

EMERALD RESOURCES NL  
ACN 009 795 046  
SUPPLEMENTARY BIDDER'S STATEMENT

---

**1. IMPORTANT INFORMATION**

This document is the supplementary bidder's statement (**Supplementary Bidder's Statement**) made under section 643 of the *Corporations Act 2001* (Cth) (**Corporations Act**) by Emerald Resources NL (ACN 009 795 046) (**Emerald**) to the bidder's statement dated and lodged with the Australian Securities and Investments Commission (**ASIC**) on 17 August 2023 issued by Emerald (**Original Bidder's Statement**) in relation to its off-market takeover offer (**Offer**) for all of the fully paid ordinary shares on issue in Bullseye Mining Limited (ACN 118 341 736) (**Bullseye**) that it does not already hold a relevant interest in.

This Supplementary Bidder's Statement was lodged with ASIC on 1 September 2023. Neither ASIC nor ASX, nor any of their officers, takes any responsibility for the contents of this Supplementary Bidder's Statement.

This Supplementary Bidder's Statement must be read together with the Original Bidder's Statement. If there is a conflict between the Original Bidder's Statement and this Supplementary Bidder's Statement, this Supplementary Bidder's Statement will prevail.

Unless the context otherwise requires, terms defined in the Original Bidder's Statement have the same meaning in this Supplementary Bidder's Statement.

Please consult your legal, financial or other professional adviser if you do not fully understand the contents of this Supplementary Bidder's Statement.

A copy of this Supplementary Bidder's Statement will be available on the ASX website ([www.asx.com](http://www.asx.com)) and the Company's website ([www.emeraldresources.com.au](http://www.emeraldresources.com.au)).

---

**2. PURPOSE OF THIS SUPPLEMENTARY BIDDER'S STATEMENT**

The purpose of this Supplementary Bidder's Statement is to provide additional information to investors as set out in Section 3 below.

---

**3. NEW INFORMATION - RESOURCE UPDATE AND ANNUAL REPORT**

On 31 August 2023, the Company made an announcement to ASX concerning its Okvau Mineral Resource and Ore Reserve Update, a copy of which is attached to this Supplementary Bidder's Statement.

The Company also acknowledges the release of the Company's annual report for the year ended 30 June 2023, on 31 August 2023.

The Directors of Emerald are not aware of any other acts, matters or things (not already described in the Original Bidder's Statement) which may be material to the making of and informed assessment of the Offer.

---

**4. CONSENTS**

The Company confirms that as at the date of this Supplementary Bidder's Statement, each of the parties that have been named as having consented to being named in the Bidder's Statement have not withdrawn that consent.

---

**5. ASIC AND ASX DISCLAIMER**

A copy of this Supplementary Bidder's Statement was lodged with ASIC and provided to ASX on 1 September 2023. None of ASIC, ASX or any of their respective officers takes any responsibility for the contents of this Supplementary Bidder's Statement.

---

**6. FURTHER INFORMATION**

Bullseye Shareholders who have any questions in relation to the Offer please call the Company Secretary on +61 8 9286 6300.

---

**7. DIRECTOR'S AUTHORISATION**

This Supplementary Bidder's Statement has been approved by a unanimous resolution passed by the directors of Emerald.

#### Fast Facts

ASX Code: EMR  
Shares on issue: 596,024,468  
Market Cap: ~A\$1.395 billion  
Cash: A\$71.0 million (at 30 June 2023)  
Bullion: A\$19.0 million (at 30 June 2023)

#### Board & Management

Jay Hughes, Non-Executive Chairman  
Morgan Hart, Managing Director  
Mick Evans, Executive Director  
Simon Lee AO, Non-Executive Director  
Ross Stanley, Non-Executive Director  
Billie Slott, Non-Executive Director  
Michael Bowen, Non-Executive Director  
Mark Clements, Non-Executive Director  
and Company Secretary  
Bernie Cleary, Operations Manager  
Shannon Campbell, Chief Financial Officer

#### Company Highlights

##### Team

- Highly credentialed gold project operational and in-house development team;
- A proven history of building projects on time and on budget.

##### Gold Production

- Okvau Gold Mine commissioned on time on budget in 2021;
- Forecast +100,000oz gold production for 2024 at AISC US\$780-US\$850/oz;

##### Growth

- Significant exploration and resource growth potential in Cambodia:
  - Okvau Gold Mine reserve expansion;
  - Memot Project maiden resource expected 2023
    - 1,639km<sup>2</sup> of prospective tenure
- Significant exploration and resource growth potential in Australia (Bullseye Mining Limited (~60%):
  - North Laverton Gold Project located on the underexplored Dingo Range greenstone belt
  - Resource and reserve expected 2023
  - 1,200km<sup>2</sup> of prospective tenure

##### ESG

- Focused on a net positive impact on near-mine environmental and social values by targeting strict compliance with corporate governance, international guidelines (IFC PS's) and local laws by engaging and collaborating with all stakeholders.
- Commitment to carbon neutral operations in Cambodia

#### Registered Office

1110 Hay Street  
West Perth WA 6005

T: +61 8 9286 6300

F: +61 8 6243 0032

W: [www.emeraldresources.com.au](http://www.emeraldresources.com.au)



## Annual Mineral Resource and Ore Reserve Statement

### Highlights

#### Okvau Gold Mine Mineral Resource and Ore Reserve Highlights:

- Maiden Okvau Gold Mine underground resource of 1.51Mt @ 6.29g/t Au for 305koz<sup>1</sup>;**
- Okvau Gold Mine open pit update extends with an ore reserve of 11.95Mt @ 1.82g/t Au for 698koz<sup>1</sup>;**
- Current mineral resource and reserves expected to extend mine life beyond 8 years;**
- Update supports the Company's view resources/reserves may be replenished annually with further drilling; and**
- Drilling remains ongoing with the view to extend Okvau Gold Mine resources/ reserves through:**
  - Infill drilling within the maiden underground resource to expand resource base and for reserve conversion;**
  - Open pit extensions through drilling along the southern and eastern confines of the current pit shell; and**
  - Near mine at the Samnang, Preak Klong and Okvau North prospects.**

<sup>1</sup> Refer to Table 1 Okvau Global Resource Estimate

Emerald Resources NL (ASX: Emerald) ("Emerald") is pleased to present its 2023 Resource and Reserve update which includes a maiden underground resource at the Okvau Gold Mine.

#### Emerald's Managing Director, Morgan Hart, commented:

"Our resource and reserve update, along with continued exploration results, are supporting the Company's view that resources will continue to be replenished on an ongoing basis with continued drilling to extend the current pit shell, below pit for underground potential and near mine prospects.

"Further, near mine drilling will ramp up on the completion of the current wet season with a view to adding further ounces for additional open cut ore feed to the Okvau Gold Mine processing plant. Results are expected to be included in the next Okvau Gold Mine resource and reserve update.

"In addition, Emerald continues its exploration activities at its 100% owned Memot Gold Project in Cambodia and the North Laverton Gold Project in Western Australia which are held through our 57% interest in Bullseye Mining. Emerald is expecting to provide a resource and/or reserve update on both of these projects in late 2023."

## Introduction

The Okvau Project is 100% owned and is located in Cambodia approximately 265km northeast of Phnom Penh in the Mondulakiri Province. Emerald is currently mining the Okvau orebody using conventional open pit mining methods.

In May 2017 Emerald Resource announced an Open Pit Mineral Indicated and Inferred Resource Estimate of 17.86Mt @ 2.01g/t Au for 1,141,000 ounces gold at a lower cut of 0.7g/t Au. This included a maiden Ore Reserve (Probable) estimate of 14.26Mt @ 1.98g/t Au for 907,000 ounces gold at a lower cut of 0.625g/t Au.

Since 2017, 18,711m of RC and Diamond drilling has been completed, designed to infill the existing drill dataset and extended the mineralisation down dip and along strike. The total dataset equalling 64,342m of drilling was used to update the Resource which was split into and Open Pit and Underground estimations.

As at 31 March 2023 the Okvau Gold Mine global resources are reported as 12.75Mt @ 2.42g/t Au for 990koz as summarized in Table 1. This included an Ore Reserve (Proven and Probable) estimate of 11.95Mt @ 1.82g/t Au for 698,000 ounces gold at a lower cut of 0.625g/t Au as summarised in Table 2.

The Okvau Open Pit Inferred and Indicated Mineral Resource is reported at a 0.7g/t Au cut-off grade in the current US\$1,450/oz reserve pit shell. Stockpiled ROM ore is reported as Measured Resource using a lower cut-off grade of 0.4g/t for oxidised ore and 0.5g/t in unoxidised, fresh ore. Measured Resources is 2.81Mt at 0.89 g/t Au for 80koz, Indicated Mineral Resources is 8.36Mt at 2.24 g/t Au for 601koz and Inferred Mineral Resources of 70kt at 1.71 g/t Au for 4koz. This is fully depleted for mine depletion as of 31 March 2023.

Beneath the current US\$1,450/oz reserve pit shell, a Mineral Resource has been estimated targeting underground mining and being reported applying at 3g/t Au cut-off grade for indicated and inferred under the current US\$1,450/oz reserve pit shell. Indicated Mineral Resources is 600kt at 6.20g/t Au for 120koz and Inferred Mineral Resources of 910kt at 6.35 g/t Au for 185koz is reported.

The Okvau open pit 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).

