ASX Announcement & Media Release

Board & Management

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, Company Secretary
Bernie Cleary, Operations Manager Okvau
Josh Redmond, Operations Manager DRGP
Brett Dunnachie, Chief Corporate Officer
Shannon Campbell, Chief Financial Officer

Company Highlights

Gold Production

- 114koz gold production at AISC US\$818/oz;

- Au for 470koz (Updated Resource (interim) expected second half calendar 2024)

 o 1,428km² of prospective tenure Significant exploration and resource growth potential in Australia:
 o Dingo Range Gold Project (100%) located on the underexplored Dingo

- with corporate governance, international guidelines (IFC PS's) and local laws by engaging and collaborating with all

Registered Office



Expansion to Underground Resource at Okvau

Okvau Gold Mine Resource Estimate of 12.53Mt @ 2.40g/t Au for 965koz which includes:

- Underground Resource update increases +105,000oz to 2.13Mt @ 6.00g/t Au for 410koz¹; and
- Open Pit resource of 10.40Mt @1.66g/t Au for 555koz¹

Highlights

Okvau Gold Mine Mineral Resource and Ore Reserve Highlights:

- Okvau Gold Mine Mineral Resources continue to be replenished on a yearly basis;
- Drilling remains ongoing with the view to extend the Okvau Gold Mine resources/reserves through:
 - Infill and extensions to the underground resource to expand resource base and for reserve conversion;
 - Open pit extensions beyond the current pit shell; and
 - **Near mine prospects.**

Emerald's Global Resource update for Memot Gold Project (EMR 100%) and Dingo Range Gold Project (EMR 100%) on track for second half of calendar 2024.

Emerald Resources NL (ASX: Emerald) ("Emerald") is pleased to advise the expansion to the underground resource and continued replenishment of resources at the 100% owned Okvau Gold Mine in Cambodia as part of the Okvau Gold Mine Resource and Reserve update.

Emerald's Managing Director, Morgan Hart, commented:

"Our resource and reserve update for the Okvau Gold Mine continues to support the Company's view that resources will be replenished on an ongoing basis with continued drilling to extend the current pit shell, below pit for underground potential and near mine prospects.

"In addition, Emerald has ramped up exploration and development activities at its two 100% owned projects, the Dingo Range Gold Project in Western Australia and the Memot Gold Project in Cambodia with updated resources for both projects on track for the second half of calendar 2024."

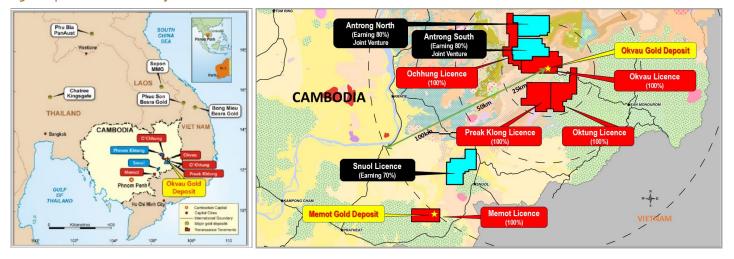
¹ Refer to Table 1 Okvau Gold Mine Resource Estimate



Introduction

The 100% owned Okvau Gold Mine is located in Cambodia approximately 265km northeast of Phnom Penh in the Mondulkiri Province. Emerald is currently mining the Okvau Gold Mine orebody using conventional open pit mining methods. Since first gold pour in June 2021, the project had produced 323,894 ounces of gold with 318,902 ounces poured to June 2024.

Figure 1 | Cambodian Gold Project Locations



Okvau Gold Mine Resources and Reserve Update

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 (refer ASX announcement 1 May 2017 and 31 August 2023).

In August 2023, Emerald announced its maiden underground mineral resource with 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 (refer ASX announcement 31 August 2023).

Since the previous resource and reserve update in August 2023, 17,580m of RC and Diamond drilling has been completed which was designed to infill the existing drill dataset and extended the mineralisation downdip and along strike. The total Okvau drilling dataset equalling 83,144m of drilling was used to update the Underground Resource of which ~38,000m are beneath the current reserve pit.

