% basis.

Block 14 Gold Project, Republic of Sudan” prepared by Lycopodium Minerals Pty Limited and is effective as of 31 August 2020. As such, it is reported in accordance with the requirements applying to foreign estimates in the ASX Listing Rules (the “Foreign Estimate”). It is not reported in accordance with the 2012 edition of the Joint Ore Reserves Committee’s Australasian Code for Reporting of Mineral Resources and Ore Reserves (“JORC Code”). This news release and all technical information regarding Orca’s NI 43-101 have been reviewed and approved by Adrian Ralph and Hans Andersen, each a Qualified Person for the purposes of NI 43-101.

**Table 26: Summary of Block 14 Project Mineral Resource**

	Indicated					Inferred				
	Mt	Au g/t	Ag g/t	Au koz	Ag koz	Mt	Au g/t	Ag g/t	Au koz	Ag koz
Oxide	10.2	1.35	1.49	443	487	1.1	1.0	1.2	34	41
Trans.	13.4	1.22	1.33	527	575	1.5	1.0	1.2	50	57
Fresh	56.3	1.31	1.82	2,371	3,296	15.9	1.2	1.6	626	838
<b>Total</b>	<b>79.9</b>	<b>1.30</b>	<b>1.70</b>	<b>3,342</b>	<b>4,358</b>	<b>18.5</b>	<b>1.2</b>	<b>1.6</b>	<b>711</b>	<b>936</b>

**Notes:**

- Based on September 2018 estimates of Galat Sufar South and Wadi Doum Mineral Resources by MPR Geological Consultants Pty Ltd.
- 0.6 g/t cut-off grade applied to all material types.
- Estimates are not depleted for artisanal mining, the impact of which is not considered material.
- Galat Sufar South Mineral Resource estimates are truncated at 350 m depth, with around 90% of Indicated and Inferred resources occurring at depths of less than 240 and 300 m respectively. Wadi Doum estimates extend to around 255 m depth, with around 90% of Indicated and Inferred resources occurring at depths of less than 115 m and 190 m respectively. The depth limits imposed on the estimates are considered to largely confine the estimates to material with reasonable prospects of eventual economic extraction.
- Indicated Mineral Resources are inclusive of Mineral Reserves.
- Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

**Table 27: Summary of Block 14 Project Mineral Reserves**

Project	Classification	Oxide		Transitional		Fresh		Total	
		'000 tonnes	Au g/t	'000 tonnes	Au g/t	'000 tonnes	Au g/t	'000 tonnes	Au g/t
Main	Probable	4,347	1.27	5,088	1.19	13,488	1.31	22,923	1.28
East	Probable	8,302	0.89	11,236	0.89	30,729	1.05	50,267	0.99
North East	Probable	1,606	0.84	2,192	0.85	367	0.90	4,166	0.85
<b>Total GSS</b>	<b>Probable</b>	<b>14,255</b>	<b>1.00</b>	<b>18,516</b>	<b>0.97</b>	<b>44,584</b>	<b>1.13</b>	<b>77,356</b>	<b>1.07</b>
<b>Wadi Doum</b>	<b>Probable</b>	<b>527</b>	<b>1.90</b>	<b>119</b>	<b>2.37</b>	<b>1,941</b>	<b>2.49</b>	<b>2,588</b>	<b>2.36</b>
<b>Block 14 Total</b>	<b>Probable</b>	<b>14,783</b>	<b>1.03</b>	<b>18,635</b>	<b>0.98</b>	<b>46,525</b>	<b>1.19</b>	<b>79,943</b>	<b>1.11</b>

**Notes:**

- Based on Mineral Reserve Statement 7 November 2018.
- CIM Definition Standards were followed for the classification of Mineral Reserves.
- Mineral Reserves were optimised using a gold price of \$1,100/oz.
- Mining Cut-off grades vary between 0.32g/t and 0.90g/t.
- Rounding of numbers to appropriate precisions may have resulted in apparent inconsistencies.

Through the acquisition of Orca, Perseus now also owns a 31.4% interest in TSXV listed Montage which announced completion of a feasibility study at its cornerstone Koné Gold Project, located in Côte d’Ivoire, on February 14 2022 in accordance with NI 43-101. Refer to Montage’s website for information relating to the Mineral Resource estimates completed by Montage on the Koné Gold Project.

**This announcement was approved for release by the Technical Committee of the Board.**

## TECHNICAL DISCLOSURE:

All Mineral Reserves and Mineral Resources were calculated as of 30 June 2022 and have been calculated and prepared in accordance with the standards set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves dated December 2012 (the "JORC Code") and in accordance with National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101"). The JORC Code is the accepted reporting standard for the Australian Stock Exchange Limited ("ASX").