**Table 1 | Okvau Global Resource Estimate**

Resource Type	Okvau Gold Project - March 2023 Global Resource Estimate											
	Measured Resources <sup>(i)</sup>			Indicated Resources <sup>(ii)</sup>			Inferred Resources <sup>(ii)</sup>			Total Resources		
	Tonnage (t)	Grade (g/t Au)	Contained Au (oz)	Tonnage (t)	Grade (g/t Au)	Contained Au (Koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)	Tonnage (t)	Grade (g/t Au)	Contained Au (oz)
Open Pit	2,810,000	0.89	80,000	8,360,000	2.24	601,000	70,000	1.71	4,000	11,240,000	1.90	685,000
Underground				600,000	6.20	120,000	910,000	6.35	185,000	1,510,000	6.29	305,000
Total	2,810,000	0.89	80,000	8,960,000	2.50	721,000	980,000	6.01	189,000	12,750,000	2.42	990,000

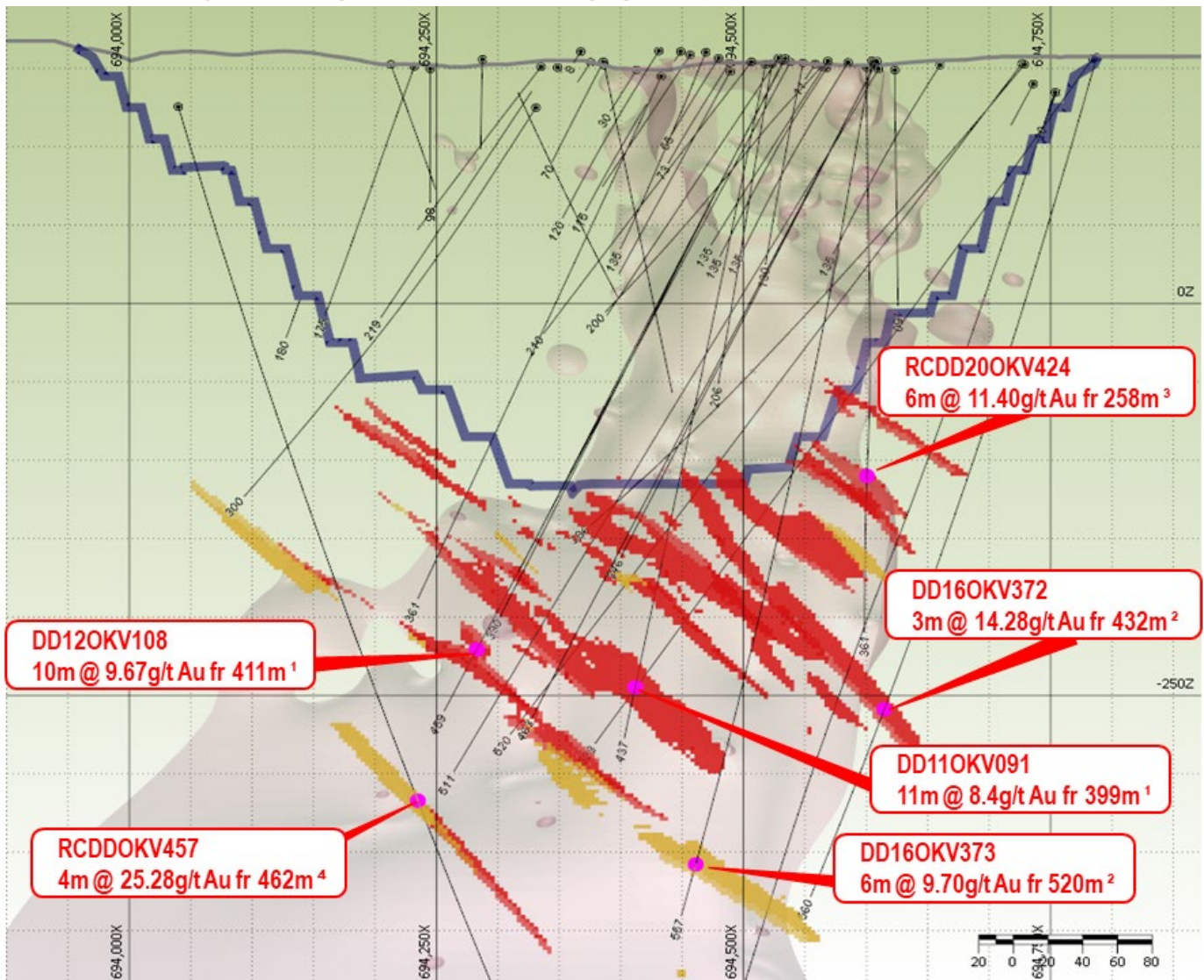
\* tonnage is rounded to the nearest 10,000t, grade is rounded to the second decimal point and ounces are rounded to the nearest 1,000oz

**Table 2 | Okvau Reserve Estimate**

Okvau Gold Project - March 2023 Global Reserve Estimate			
Resource Type	Tonnage (t)	Grade (g/t Au)	Contained Au (oz)
Proven	2,810,000	0.89	80,000
Probable	9,140,000	2.10	618,000
Total	11,950,000	1.82	698,000

\*tonnage is rounded to the nearest 10,000t, grade is rounded to the second decimal point and ounces are rounded to the nearest 1,000oz

Figure 1 | Long Section of the Okvau Reserve Pit (blue line) with the underground resource indicated and inferred block model (red) and unclassified material (yellow). Drill traces are represented as black lines with the surface topography as a grey line. The Pink solid represents the Diorite intrusive. Previously announced significant intersections are highlighted as pink dots



1 Reference is made to the Company's ASX release dated 26 July 2017.  
 2 Reference is made to the Company's ASX release dated 28 April 2017.  
 3 Reference is made to the Company's ASX release dated 29 January 2021.  
 4 Reference is made to the Company's ASX release dated 28 April 2023.

### Resource Parameters

In accordance with ASX Listing Rule 5.8.1, the following summary information is provided for the understanding of the reported estimates of the Resources:

### Geology and Geological Interpretation

The Okvau Deposit is largely hosted in a Cretaceous diorite intrusion emplaced within an upper Triassic metasedimentary host rock package. Gold mineralisation is contained in a north-east trending fracture set in a narrow off-shoot or apophyses from a larger diorite intrusion however extends beyond the diorite contact into the metasediments.

Gold mineralisation is concentrated along a network of brittle/ductile shears and arsenopyrite-rich sulphide veins. The mineralised shears typically comprise 10m to 50m wide core of strongly altered, fractured, and/or sheared rock locally with a weak planar fabric, surrounded by 0.5m to 2m wide less intensely altered halos which retain relict diorite texture. Variably deformed pyrrhotite, arsenopyrite and/or pyrite-rich layers up to 10 metres wide also commonly occur in the core of the shears. Structural and geological observations were used to determine the overall orientation of the individual lodes.

The Okvau resource estimate covers approximately 600m of strike and 500m width of the mineralised vein system, to a maximum depth of 450m below surface.

Please refer to ASX announcements dated 1 May 2017 and 26 November 2019 for details of previous Resource estimate.



### Drilling Techniques, Sampling and Assaying

The Mineral Resource estimate is based on a database of 328 drill holes, for a total of 64,342m. The database is comprised of 122 diamond holes and 186 RC drill holes (including 20 RC collars and diamond tails). New drill data completed after the 2017 Resource and Current Reserve calculation (refer ASX announcement 1 May 2017) comprises of 11 diamond holes and 57 RC drill holes (including 13 RC collars and diamond tails). The drill holes completed after 2016 were designed to infill the existing drill dataset and extended the mineralisation down dip and along strike.

**Figure 2 | Plan View of the collars used in both the Oper Pit and Underground mineral resource estimation**

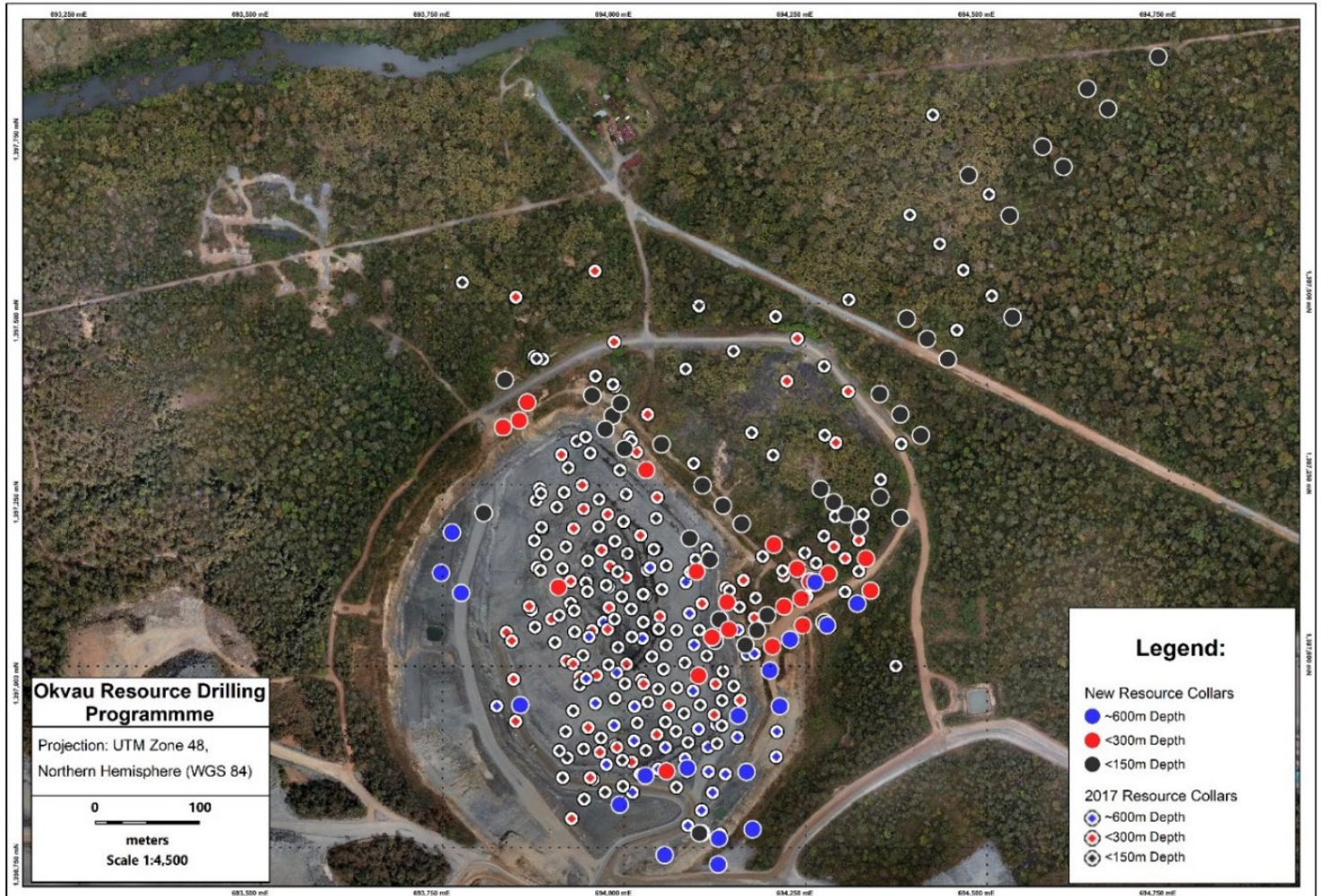
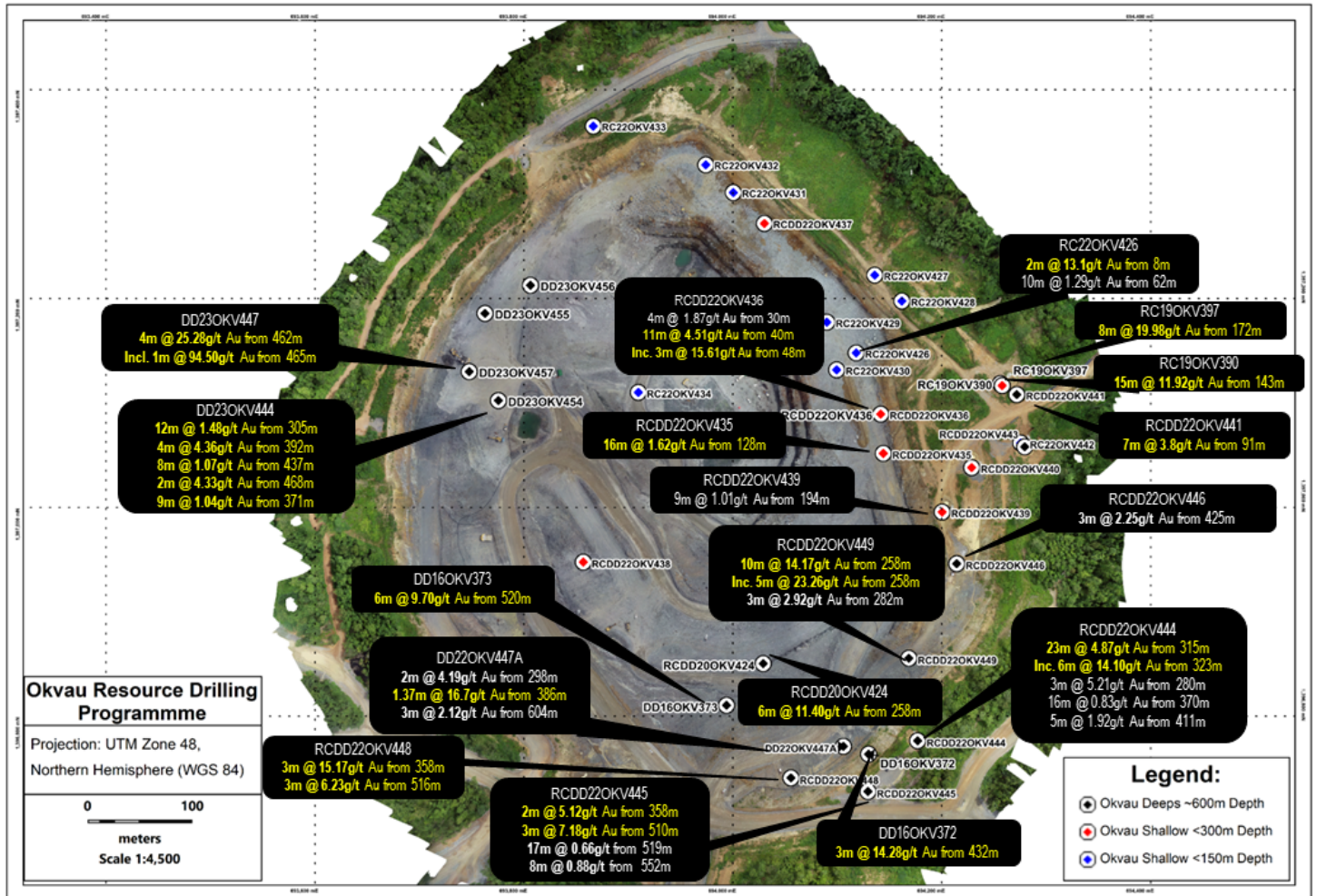