The Okvau Gold Mine Resource is 12.53Mt @ 2.40g/t Au for 965koz, comprising 10.40Mt @1.66g/t Au for 555koz Open Pit Resource at a lower cut of 0.625g/t Au and 2.13Mt @ 6.0g/t for 410koz Underground Resource lower cut of 3.0 g/t Au. This included an Ore Reserve (Proven and Probable) estimate at 31 March 2024 is 10.29Mt @ 1.66g/t Au for 548,000 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 0.625g/t Au cut-off grade in the current US\$1,450/oz reserve pit shell (refer ASX announcement 1 May 2017 and 31 August 2023). 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 3.52Mt at 0.84 g/t Au for 95koz, Indicated Mineral Resources is 6.83Mt at 2.08 g/t Au for 457koz and Inferred Mineral Resources of 0.05kt at 1.59 g/t Au for 3koz. This is fully depleted for mine depletion as of 31 March 2024.

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 resources. Indicated Mineral Resources is 1Mt at 6.00g/t Au for 192koz and Inferred Mineral Resources of 1.13Mt at 6.00 g/t Au for 218koz is reported. The Resource has been diluted for underground mining.

The Okvau 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 Gold Mine Resource Estimate

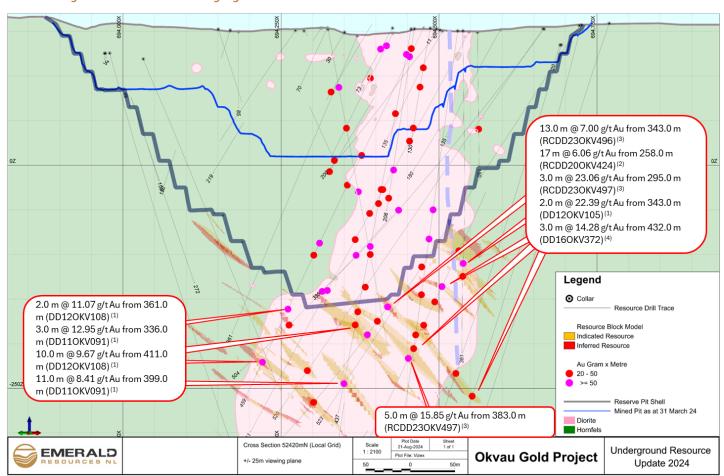
		Meas	ured Res	ources	Indica	ted Re	sources	Inferr	ed Res	ources	Tot	al Resou	rces
Resource	Cut Off	Tonnage	Grade	Contained	Tonnage	Grade	Contained	Tonnage	Grade	Contained	Tonnage	Grade	Contained
Туре	Au g/t	(Mt)	(g/t Au)	Au (Koz)	(Mt)	(g/t Au)	Au (Koz)	(Mt)	(g/t Au)	Au (Koz)	(Mt)	(g/t Au)	Au (Koz)
Stockpiles	0.5	3.52	0.84	95	-	-	-	-	-	-	3.52	0.84	95
Open Pit	0.625	-	-	-	6.83	2.08	457	0.05	1.59	3	6.88	2.08	460
Underground	3.0	-	-	-	1.00	6.00	192	1.13	6.00	218	2.13	6.00	410
Total		3.52	0.84	95	7.83	2.58	649	1.18	5.8	221	12.53	2.40	965

Table 2 | Okvau Gold Mine Reserve Estimate

Okvau Gold Mine - March 2024 Reserve Estimate			
Resources	Tonnage	Grade	Contained Au (oz)
Туре		(g/t) Au	
Proven	3.52	0.84	95
Probable	6.77	2.08	453
Total	10.29	1.66	548

^{*}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 2 | Cross Section of the Okvau Gold Mine Reserve Pit with the underground resource indicated and inferred block model. Previously announced significant intersections are highlighted



⁴ Reference is made to the Company's ASX release dated 28 April 2017

¹ Reference is made to the Company's ASX release dated 1 May 2017 2 Reference is made to the Company's ASX release dated 28 January 2021 3 Reference is made to the Company's ASX release dated 24 January 2024



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 650m of strike and 500m width of the mineralised vein system, to a maximum depth of 650m below surface.

Drilling Techniques, Sampling and Assaying

The Mineral Resource estimate is based on a database of 390 drill holes, for a total of 83,144m. The database is comprised of 123 diamond holes, 226 RC drill holes and 41 RC collars with diamond tails. New drill data completed after the August 2023 Resource and Current Reserve calculation comprises of 1 diamond hole, 40 RC drill holes and 22 RC collars with diamond tails. These drill holes were designed to infill the existing drill dataset and extend the mineralisation downdip and along strike.