The definitions of Ore Reserves and Mineral Resources as set forth in the JORC Code have been reconciled to the definitions set forth in the CIM Definition Standards. If the Mineral Reserves and Mineral Resources were estimated in accordance with the definitions in the JORC Code, there would be no substantive difference in such Mineral Reserves and Mineral Resources.

## COMPETENT PERSON STATEMENT:

### Edikan

The information in this report that relates to the Esuajah South Underground Mineral Resource and Ore Reserve was first reported by the Company in a market announcement "Perseus Mining Updates Mineral Resources & Ore Reserves" released on 24 August 2021. The information in this report that relates to Esuajah North Mineral Resources estimate was first reported by the Company in a market announcement "Perseus Updates Resources & Reserves" released on 28 August 2018. The information in this report that relates to AF Gap Mineral Resources and Ore Reserve estimate was first reported by the Company in a market announcement "Perseus Updates Mineral Resources & Ore Reserves" released on 25 August 2020. The information in this report that relates to the Mineral Resource and Ore Reserve estimates for the Fetish deposit and the Heap Leach was first reported by the Company in a market announcement "Perseus Updates Edikan Mineral Resource & Ore Reserves" released on 19 February 2020. The information in this report that relates to the Mineral Resource and Ore Reserve estimates for the Nkosuo deposit was first reported by the Company in a market announcement "Perseus Increases Edikan's Inventories of Mineral Resource & Ore Reserves" released on 19 July 2022. This report includes an update for mining depletion at Edikan as at 30 June 2022. The Company confirms that it is not aware of any new information or data that materially affect the information on 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 further confirms that material assumptions underpinning the estimates of Ore Reserves described in "Technical Report — Edikan Gold Mine, Ghana" dated 7 April 2022 continue to apply.

### Sissingué, Fimbiasso and Bagoé

The information in this report that relates to Mineral Resources and Ore Reserve estimates for Sissingué was reported by the Company in a market announcement "Perseus Mining Updates Life of Mine Plan for Sissingué Gold Mine & Satellite Deposits" released on 28 March 2022. This report includes an update for mining depletion at Sissingué as at 30 June 2022. The information in this report that relates to Mineral Resource and Ore Reserve estimates for the Fimbiasso deposits was reported by the Company in a market announcement "Perseus Mining Updates Mineral Resources and Ore Reserves" released on 26 August 2020. The information in this report that relates to Mineral Resource and Ore Reserve estimates for the Bagoé deposits was reported by the Company in a market announcement "Perseus Mining Updates Mineral Resources and Ore Reserves" released on 24 August 2021. The Company confirms that all material assumptions underpinning those estimates and the production targets, or the forecast financial information derived therefrom, in that market release continue to apply and have not materially changed. The Company further confirms that material assumptions underpinning the estimates of Ore Reserves described in "Technical Report — Sissingué Gold Project, Côte d'Ivoire" dated 28<sup>th</sup> March 2022 continue to apply.

### Yaouré

The information in this report that relates to the Open Pit and Underground Mineral Resources and the Underground Ore Reserve at CMA was first reported by the Company in a market announcement "Perseus Mining announces maiden Underground Ore Reserve at Yaouré" released on 30 August 2022. The information in this report that relates to the other Mineral Resources & Ore Reserves (including the Heap Leach) for the Yaouré Deposit was reported by the Company in a market announcement "Perseus Mining Updates Mineral Resources & Ore Reserves" released on 24 August 2021. This report includes an update for mining depletion at the Yaouré Operation as at 30 June 2022. The Company confirms that all material assumptions underpinning those estimates and the production targets, or the forecast financial information derived therefrom, in that market release continue to apply and have not materially changed. The Company further confirms that material assumptions underpinning the estimates of Ore Reserves described in "Technical Report — Yaouré Gold Project, Côte d'Ivoire" dated 18 December 2017 continue to apply.

### Block 14 Project – Foreign/historical estimates

The information in this report that relates to the Mineral Resources and Probable Reserves of the Block 14 Project was first reported by the Company in a market announcement "Perseus Enters into Agreement to Acquire Orca Gold Inc." released on 28 February 2022. The Company confirms it is not in possession of any new information or data relating to those estimates that materially impacts of the reliability of the estimate of the Company's ability to verify the estimate as a Mineral Resource or Ore Reserve in accordance with Appendix 5A (JORC Code) and the information in that in that original market release continues to apply and have not materially changed. These estimates are prepared in accordance with Canadian National Instrument 43-101 standards and have not been reported in accordance with the JORC Code. A competent person has not done sufficient work to classify the resource in accordance with the JORC Code and it is uncertain that following evaluation and/or further exploration work that the estimate will be able to be reported as a Mineral Resource or Ore Reserve in accordance with the JORC Code.

## 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 Yaouré Gold Mine, the Edikan Gold Mine and the Sissingué Gold Mine without any major disruption due to the COVID-19 pandemic or otherwise, 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.*

**ASX/TSX CODE: PRU**

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