Figure 3 | Plan view of the additional collars and significant intercepts from drilling completed after 2017 on the Okvau Resource Estimate



Drilling at Okvau is typically spaced at 25m by 25m centres in the top 120m of the deposit. Below 120m vertical the drill spacing widens to 50m drill sections and 25m or 50m along section and wider still beyond 450m vertical.

Information regarding the data used to inform the previously quoted 2017 resource, has been previously announced (refer ASX announcement 1 May 2017). The diamond core from the drill data completed after 2016 was sampled using half-core where the core is cut in half down the longitudinal axis. The core was sampled on 1m sample intervals, as determined by a geologist based on viewing potential mineralisation, otherwise in zones of interpreted waste, the core was sampled at 2m intervals. Only 1% of the new drill data of grade greater than 0.2g/t Au was sampled at a 2m interval and 1.9% across the entire data set.

The RC drill data collected after 2016 was taken as a 4m composite from the excess bagged material off the cone splitter taken every 1m. A spear sampling technique is then used to produce a 3-5kg composite sample. The 1m samples are split with a cone splitter at the drill rig to produce a 3-5kg sub-sample. These 1m samples are submitted after the results of the 4m composites were received indicate mineralisation or instead of the composited sample if potential mineralisation is identified in the logging.

Sampling assays from the drill data completed after 2016 were carried out at a commercial off-site laboratory (ALS Phnom Penh). Gold assays are conducted at ALS Vientiane, Laos, utilising Au-AA26 50g fire assay read by AAS. Multi-element assay is completed at ALS, Brisbane, Australia with ME-MS44 and ME-ICP44 + Au 50g (Au-TL44) aqua regia extraction with ICP-MS finish.

### Estimation Methodology and Classification

The lithological constraints and oxidation surfaces were generated by Emerald technical staff and were applied to the grade estimation. The modelled lithology includes diorite and metasedimentary (hornfels) host rocks. An oxidation surface representing the top of fresh rock was also modelled.

## Open Pit Mineral Resource

The Open Pit Mineral Resource gold estimate is based on a mineralisation constraint (estimation domain) generated with indicator kriging using drill holes coded with a mineralisation interpretation generated by Emerald technical staff. The mineralisation interpretation was completed using a 0.5g/t Au lower cut-off grade and includes a maximum 5 metres of internal dilution plus 2 metres of external dilution and was generated using the known geological controls on gold mineralisation.

The Open Pit Mineral Resource gold estimate was determined using Multiple Indicator Kriging ('MIK') within the mineralisation zone constraints. MIK is a non-linear or 'recovered resource' grade estimation method which estimates grades and tonnages for a targeted Selective Mining Unit ('SMU') block size, inclusive of dilution and ore loss. Secondary variables (sulphur, arsenic, bismuth, antimony, copper, and tellurium) have been estimated using Ordinary Kriging (OK).

A 'parent' block size of 20 m x 25 m x 10 m was used followed by a change of support estimate to a 5m x 5m x 5m SMU. The model was constrained by a topographic survey and the geological model.

The MIK estimate was generated using a multi-pass estimation approach, with the high confidence sample search parameters (estimation pass 1 with a sample search of 50m x 50m x 20m) expanded by 100% for each subsequent pass to estimate blocks not originally estimated in prior high confidence estimation passes. The majority of categorised blocks were estimated searching to a maximum distance of 100 metres from data with the sample searches optimised based on geostatistical investigations and variography generated for both gold and indicator variables.

The grade estimates are based on 2m down-the-hole composites of the RC and diamond drilling. High grade cuts were variously applied to the composite data to limit the influence of high grade outliers. High grade cuts have been determined via outlier analysis studies with a high grade cut of 20g/t Au and 40g/t Au applied to the fresh hornfels and diorite domains respectively. A 10g/t Au high grade cut was applied to the oxide diorite domain composites and no high-grade cut applied to the hornfels oxide composites.

High confidence estimates that are within approximately 30 metres of drilling or better were considered as Indicated Mineral Resources. Inferred Mineral Resources were blocks that were not considered Indicated Resources but still within the interpreted mineralisation zone and within 75 metres of drilling (when estimated with pass 1 or 2) or within 40 metres of drilling for estimation pass 3. A cross sectional interpretation was completed using criteria listed above and a wireframe solid produced to capture those blocks that could be considered as Indicated and Inferred Resources

The methodology and parameters used to inform the Open Pit Mineral Resource is consistent with the estimation approach used for the 2017 Mineral Resource, which to date has matched the Mill reconciliation since commencement of mining in July 2021.

## Underground Mineral Resource

The Underground Mineral Resource estimate is based on wireframes (estimation domain) generated with implicit vein modelling in Micromine by Emerald Technical Staff, using drillholes coded with a mineralisation interpretation generated by Emerald technical staff. The wireframes identify numerous domains of composite grade 2g/t Au, with a downhole width of no less than 3 metres and was generated using the known geological controls on gold mineralisation. Where appropriate, sub-economic samples and intervals have been included in the wireframes to ensure continuity of the interpretation including a maximum of 2 metres of internal dilution. The underground Mineral Resource gold estimate was determined using Ordinary Kriging ('OK') within the wireframe constraints. A block size of 2.5m x 2.5m x 2.5m was used, and the model was constrained by a topographic survey and the 2017 reserve pit design.

The OK estimate was generated using a multi-pass estimation approach, with the search ellipse oriented in line with the interpreted mineralised bodies. Search ellipse dimensions were chosen to encompass adjacent drillholes on sections and adjacent lines of drilling along strike and designed to fully estimate the mineralised domains. Any blocks not estimated in the first estimation pass were estimated in a second pass with an expanded search neighbourhood with relaxed conditions to allow the domains to be fully estimated. The blocks within the first estimate pass were considered an indicated resource category, while the blocks within the second estimation pass were categorised as inferred.

The OK calculation parameters used for the Underground Mineral Resource were compared against the available grade control data set (drilled on a 5m x 5m spacing) for validation. Input composite counts for the estimates were variable and set at a minimum of 4 data points within the search ellipse.

The grade estimates are based on 1m down-the-hole composites of the RC and diamond drilling. High grade cuts were variously applied to the composite data to limit the influence of high-grade outliers. High-grade cuts have been determined via top cut analysis in Micromine, with a high grade cut of 42g/t Au being applied to the dataset. As with the OK estimate, the top cut analysis was compared with the available grade control data points for confirmation.

In the Resource no rigorous application has been made of minimum mining width, internal or external dilution or other modifying factors, and the Resource is reported in situ.



The grade estimate was validated visually.

An additional 422kt at 7.45g/t Au for 100koz of metal inventory has been estimated outside the Resources reported in this announcement. This unclassified mineralisation includes intersections such as 6m @ 9.70 g/t Au from 520m (diamond16OKV373)<sup>1</sup> and 4m @ 25.28 g/t Au from 462m (diamond23OKV457)<sup>2</sup>, these will be infilled by further drilling to classify and potentially included in future resource and reserve updates.

<sup>1</sup>(refer ASX announcement 28 April 2017), <sup>2</sup>(refer ASX announcement 28 April 2023)

### Bulk Density

A bulk density dataset were collected throughout the deposit via the immersion method of core billets and routine grab samples collected from the current mined pit. Bulk densities between 2.78g/cm<sup>3</sup> and 2.95g/cm<sup>3</sup> were assigned to unoxidized fresh material based on the average bulk density grouped into fresh and oxidised samples and subdivided by lithology and grade, bulk density was assigned to the block model for tonnage reporting. 1.89g/cm<sup>3</sup> was assigned to the small amount of unmined remaining surface oxide material.

### Potential for Eventual Economic Extraction

The Open Pit Mineral Resource comprise blocks with an estimated gold grade above 0.5g/t Au, the current break-even cut-off grade that derives from cost and revenue parameters utilised by the current mining within existing reserve pit estimated based on a gold price of US\$1,450/oz.

Underground Mineral Resource comprise blocks with an estimated gold grade above 3g/t Au. This cut-off grade is estimated to be the minimum grade required for economic extraction at current metal prices.