Figure 3 | Plan View of the collars used in both the Open Pit and Underground mineral resource estimation

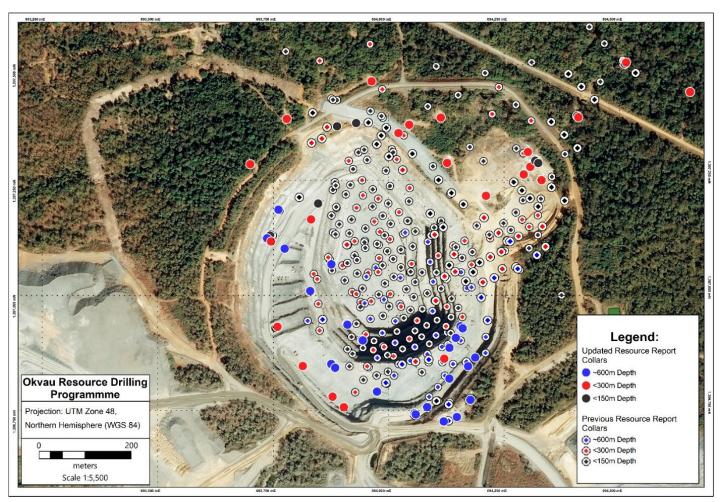
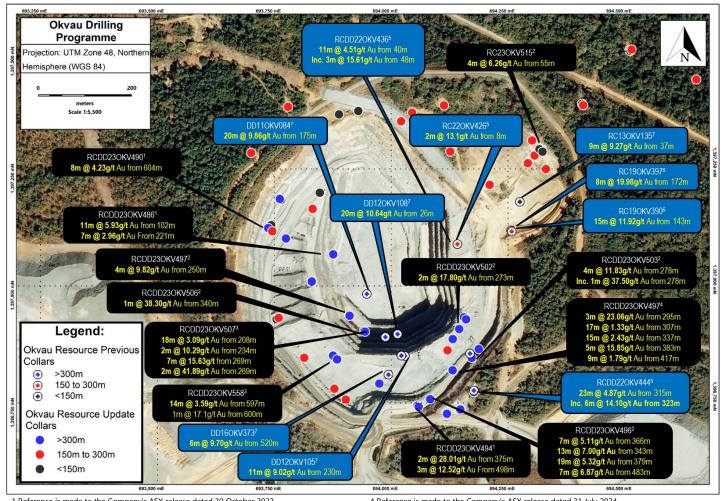




Figure 4 | Plan view of the collars used in the Okvau Underground Resource Estimate with historic results (blue highlights) and recent significant intercepts (black highlights).



- 1 Reference is made to the Company's ASX release dated 30 October 2023 2 Reference is made to the Company's ASX release dated 24 January 2024
- 3 Reference is made to the Company's ASX release dated 18 April 2024
- 4 Reference is made to the Company's ASX release dated 31 July 2024
- 5 Reference is made to the Company's ASX release dated 28 July 2022
- 6 Reference is made to the Company's ASX release dated 02 July 2019 7 Reference is made to the Company's ASX release dated 28 April 2017

Drilling at the Okvau Gold Deposit 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 and 2023 resources, has been previously announced (refer ASX announcement 1 May 2017 and 31 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) agua 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.



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 using a nominal cut-off of 1.5g/t Au, with a downhole width of no less than 3 metres, to account for expected mining dilution, 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 5mNx 5mE x 5mRL, sub-blocked to 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 grade estimates are based on 1m down-the-hole composites of the RC and diamond drilling. High grade cuts were 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 66g/t Au being applied to the dataset.

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 150kt at 6.47g/t Au for 31koz of metal inventory has been estimated outside the Resources reported in this announcement.

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.

Bulk Density

A bulk density dataset was collected throughout the deposit via the immersion method of core billets and routine grab samples collected from the current mined pit. Bulk density measurements (1,256 samples) were averaged from within the mineralised domain and 3.05g/cm³ has been assigned to unoxidized fresh material in the block model for tonnage reporting.

Potential for Eventual Economic Extraction

The Open Pit Mineral Resource comprises blocks with an estimated gold grade above 0.625g/t Au, the current open pit mining break-even cut-off grade for ore is circa 0.40 g/t Au. This is derived from cost and revenue parameters utilised by the current mining within existing reserve pit estimated based on a gold price of US\$2,500/oz.