The same metallurgical and recovery assumptions as the 2017 Mineral Resource estimate was also applied to both Resources reported in this document.

### Ore Reserve

The Ore Reserve for the Project has been updated in accordance with the JORC Code, 2012 Edition, using the updated Mineral Resource Estimate detailed above and accounts for depletion of the Okvau Open Pit to 31 March 2023. The Ore Reserve is based on Indicated Mineral Resources and as such is stated as Probable Ore Reserves. A more detailed description is contained in Appendix One. No material changes have been made to the processes by which the Ore Reserve is calculated, nor to the assumptions made while producing the Ore Reserve (refer ASX announcement 1 May 2017).

The cut-off grade used in the estimation of the Ore Reserve is the non-mining, break-even gold grade taking into account modifying factors of mining recovery and dilution, metallurgical recovery, site operating costs, royalties and revenues. All these factors have been estimated to a DFS level. For reporting of Ore Reserves the calculated cut-off grade is 0.625g/t Au. The Ore Reserve estimate is reported within the open pit mine design.

There are no regulatory, environmental, or social impact considerations presently known that are likely to impact eventual economic extraction of the Mineral Resource.

The Underground Mineral Resource estimate stated herein does not consider other modifying factors that might arise out of mine planning and design such as ore loss, mining dilution or other mineralised material that might be mined in order to access stoping areas during general underground production activities.

### Near Mine Exploration

As previously announced, the Okvau gold Project has several nearby prospects such as Samnang, Okvau North (refer Figure 4) and Preak Klong (Figure 5) with the potential of becoming sources of supplement feed for the Okvau Mill. Additional drilling has been planned on all prospects to infill and extend the significant drill results listed below:

#### Samnang \*refer ASX announcement 27 December 2017

- 9m @ 6.60g/t from 0m;
- 10m @ 2.46g/t from 36m;
- 9m @ 2.03g/t from 52m;
- 3m @ 8.93g/t from 28m; and
- 5m @ 7.48g/t from 14m.

#### Okvau North \*refer ASX announcement 4 July 2023

- 3m @ 7.68g/t from 64m; and
- 3m @ 49.81g/t from 21m.

#### Preak Klong NW and Gossan \*refer ASX announcement 1 April 2020

- 3m @ 31.09g/t from 65m;
- 2m @ 14.07g/t from 21m;
- 5m @ 3.11g/t from 41m;
- 2m @ 5.95g/t from 30m;
- 3m @ 8.9g/t from 73m;
- 4m @ 10.2g/t from 56m;
- 3m @ 12.9g/t from 38m;
- 3m @ 8.5g/t from 58m;
- 2m @ 13.5g/t from 89m; and
- 1m @ 16.2g/t from 74m.



Figure 4 | Plan of Okvau Pit with significant intersections from Samnang and Okvau North prospects

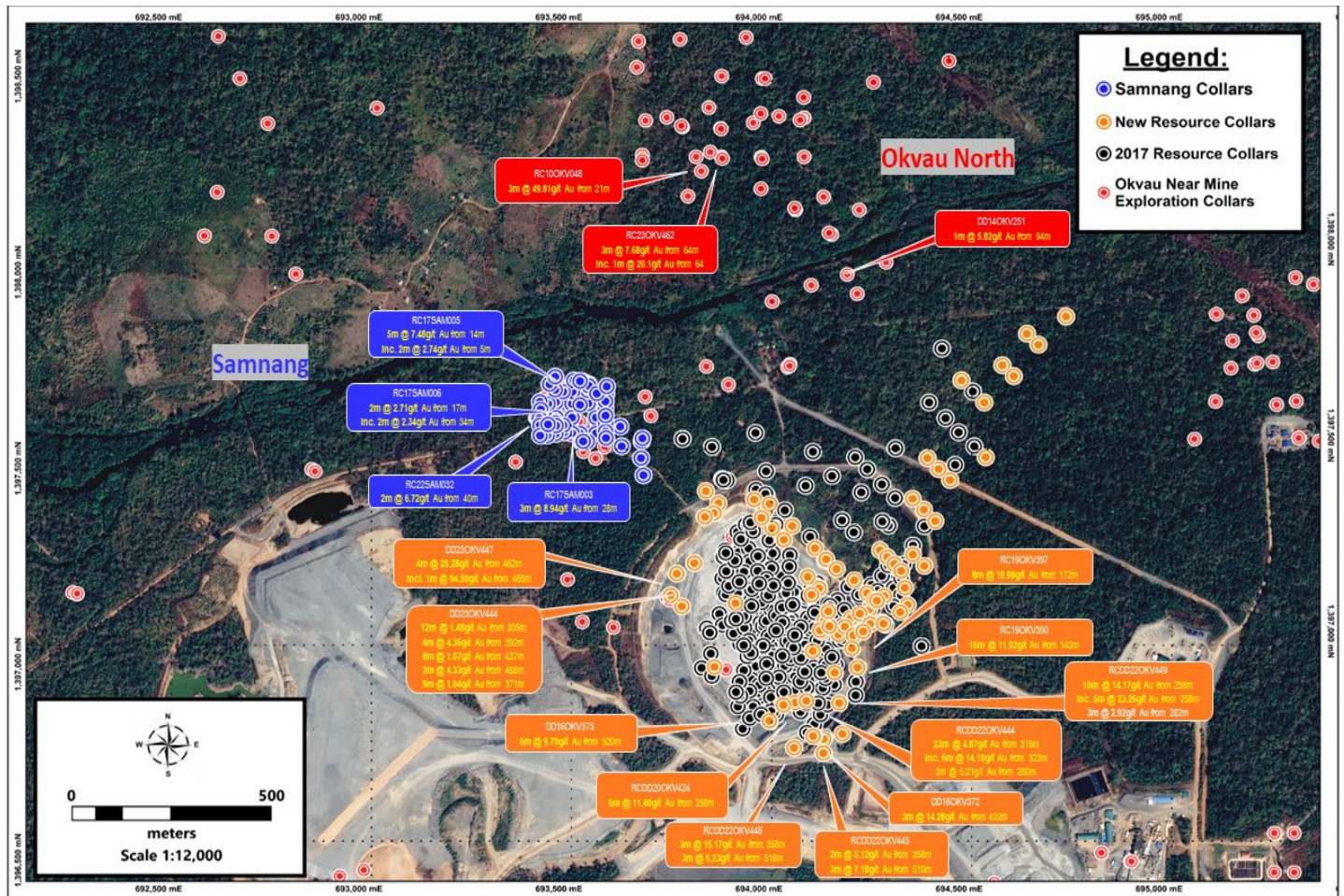
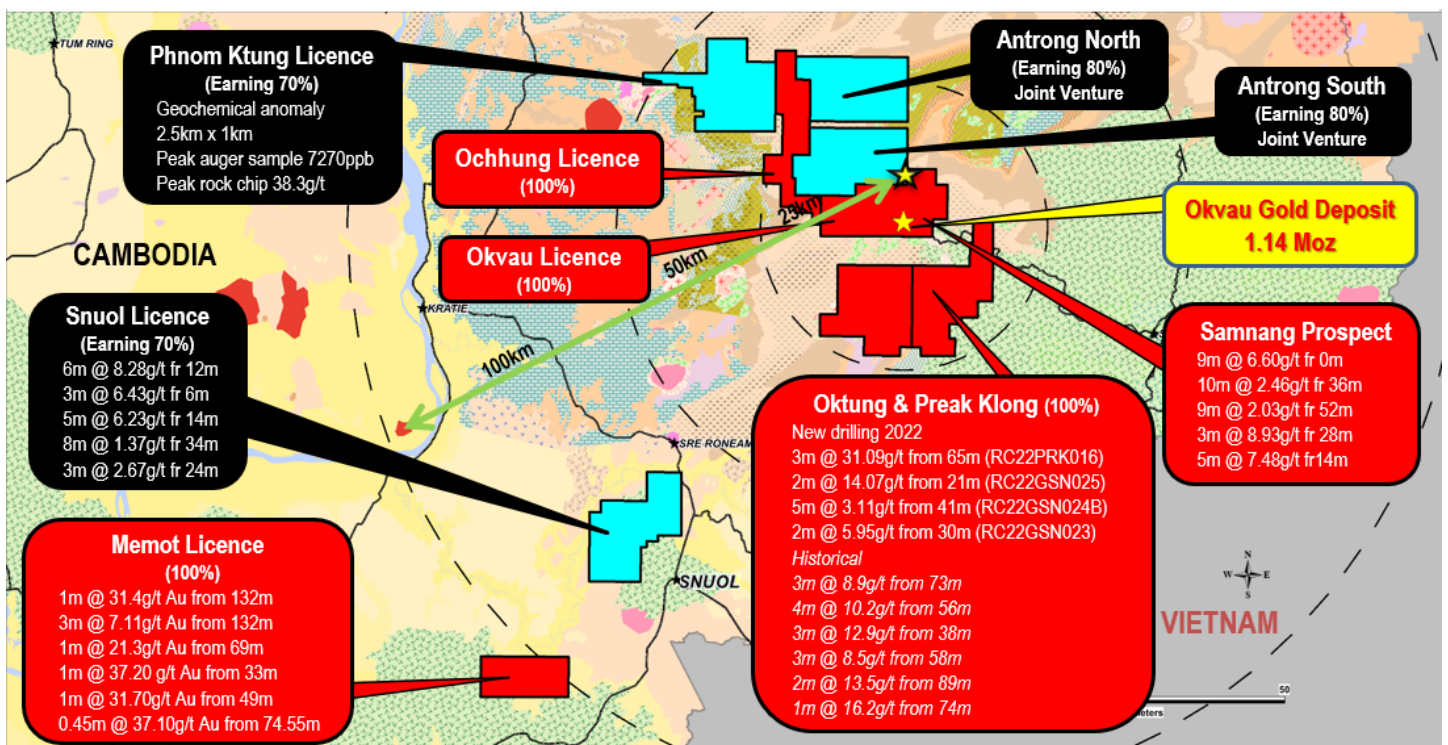


Figure 5 | Emerald Resources Cambodian licences with Okvau Gold Project highlighted





This ASX release was authorised on behalf of the Emerald Board by: Morgan Hart, Managing Director.

For further information please contact  
Emerald Resources NL

**Morgan Hart**  
**Managing Director**

## **About Emerald Resources NL**

### **Overview**

Emerald is a developer and explorer of gold projects. Emerald's Okvau Gold Project, Cambodia was commissioned in June 2021 and in full production by September 2021. Emerald has now poured over 7,000kgs of gold doré from its operations.

Emerald also holds a number of other projects in Cambodia which are made up of a combination of granted mining licences (100% owned by Emerald) and interests in joint venture agreements. Together, Emerald's interest in its Cambodian Projects covers a combined area of 1,639km<sup>2</sup>.

Emerald has a controlling interest in Bullseye Mining Limited (57.34%), an unlisted Australian public company with three Western Australian gold projects totalling in excess of 1,200km<sup>2</sup> of highly prospective gold tenure including the North Laverton Gold Project which covers in excess of 800km<sup>2</sup> of the entire Dingo Range greenstone belt.

### **Forward Looking Statement**

This document contains certain forward looking statements. These forward-looking statements are not historical facts but rather are based on the Company's current expectations, estimates and projections about the industry in which Emerald Resources operates, and beliefs and assumptions regarding the Company's future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to known or unknown risks, uncertainties and other factors, some of which are beyond the control of the Company, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward looking statements, which reflect the view of Emerald Resources only as of the date of this announcement. The forward looking statements made in this release relate only to events as of the date on which the statements are made. Emerald Resources will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority. This document has been prepared in compliance with the current JORC Code 2012 Edition and the ASX listing Rules.

The Company believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any production targets and financial estimates, based on the information contained in this announcement. Reference is made to ASX Announcements dated 1 May 2017 and 26 November 2019. All material assumptions underpinning the production target, or the forecast financial information continue to apply and have not materially changed. 100% of the production target referred to in this announcement is based on Probable Ore Reserves.

Emerald has a highly experienced management team, undoubtedly one of the best credentialed gold development teams in Australia with a proven history of developing projects successfully, quickly and cost effectively. They are a team of highly competent mining engineers and geologists who have overseen the successful development of gold projects in developing countries such as the Bonikro Gold Project in Cote d'Ivoire for Equigold NL and more recently, Regis Resources Ltd.

### **Competent Persons Statements**

The information in this report that relates to Exploration Drill Results for both Resources from Okvau is based on information compiled by EGRM Consulting Pty Ltd, Mr Brett Gossage, who is a consultant to the Company, who is a Member of the Australasian Institute of Mining & Metallurgy (AUSIMM), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Gossage has reviewed the contents of this release and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Drill Results for both Resources from Okvau is based on information compiled by Mr Keith King, who is an employee to the Company and who is a Member of The Australasian Institute of Mining & Metallurgy. Mr Keith King has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr King has reviewed the contents of this release and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which it appears.



The information in this report that relates to Open Pit Mineral Resources for the Okvau Gold Deposit was prepared by EGRM Consulting Pty Ltd, Mr Brett Gossage, who is a consultant to the Company, who is a Member of the Australasian Institute of Mining & Metallurgy (AUSIMM), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Gossage has reviewed the contents of this release and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which it appears.

The information in this report that relates to Underground Mineral Resources for the Okvau Gold Deposit was prepared by Mr Keith King, who is an employee to the Company, who is a Member of the Australasian Institute of Mining & Metallurgy (AusIMM), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr King has reviewed the contents of this news release and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which it appears.

Information in this announcement that relates to Ore Reserves for the Okvau Gold Deposit is based on, and fairly represents, information and supporting documentation prepared by Mr Glenn Williamson, an independent specialist mining consultant. Mr Williamson is a Member of the Australasian Institute of Mining & Metallurgy. Mr Williamson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (or 'CP') as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Williamson has reviewed the contents of this news release and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which it appears.

#### **No New Information**

To the extent that announcement contains references to prior exploration results and Mineral Resource estimates, which have been cross referenced to previous market announcements made by the Company, unless explicitly stated, no new material information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Appendix One | JORC Code, 2012 Edition | 'Table 1' Report

Section 1 Sampling Techniques and Data from Drilling included in Resources

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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>Diamond drilling is used to recover a continuous core sample of bedrock. As a standard 1m length half-core samples are submitted for assay, in a small number of cases sample interval lengths have been modified to use geological boundaries as the limit of sample interval for assay.</li> <li>Reverse circulation (RC) drilling is used to collect 1m samples prior to 2017 these are riffle split at the drill rig to produce a 3-5kg sub-sample. From 2017 reverse circulation (RC) drilling is used to collect both a 4m composite and 1m samples. The 4m composite are taken from the excess bagged material off the cone splitter taken every 1m. A spear sampling technique is then used to produce a 3-5kg composite sample. The 1m samples are split with a cone splitter at the drill rig to produce a 3-5kg sub-sample. These 1m samples are submitted after the results of the 4m composites are received to identify the zones of mineralisation.</li> <li>Current drill sample preparation is carried out at a commercial off-site laboratory (ALS Phnom Penh). Gold assays are conducted at ALS Vientiane, Laos utilising a 50gram subsample of 85% passing 75µm pulped sample using Fire Assay with AAS finish on and Aqua Regia digest of the lead collection button. Multi-element assay is completed at ALS, Perth, Australia on a 1g pulp subsample digested by Aqua Regia and determined by ICP-AES or ICP-MS for lowest available detection for the respective element.</li> <li>Sample preparation is carried out at a commercial off-site laboratory (ALS Phnom Penh) and gold assays are conducted at the ALS Vientiane assay laboratory.</li> <li>Standards, duplicates and blanks are inserted in sample batches to test laboratory performance.</li> </ul>
Drilling techniques	<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 (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).</li> </ul>	<ul style="list-style-type: none"> <li>A track-mounted Boart Longyear LF70 M/P drill rig is used to drill HQ3 and NQ2 diamond core.</li> <li>A track mounted Boart Longyear DB540 M/P drill rig is used to drill 5.25 inch RC holes.</li> <li>Core diameter varies – HQ, HQ3, NQ, NQ2, NQ3, NTW and BTW used at various times.</li> <li>Core was oriented by means of a REFLEX ACT orientation tool, following a standard operating procedure, for all drilling subsequent to 2009. A spear tool was used for drilling pre-2009.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<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>All RC 1m samples and sub-samples (pre- and post-split) are weighed at the rig, to check that there is adequate sample material for assay. Any wet or damp samples are noted and that information is recorded in the database; samples are usually dry.</li> <li>Diamond core recovery is routinely monitored by comparing recovered core vs drill run lengths – recovery is consistently high. Recovery data are recorded on drill run lengths.</li> <li>There is no relationship between sample recovery and grade.</li> </ul>
Logging	<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 RC chips and diamond core is routinely logged (qualitatively) by a geologist, to record details of regolith (oxidation), lithology, structure, mineralization and/or veining, and alteration. In addition, the magnetic susceptibility of all samples is routinely measured. All logging and sampling data are captured into a database, with appropriate validation and security features.</li> <li>A geotechnical log is produced for all diamond core.</li> <li>Core has been logged to an appropriate level of detail by a geologist to support mineral resource estimation.</li> <li>100% of core is logged, with the mineralised intersections logged to greater detail.</li> <li>In addition to the geological logging, other features recorded are: location of bulk density samples; downhole camera survey calibration, intervals confidently oriented; and core condition.</li> <li>Standard field data are similarly recorded (qualitatively) routinely by a geologist for all soil sampling sites.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Field duplicates are inserted at regular intervals downhole (every 25m) and are collected at the RC drill rig to monitor sampling precision; while coarse crush duplicates of diamond core are generated at the sample prep stage (because of the need to preserve drill core).</li> <li>This sample technique is industry standard and is deemed appropriate for the deposit style at Okvau.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>All drill samples are sent to the NATA accredited ALS Laboratory in Vientiane, Laos, for fire assay. From 2016 a 50g fire assay was completed (Au-AA26: 50g ore grade method, total extraction by fusion, with an AA finish). Samples reporting &gt;100ppm upper detection limit are repeated by Au-AAGRA22 method, graphite furnace with gravimetric finish. Pre 2016, a 30g fire assay was completed (Au-AA25: 30g ore grade method, total extraction by fusion, with an AA finish), samples which report &gt;100ppm upper</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>detection limit are repeated by Au-AAGRA22 method, graphite furnace with gravimetric finish.</li> <li>Resource and Metallurgy samples are sent to the similarly accredited ALS Lab in Brisbane, Australia, for multi-element ICP analysis, after aqua regia digest of a 1g charge by ME- MS42: ICP-MS for Ag, As, Bi, Cu, Sb, Te, Hg. Multi-element samples returning &gt;250ppm upper limit for Ag, As, Bi, Cu, Sb, Te by ME-MS42 are repeated by ME-IC41: ICP-AES.</li> <li>All Exploration 1m RC samples and soil samples are sent to the NATA accredited ALS Laboratory in Brisbane, Australia, for gold and multi-element ICP analysis, after digest of a 50g charge by aqua regia (TL44-MEPKG, ICP MS/AES for Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sn, Sr, Te, Th, Ti, Tl, Te, Th, Ti, Tl, U, V, W, Zn.</li> <li>Fire assay is considered a total gold assay.</li> <li>This method has a lower detection limit of 0.01g/t Au.</li> <li>All magnetic susceptibility measurements of drill samples are made with a Terraplus KT-10 magnetic susceptibility meter.</li> <li>An appropriate sample preparation and analytical quality control programme confirms that the gold fire assay values are of acceptable quality to underpin mineral resource estimation.</li> <li>Industry-standard QAQC protocols are routinely followed for all sample batches sent for assay, which includes the insertion of commercially available CRMs and blanks into all batches - usually 1 of each for every 20 field samples. Some blanks used are home-made from barren basalt or quarry granite. QAQC data are routinely checked before any associated assay results are reviewed for interpretation, and any problems are investigated before results are released to the market.</li> <li>All assay data, including internal and external QA/QC data and control charts of standard, replicate and duplicate assay results, are communicated electronically.</li> <li>Reviews of QA/QC data by Emerald Technical staff concluded that the quality of assay data is sufficient to support reporting of the Okvau Resource Estimate.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>The calculations of all significant intercepts (for drill holes) are routinely checked by senior management.</li> <li>Two close spaced (twin) holes confirm confidence in the existence and projection of mineralised intercepts over short ranges.</li> <li>All field data associated with drilling and sampling, and all associated assay and analytical results, are managed in a relational database, with industry-standard verification protocols and security measures in place.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<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>• Brett Gossage visited the site in December 2016 and Keith King has visited the site frequently, with the most recent being April 2023, and visually verified the results in the assay database against mineralised intersections evident in the stored half core.</li> <li>• Drill hole collar locations are surveyed with a differential GPS used in RTK survey mode. The instrument has sub centimetre accuracy for both horizontal coordinates and vertical coordinates.</li> <li>• All locations are surveyed to the WGS84 UTM grid. Collar coordinates are routinely converted to a local grid (local N is approx. equivalent to UTM 045°), with an appropriate transformation about a common point - to simplify the interpretation of drill cross sections.</li> <li>• In 2017, Wes Gartrell, a WA authorised mine surveyor, completed checks on the survey. His work confirmed the accuracy of all the previously collected survey data. From 2017 – 2021 in country contract surveyor’s “Aruna” were used up to the commencement of mining where licenced mine surveyors have recorded the collar locations. Since 2021 the employed licenced mine site surveyors have recorded the collar locations.</li> <li>• The first 9 holes of the Okvau resource drill hole database were not surveyed downhole; but all subsequent holes were surveyed downhole at 25-30m intervals for all types of drilling, using a single-shot REFLEX survey tool (operated by the driller and checked by the supervising geologist).</li> <li>• A topography surface was generated using data collected from a UAV (drone) survey referencing established survey control. This topography surface was confirmed by the survey positions of the drill collars and was applied to this Study.</li> </ul>
Data spacing and distribution	<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>• Intersection spacing for the Okvau Resource Estimate is typically 25m by 25m or better in the top 100m of the deposit. Below 120m vertical the drill spacing widens to 25m drill sections and 50m on or along section.</li> <li>• RC grade control drilling (pattern from 5m by 5m) and in pit mapping is also available</li> <li>• This drill spacing is considered to be sufficient to establish geological and grade continuity appropriate for the declaration of a Mineral Resource.</li> <li>• No samples within a “zone of interest” are ever composited.</li> </ul>
Orientation of data in relation to geological structure	<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 usually designed to intersect target structures with a “close-to-orthogonal” intercept.</li> <li>• Drilling has been done at various orientations; moderately to steeply northwest dipping is the most common.</li> <li>• Most of the drill holes intersect the mineralised zones at sufficient angle for the risk of significant sampling orientation bias to be low.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The chain of custody for all drill samples from the drill rig and soil/auger samples from the field to the ALS Sample Preparation facility in Phnom Penh is managed by Renaissance personnel. Drill samples are transported from the drill site to the Okvau exploration core farm, where they are logged and all samples are batched up for shipment to Phnom Penh.</li> <li>Sample submission forms are sent to the ALS Sample Prep facility in paper form (with the samples themselves) and also as an electronic copy. Delivered samples are reconciled with the batch submission form prior to the commencement of any sample preparation.</li> <li>ALS is responsible for shipping sample pulps from Phnom Penh to the analytical laboratories in Vientiane, Brisbane and Perth and all samples are tracked via their Global Enterprise Management System.</li> <li>All bulk residues are stored permanently at the ALS laboratory in Vientiane.</li> <li>No information is available regarding sample security procedures for the historical drilling results reported.</li> </ul>
Audits or reviews	<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>All QAQC data are reviewed routinely, batch by batch, and on a quarterly basis to conduct trend analyses, etc. Any issues arising are dealt with immediately and problems resolved before results are interpreted and/or reported.</li> <li>Comprehensive QAQC audits have been conducted on this project by Duncan Hackman (August 2009, February 2010 &amp; November 2011), SRK (February 2013), Nola Hackman (January 2014), Brian Wolfe (2015) and Brett Gossage (2017).</li> <li>Senior Emerald Technical staff routinely review the available quality data and have concluded the data quality is robust and appropriate for resource estimation studies.</li> </ul>

## Section 2 Reporting of Exploration Results from Recent Drilling at Okvau

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<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 licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Okvau Project is located on the Okvau Industrial Mining Licence (No.003) which is held (100%) in the name of Renaissance Minerals (Cambodia) Ltd, a wholly owned Cambodian subsidiary of Renaissance Minerals Ltd. Emerald Resources NL owns 100% of Renaissance Minerals Ltd.</li> <li>The tenure is considered to be completely secure.</li> <li>The Okvau Exploration Licence is located within the broader Phnom Prich Wilderness Sanctuary area but located outside of the 'core zone'.</li> <li>The Royal Government of Cambodia (via the Ministry of Mines and Energy) has been very supportive throughout the construction and mining of the Project to date.</li> </ul>



Criteria	Explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Renaissance Minerals (Cambodia) Ltd was acquired by Renaissance Minerals Ltd (ASX RNS) in May 2012 and was formerly named OZ Minerals (Cambodia) Ltd when it was a 100% owned subsidiary of OZ Minerals Ltd. OZ Minerals was formed in 2009 by the merger of Oxiana Ltd (who initiated the Okvau Project) and Zinifex.</li> <li>Oxiana and OZ Minerals completed the following work at Okvau between 2006 and 2011: a resource drill-out of the Okvau deposit; plus a regional geological interpretation of Landsat imagery; stream sediment geochemistry, with some soil sampling follow-up; airborne magnetic and radiometric surveys over both ELs, and various ground geophysical surveys (including gradient array IP); geological mapping and trenching; and the initial drill testing of various exploration targets.</li> </ul>
Geology	<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 Okvau deposit is interpreted as an "intrusion-related gold system". It is hosted mostly in Cretaceous age diorite and, to a lesser extent, in surrounding hornfels (metamorphosed, fine-grained clastic sediments). Gold mineralization is hosted within a complex array of sulphide veins, which strike northeast to east-west, and dip at shallow to moderately steep angles, to the south and southeast.</li> <li>Mineralisation is structurally controlled and mostly confined to the diorite. The highest grade intersections generally occur at the diorite-hornfels contact.</li> <li>The host diorite at Okvau is one of numerous similar Cretaceous-aged intrusions in eastern Cambodia, which are believed to be related to an ancient subduction zone that was located to the east, off the coast of current Vietnam.</li> </ul>
Drill hole Information	<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 holes: <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> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Okvau Resource Estimate is based on a database of 328 drill holes, for a total of 64,342m. The database is comprised of 122 diamond holes (36,146m), 186 RC drill holes (20,878m) and 20 RC collars and diamond tails (7,318m). Intersection spacing for the Okvau Resource Estimate is typically 25m by 25m in the top 100m of the deposit. Below 120mRL vertical metres the drill spacing widens to 25m drill sections and 50m on or along section.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for</li> </ul>	<ul style="list-style-type: none"> <li>Compositing done the Okvau Resource Estimate is discussed in Section 3.</li> </ul>

Criteria	Explanation	Commentary
	<p>such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The majority of drill holes intersect the mineralisation at a sufficient angle for the risk of sampling orientation bias to be low.</li> </ul>
Diagrams	<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>Appropriate maps are included in the body of this release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All significant drilling results are intersections with a minimum of 2 gram metre values.</li> </ul>
Other substantive exploration data	<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>Surface geological mapping and detailed structural studies have helped inform the geological model of the Okvau Deposit.</li> <li>Emerald has completed a Definitive Feasibility Study, the result of which are reported in this release. This study included metallurgical, geotechnical and hydrological studies.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further drilling at the Okvau Deposit will be undertaken to test lateral extensions of the known mineralisation</li> <li>Further drilling will be undertaken to test new targets, as potential is recognized.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	Explanation	Commentary
Database integrity	<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>During site visits, field observations were compared with the corresponding information in the database.</li> <li>Visual checks were made to confirm that mineralised intervals evident in the drill core corresponded with assay results in the database.</li> <li>Collar positions were checked on the ground to confirm positional accuracy.</li> </ul>
Site visits	<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>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>Site visits are regularly conducted by Keith King, with the most recent being April 2023. No material issues have been identified as part of these visits.</li> <li>A site visit was completed to the Okvau site by Brett Gossage on 6 December 2016. In</li> </ul>

Criteria	Explanation	Commentary
		<p>addition, the ALS sample preparation laboratory in Phnom Penh was reviewed on 5/12/2017. No material issues were identified. No review of the ALS Assay Laboratory in Vientiane, Laos, however, independent consultant Mr Brian Wolfe, completed a review of this facility in 2015 and concluded the laboratory was laboratories appeared clean and organized and no material issues were noted.</p> <ul style="list-style-type: none"> <li>• Diamond drilling was being completed during the site visit. The drilling and sampling was completed consistent with good industry practice.</li> <li>• The core management facilities were observed, and appeared to be organised and well suited to managing the logging and sampling procedures efficiently.</li> <li>• No RC drilling was being completed during the site visit. The drilling and sampling protocols were reviewed and are considered to represent good industry practices.</li> <li>• Based on the site reviews, no data quality issues have been identified sufficient to affect the currently designated classification of the resources.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>• Site visits are regularly conducted by Keith King, with the most recent being April 2023. No material issues have been identified as part of these visits.</li> <li>• The ALS sample preparation laboratory in Phnom Penh was reviewed in April 2022 by Keith King and no material issues were identified.</li> <li>• No review of the ALS Assay Laboratory in Vientiane, Laos, however, independent consultant Mr Brian Wolfe, completed a review of this facility in 2015 and concluded the laboratory was laboratories appeared clean and organized and no material issues were noted.</li> <li>• Diamond drilling and RC drilling were being completed during the site visits. The drilling and sampling were completed consistent with good industry practice.</li> <li>• The core management facilities were observed and appeared to be organised and well suited to managing the logging and sampling procedures efficiently.</li> <li>• Based on the site reviews, no data quality issues have been identified sufficient to affect the currently designated classification of the resources.</li> </ul>
Geological Interpretation	<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> <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><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>• The mineralisation is hosted within a Cretaceous diorite intrusion emplaced in a Triassic metasedimentary package. Gold grade continuity is best defined along the traces of planar shears within the diorite that extend into the metasediments (hornfels).</li> <li>• A wireframe solid of the diorite has been generated and is used as a control of the mineralisation constraints. In addition, a wireframe representing the top of fresh has also been interpreted by Emerald.</li> <li>• A mineralisation constraint was modelled based on a cross sectional and fliitch interpretation that was completed by Emerald using a 0.5gt Au lower cutoff grade. The interpretation included 2m external dilution</li> </ul>



Criteria	Explanation	Commentary
		<p>and a maximum 5m internal dilution. This interpretation was completed applying the interpreted geological controls.</p> <ul style="list-style-type: none"> <li>An indicator kriging estimate was generated using 1m downhole composites of the drilling coded with the Emerald mineralisation interpretation. A grade shell was constructed using a 0.35 or greater probability threshold estimated with the indicator kriging. The grade shell was constrained to within 100m of the nearest data point in the diorite and 75m within the hornfels. This grade constraint ensures the appropriate continuity of the interpreted zones with the inclusion of additional sub-grade material. The mineralisation constraint has been used for the resource estimation studies.</li> <li>Alternative grade constraints were generated by varying the cut-off grade, intercept criteria and the probability of the indicator estimate. The continuity of these alternative interpretation was variable according to the chosen parameters and the chosen grade shell was felt to be the most representative of the mineralization continuity and 3D geometry.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The mineralisation is hosted within a Cretaceous diorite intrusion emplaced in a Triassic metasedimentary package. Gold grade continuity is best defined along the traces of planar shears within the diorite that extend into the metasediments (hornfels).</li> <li>Wireframe solids representing each mineralised structure were created using implicit modelling in Micromine. The wireframes have been modelled to identify structures grading 2g/t over a minimum width of 3m, though incorporate lower grade material where appropriate to ensure continuity of the structure, including a maximum of 2m internal dilution.</li> <li>Alternative grade constraints were generated by varying the cut-off grade and intercept criteria. The continuity of these alternative interpretation was variable according to the chosen parameters and the chosen parameters were felt to be the most representative of the mineralization continuity and 3D geometry.</li> </ul>
Dimensions	<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 mineralization has been delineated over a strike length of approximately 600m, a width of approximately 500m and to a depth of 400m below surface.</li> </ul>
Estimation and modelling techniques	<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> </ul>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>Multiple Indicator Kriging (MIK) with change of support to estimate recoverable resources was chosen as the most appropriate estimation method for the Okvau Open Pit gold resource.</li> <li>Secondary variables (sulphur, arsenic, bismuth, antimony, copper, and tellurium) have been estimated using Ordinary Kriging (OK).</li> <li>The mineralisation domain to constrain estimation was modelled as described above. Diorite and hornfels mineralisation have been estimated separately with soft boundaries used to limit the sharing of data between the mineralisation domains.</li> </ul>

Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <li>The assumptions made regarding recovery of by-products.</li> </ul>	<p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>Ordinary Kriging (OK) was chosen an appropriate estimation method for the Okvau Underground gold resource.</li> <li>Secondary variables (sulphur, arsenic, bismuth, antimony, copper, and tellurium) have been estimated using Ordinary Kriging (OK).</li> <li>The mineralisation domain to constrain estimation was modelled as described above. Mineralised domains have been estimated separately with hard boundaries used to eliminate the sharing of data between the mineralised domains.</li> </ul>
	<ul style="list-style-type: none"> <li>Estimation of deleterious elements or other non-grade variables of economic significant (eg Sulphur for acid mine drainage characterization).</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 assumption 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 drillhole data, and use of reconciliation data if available.</li> </ul>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>A downhole composite length of 2m has been used in estimation.</li> <li>Variogram model were generated and fitted for indicator and gold grade variograms. Separate variography was modelled for hornfels and diorite.</li> <li>A parent block size of 20mE x 25mN x 10mRL was used for grade estimation.</li> <li>A multiple pass estimation strategy was applied.</li> <li>Sample neighbourhood of dimensions of 50m x 50m x 20m, 100m x 100m x 40m, and 200 x 200mN x 80mRL were used for passes 1, 2 and 3 respectively. The reported resource is comprised of little of the 3rd estimation pass.</li> <li>A maximum of 40 and with a minimum of 24 (pass 1) and 12 (passes 2 &amp; 3) composites have been used in grade estimation. A maximum number of 8 composites from any drillhole have been allowed to estimate a single block.</li> <li>A combination of soft and semi-soft boundaries were used in grade estimation. Composites from the adjacent domain (ie hornfels when estimating diorite and the reverse) were used for estimation pass 1 (50m by 50m by 20m). For estimation passes 2 and 3, the adjacent domain composites were required to be within 40m by 40m by 10m of the block centroid for estimation. Adjacent domain composites further than this distance were excluded.</li> <li>Composite grades were capped at 25g/t for the hornfels and 40gt for the diorite fresh domains and 3gt and 10g/t for the hornfels and diorite oxide domain respectively.</li> <li>Density values were assigned based on lithology and oxidation. The assigned diorite density for oxide was 1.89t/m<sup>3</sup> and 2.87t/m<sup>3</sup> for fresh material. The assigned hornfels density was 1.89t/m<sup>3</sup> for oxidised rock and 2.78t/m<sup>3</sup> for fresh material. Any material grading higher than 0.8g/t has been assigned a density of 2.95t/m<sup>3</sup> due to the massive sulphides associated with mineralization, as observed in core sample bulk density measurements and from samples taken during production in the open pit.</li> <li>The topography surface was generated using data collected from a UAV (drone) survey referencing established survey control.</li> <li>From the MIK panel estimate, a selective mining unit (SMU) estimate has been generated based on a 5m by 5m and 5m block size. This SMU is based on the envisaged mining practices likely to be employed at</li> </ul>

Criteria	Explanation	Commentary
		<p>Okvau.</p> <ul style="list-style-type: none"> <li>The MIK SMU has been localised to SMU size blocks for visualisation and mine planning purposes.</li> <li>Previous resource estimates are available (SRK 2013) and Wolfe (2015). Differences have been noted estimates in terms of grade, tonnage and resource classification relative to the current estimate. The differences are interpreted to be a result of improved understanding of the structural controls, additional drill hole data, differences in the domaining approach and the estimation method.</li> <li>The grade estimates were statistically and visually validated prior to acceptance.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>A downhole composite length of 1m has been used in the Underground resource estimation.</li> <li>Variogram models were generated and fitted for each mineralised domain.</li> <li>The parent block size within the estimated domain is 2.5mN x 2.5mE x 2.5mRL. The parent block size was chosen based on mineralised bodies dimension and orientation, estimation methodology and relates to the likely method of future underground production. The search ellipse was oriented in line with the interpreted mineralized bodies. Search ellipse dimensions were chosen to encompass adjacent drillholes on sections and adjacent lines of drilling along strike and designed to fully estimate the mineralized domains.</li> <li>A multiple pass estimation strategy was applied.</li> <li>A maximum search distance of 63m and 126m were used for passes 1 and 2 respectively.</li> <li>Input composite counts for the estimates were variable and set at a minimum of 4 data points across a minimum of two drill holes within the search ellipse to estimate a single block for pass 1 which was relaxed to a minimum 4 data points for pass 2.</li> <li>Composite grades were capped at 42g/t for all mineralised domains.</li> <li>The assigned density for mineralised domains is 2.95t/m<sup>3</sup>. All material for this estimation is below the current designed pit and is logged as fresh material. 2.95t/m<sup>3</sup> has been selected as the density for mineralized zones as they have been observed, in drilled samples and in production, to have a higher density than the surrounding material due to the massive sulphides associated with mineralisation.</li> <li>The topography surface was generated using data collected from a UAV (drone) survey referencing established survey control.</li> <li>No previous modelling or estimation have been completed on the Okvau deposit for the purpose of underground mining. Comparison of tonnage and grade to the current Okvau Open Pit estimation at underground cut-offs produce similar results.</li> <li>The grade estimates were statistically and visually validated prior to acceptance.</li> </ul>
Moisture	<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 are estimated on a dry basis, as described above.</li> </ul>



Criteria	Explanation	Commentary
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The resource model has been designed to be robust for a range of lower cutoff grades between 0.3gt to 1.0gt. Based on the results of the Feasibility Study completed by Emerald, a cut-off of 0.70g/t was chosen as the base case for reporting Mineral Resources.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>A 3g/t Au cut-off grade is estimated to be the minimum grade required for economic extraction at current metal prices.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, extraction) mining dilution. 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 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>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The resource model assumes open cut mining is completed and a moderate to high level of mining selectivity (SMU dimension of 5mE x 5mN x 5mRL) is achieved in mining. This level of mining selectivity is consistent with the grade control approach but mining modifiers are required to account further for ore loss and dilution.</li> <li>It has been assumed that high quality grade control will be applied to ore/waste delineation processes using RC drilling, or similar, applying a pattern sufficient to ensure adequate coverage of the mineralisation zones.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The resource model assumes underground mining is completed and a moderate to high level of mining selectivity is achieved in mining.</li> <li>It has been assumed that high quality grade control will be applied to ore/waste delineation processes applying a pattern sufficient to ensure adequate coverage of the mineralisation zones.</li> </ul>
Metallurgical factors or assumptions	<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>Renaissance has undertaken several phases of metallurgical test work at the Bureau Veritas Minerals Pty Ltd laboratories in Perth, Western Australia under the management of Renaissance's metallurgical consultant Metpro Consultants Pty Ltd. Further metallurgical test work has been undertaken at ALS Metallurgy Pty Ltd laboratories in Perth, Western Australia under the control of Emerald resources NL. Utilising coarse grinding and flotation, fine grinding of a low mass concentrate and conventional cyanide leaching of concentrate and flotation tails the average LOM gold recovery is estimated to be 84%.</li> </ul>
Environmental factors or assumptions	<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 option. While at this stage the determination of potential environmental impact, 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>Due to the low relief and reasonably open topography of the area, and the lack of land conflict issues, it is assumed that waste and process residue would not preclude the project from progressing.</li> <li>Renaissance has undertaken a detailed Environmental Impact Assessment.</li> <li>Renaissance has submitted its detailed Environmental Impact Assessment to the Ministry of Environment in Cambodia and</li> <li>is progressing with licensing requirements in order to obtain approvals to commence extraction.</li> </ul>
Bulk density	<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</li> </ul>	<ul style="list-style-type: none"> <li>Over 9,000 dry bulk density measurements were taken from selected core samples and routine in pit grab samples, measured using</li> </ul>

Criteria	Explanation	Commentary
	<p>of the measurements, the nature, size and representativeness of the samples.</p> <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>the immersion method.</p> <ul style="list-style-type: none"> <li>The measurements have been sub-divided into fresh and oxidised samples and have also grouped by lithology.</li> <li>Based on the above the bulk densities have been assigned as either 1.89t/m<sup>3</sup> or 2.87t/m<sup>3</sup> for diorite oxide and fresh respectively and 1.89t/m<sup>3</sup> or 2.78t/m<sup>3</sup> for hornfels oxide and fresh respectively. 2.95t/m<sup>3</sup> has been selected as the density for fresh high grade mineralized zones (&gt;=0.8g/t Au) as they have been observed to have a higher density than the surrounding material due to the massive sulphides associated with mineralisation.</li> </ul>
Classification	<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>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The estimate has been classified as Indicated and Inferred based on the quality of the data collected, the density of data, the confidence of the geological model and mineralisation model, and the gold grade estimation quality.</li> <li>Based on these factors, high confidence estimates that were within approximately 30m or better of drilling and have been estimated with high confidence grade interpolation (generally estimation pass 1, or within 20m of drilling for estimation pass 2) were considered as Indicated Mineral Resource.</li> <li>Inferred Mineral Resource blocks were estimates not considered Indicated Resource but still within the interpreted mineralisation zone and within 75m of drilling (when estimated with pass 1 or 2) or within 40m of drilling for estimation pass 3.</li> <li>A cross sectional interpretation was completed using criteria listed above and a wireframe solid produced to capture those blocks that could be considered as Indicated and Inferred Resource. Note the wireframes were constructed such that contiguous zones of indicated and inferred blocks were grouped resulting in isolated blocks being reclassified</li> <li>The result appropriately reflects the Competent Person's view of the deposit.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>The estimate has been classified as Indicated and Inferred based on the quality of the data collected, the density of data, the confidence of the geological model and mineralisation model, and the gold grade estimation quality.</li> <li>Based on these factors, high confidence estimates that were within estimation pass 1 were considered as Indicated Mineral Resource.</li> <li>Inferred Mineral Resource blocks were estimates not considered Indicated Resource but still within the interpreted mineralisation zone and within estimation pass 2.</li> <li>The result appropriately reflects the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<p><b>Open Pit Resource Estimation</b></p> <ul style="list-style-type: none"> <li>No audits or reviews of the Mineral Resource estimate have taken place. However, previous estimates have been generated by independent consultants.</li> </ul> <p><b>Underground Resource Estimation</b></p> <ul style="list-style-type: none"> <li>No audits or reviews of the Mineral Resource estimate have taken place.</li> </ul>

Criteria	Explanation	Commentary
Discussion of relative accuracy / confidence	<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 statement 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 Mineral Resource is considered to be of sufficient local confidence to allow mine planning studies to be completed.</li> <li>The Indicated and Inferred classifications assigned locally to the estimation are considered sufficient to represent the relative accuracy and confidence. This has been applied to a relative confidence based on data density and zone confidence for resource classification.</li> <li>No quantitative analysis in confidence limits has been undertaken.</li> <li>Production data supports the Open Pit grade estimate. The resource estimate is consistent with the grade control estimate. Mining modifiers are to be applied to the Mineral Resource for conversion to Ore Reserves.</li> <li>The Underground Mineral Resource estimate stated herein does not consider other modifying factors that might arise out of mine planning and design such as ore loss, mining dilution or other mineralised material that might be mined in order to access stoping areas during general underground production activities.</li> </ul>

#### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<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 Mineral Resource estimate that forms the basis for this Ore Reserve Estimate was completed by Brett Gossage, Principal Consultant and Director of EGRM. Mr Gossage is a geologist with over 33 years' experience. He is a Member of the AusIMM.</li> <li>The Mineral Resources reported are inclusive of the Ore Reserves.</li> </ul>
Site visits	<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>Glenn Williamson has undertaken site visits for site inspection in support of mine planning and to coordinate groundwater monitoring studies, geotechnical drilling, surveying of exploration drill holes and topographical survey. The visits contributed to the outcome of the initial Ore Reserve estimation process and the development of the DFS.</li> </ul>
Study status	<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.</li> <li>Modifying Factors have been considered.</li> </ul>	<ul style="list-style-type: none"> <li>The study to which this ore reserve estimate and report applies is an updated ore reserve based on further exploration drilling and after a two year period of mining and processing has occurred. The study has been conducted at a level necessary to establish that the mine plan is technically achievable and economic with modifying factors considered and applied where appropriate.</li> </ul>
Cut-off parameters	<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>Cut-off grade reported in the Ore Reserve Statement has been calculated on the basis of a gold price of US\$1,250 per Troy ounce. Mining recovery and mining dilution have been applied to the resource model in the MIK resource estimation stage no additional mining loss or mining dilution has been applied in the</li> </ul>



Criteria	Explanation	Commentary
		<p>calculation of the reserve. Metallurgical recovery has been applied at 84% and costs have been estimated from quotations or established by estimation from first principles. The milling and administration costs have been estimated from first principles as part of a DFS study and the use of 84% metallurgical recovery is based on the results of metallurgical test work.</p>
Mining factors or assumptions	<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 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 (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>• The mining dilution factors used.</li> <li>• The mining recovery factors used.</li> <li>• Any minimum mining widths used.</li> <li>• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>• The infrastructure requirements of the selected mining methods.</li> </ul>	<ul style="list-style-type: none"> <li>• Whittle Optimisation was used to establish the basic shell on which to base design. Inputs included cost factors, both quoted earthmoving and drill and blast costs and estimated administration and milling costs, pit slopes, US\$1,200 per ounce gold price, mining recovery (100%) and dilution (0%) and metallurgical recovery (85%).</li> <li>• From within the optimal shell, a nested shell was selected that provided space for cutback and a basis for evening out the production schedule for balancing fleet requirements.</li> <li>• Pit slopes were recommended based on a study of geotechnical logging of existing exploration diamond drill holes, 5 geotechnical diamond drill holes (two of which were drilled in the most recent resource drilling programme based on the recommendation of Dr PM Dight (Geotechnical Engineer). An overall pit slope of 52 degrees was applied in optimization and design closely matched that with slopes including ramps.</li> <li>• Minimum mining width has not been applied in optimization but has been applied to the resource model as 5mx5mx5m.</li> <li>• Grade control drilling in advance of mining has been allowed for at US\$25/metre for drilling and assaying over 17,000,000 cubic metres.</li> <li>• Inferred material has been included in the optimization in all runs and excluded from pit design analysis. No inferred material has been reported the pit design reported in the Ore Reserve.</li> <li>• The mining schedule associated with the Ore Reserve calls for 2x 120 tonne excavators with 12x90 tonne dump trucks with ancillary gear to mine the ore and waste at the required rate.</li> <li>• The mine design has not been substantially modified since the initial reserve was announced. Production is broadly following the original schedule and design stages. The updated reserve takes account of an updated resource estimate and mining depletion withing the original design.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>• Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The metallurgical process proposed is CIL in association with flotation to process arsenopyrite and antimony which occurs in association with the gold mineralization. The process is established and used by a number of gold producers successfully.</li> <li>• A total of 6 metallurgical holes were drilled in two passes for metallurgical testing. Compositing of samples was done by level to simulate process feed for the holes drilled in the second pass.</li> </ul>

Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical recovery has been applied at 84% in accordance with instruction and the results of test work. No further allowance has been made for deleterious elements.</li> <li>Metallurgical recovery demonstrated by operations to date is approaching that indicated by test work with progressive adjustments being made to the metallurgical circuit.</li> <li>No recoverable minerals are defined by specification in this case.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Project approval has been obtained and the project is now in operation in compliance with environmental requirements.</li> <li>Environmental studies are ongoing for the Okvau Project with environmental impact and mitigation strategies and costs having been established. Waste rock storage and a tailings storage facility are established and in operation. Waste rock characterization studies have been undertaken and contributed to design and costing in all phases of Earthmoving, Operations and Closure planning.</li> </ul>
Infrastructure	<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>All required infrastructure is now in existence at the site in support of ongoing operations.</li> </ul>
Costs	<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 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>All startup capital required for ongoing operations has been spent and only minor sustaining capital to be budgeted from cash flow is required for mining of remaining reserve.</li> <li>Deleterious elements such as arsenic and tellurides occur in the deposit. The effect of these on recovery has been indicated by metallurgical test work. The environmental impact of these minerals in the TSF and Waste Storage areas has been studied and mitigation of the effect of them has been considered in DFS design and costing</li> <li>Operating costs have, in the case of mining, been quoted by a mining contractor for drill and blast and load and haul. In-house first principles estimates have been made by Emerald as part of a DFS for other costs. All costs have been quoted or estimated in US\$. Adjustment to costs have been made for inflation (rise and fall) in succeeding budgets following project commencement.</li> <li>No allowance for royalties was made in the Ore Reserve estimation but royalties have been accounted for subsequently in the detailed financial modelling in the DFS and succeeding budgets.</li> <li>Transportation charges in relation to mining have been accounted for in contract rates quoted for load and haul and drill and blast. Fuel costs take account of delivery to site as do milling costs for consumables.</li> <li>No allowance has been made for refining charges on gold sales in the Ore Reserve study but has been accounted for in the financial model and succeeding budgets.</li> </ul>

Criteria	Explanation	Commentary
Revenue factors	<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>Head grade of gold ore has been estimated by inclusion of dilution within the block model used as the resource model. Blocks within the resource model have been created at 5 metre x 5 metre x 5 metre SMU size and allow for mining dilution in the reported grade, influenced by the geology and surrounding grades.</li> <li>Gold price of US\$1,250 per troy ounce was applied in previous Ore Reserve Analysis. Historically this price has been exceeded for a period of years. The same price has been used on this occasion for consistency.</li> </ul>
Market assessment	<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 gold market has been strong over a reasonable period of time and the gold price used in the study has been exceeded over 7 of the last 10 years. At the time of this study the gold price has been in the order of US\$1,950 per troy ounce.</li> <li>Gold supply has averaged 4,000t/annum over the last 10 years and demand has been consistent with about 66% derived from mining and 34% from recycling.</li> <li>It has been assumed that supply and demand for gold will continue on the same average basis.</li> </ul>
Economic	<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> <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> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>The project was developed on the following basis:</li> <li>A coarse NPV was calculated using DFS estimated Capital of US\$98 million and a discount rate of 5%. Cash flows were allowance for all capital to be spent in year 1 and all mining and processing costs expended on a flat floor basis based on 2,000,000 tonnes per annum processing with associated income from gold sales at \$1,250/troy ounce. This showed an NPV of about US\$245 million over 9 years of the project from commencement of construction based on a static net income total of US\$375 million.</li> <li>Analysis of sensitivities was conducted on the Whittle shell selected for design.</li> <li>Financial modelling of NPV and IRR was conducted with sensitivity estimates in the DFS.</li> <li>Remodelling of economic analysis has been conducted for each yearly budget since project commencement.</li> </ul>
Social	<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>Consultation with stakeholders at local district and provincial levels has been ongoing since the baseline studies commenced a number of years ago. A final draft ESIA was submitted to the Ministry of Environment late December 2016 with feedback from Government and key stakeholders very positive. Project approvals were subsequently received and the project was commenced and has operated successfully for over two years with consultation ongoing.</li> </ul>
Other	<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:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and</li> </ul>	<ul style="list-style-type: none"> <li>Flooding is a material risk to the pit in operations. A substantial waste bund has been constructed to exclude flood waters and mitigate the risk.</li> <li>Emerald submitted to the Ministry of Mines &amp; Energy an application for an Industrial Mining Licence over a Project area of approximately 11km<sup>2</sup> within the existing Okvau Exploration</li> </ul>



Criteria	Explanation	Commentary
	<p>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.</p>	<p>Licence. As part of this process, a comprehensive Environment &amp; Social Impact Assessment for the Project has been submitted to the Ministry of Environment for approval. The current Law on Mineral Resources (2001) provides for the ability to negotiate a Mineral Investment Agreement for projects that the Minister considers to be of significant benefit to Cambodia. Emerald has received the support of the Minister for this and project approval.</p> <ul style="list-style-type: none"> <li>• Emerald has received all material approvals and licences necessary to operate the project.</li> </ul>
Classification	<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>• No Measured Mineral Resources existed in the resource model and all Probable Ore Reserves have been derived from Indicated Mineral Resources.</li> <li>• The results of classification accurately reflect Glenn Williamson's view of the project.</li> </ul>
Audits or reviews	<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>• No audit has been conducted of the Ore Reserve estimate</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>• It is recognised that this may not be possible or appropriate in all</li> <li>• circumstances. 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 grade estimates were statistically and visually validated prior to acceptance in the resource estimation process.</li> <li>• Reconciliation of production against reserve shows a close comparison.</li> <li>• The Probable Ore Reserve which is the subject of the Ore Reserve Statement and DFS is based on an Indicated Mineral Resource where the confidence level is less than confidence would be in a Measured Mineral Resource. Confidence in the associated cost estimates is of a high level with those aspects having been estimated from first principles. Confidence in metallurgical recovery, and mining dilution and loss aspects is moderate, with those aspects having been operationally tested. The overall global confidence in the Probable Ore Reserve is less than for a Proved Ore Reserve.</li> </ul>