Underground Mineral Resource comprises blocks with an estimated gold grade above 3g/t Au. This cut-off grade has been selected to be the minimum grade required for economic extraction with a nominal profit margin at current metal prices.

The same metallurgical and recovery assumptions as the 2017 Mineral Resource estimate were also applied to the Underground 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 2024. 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.



Okvau Near Mine Exploration

As previously announced, the Okvau Gold Project has several nearby prospects such as Samnang, Okvau North and Preak Klong (refer Figures 5 and 6) with the potential of becoming sources of supplement feed for the Okvau Gold Mine 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 Au from 0m;

 - 3m @ 8.93g/t Au from 28m;
 - 10m @ 2.46g/t Au from 36m; and
 - 9m @ 2.03g/t Au from 52m.

Okvau North

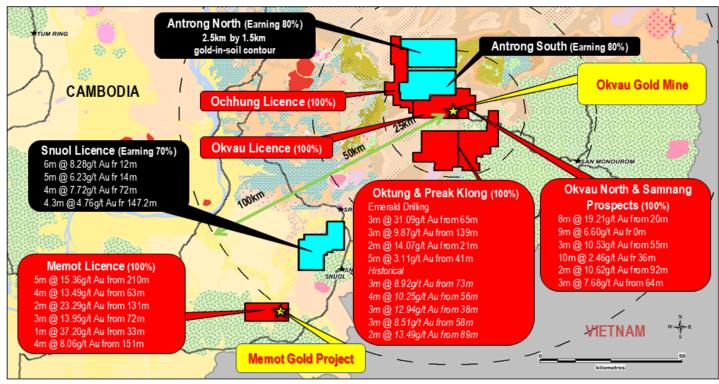
- * refer ASX announcement 4 July 2023⁽¹⁾ and 30 October 2023⁽²⁾
 - 8m @ 19.21g/t Au from 20m⁽¹⁾;
 - 3m @ 49.81g/t Au from 21m⁽¹⁾;
 - 3m @ 7.68g/t Au from 64m⁽¹⁾;
 - 2m @ 10.63g/t Au from 92m⁽²⁾;
 - \approx 8m @ 1.87g/t Au from 37m⁽²⁾; and
 - 4m @ 1.62g/t Au from 110m⁽¹⁾.

Preak Klong NW and Gossan

*refer ASX announcement 1 April 2020 $^{(3)}$ and 29 April 2022 $^{(4)}$

- 3m @ 31.09g/t Au from 65m ⁽³⁾;
- 3m @ 9.87g/t Au from 139m (3);
- 2m @ 14.07g/t Au from 21m (3);
- 5m @ 3.11g/t Au from 41m (4);
- 3m @ 8.92g/t Au from 73m ⁽⁴⁾;
- 4m @ 10.25g/t Au from 56m (4);
- 3m @ 12.94g/t Au from 38m ⁽⁴⁾;
- 3m @ 8.51g/t Au from 58m ⁽⁴⁾; and
- 2m @ 13.49g/t Au from 89m ⁽⁴⁾.

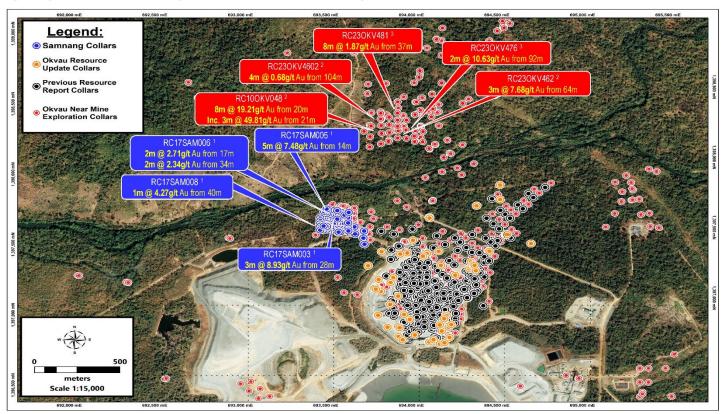
Figure 5 | Cambodian licences with Okvau Gold Mine and Memot Gold Project highlighted



Refer to the Company's ASX Announcements 18 April 2024, 30 October 2023, 4 July 2023, 28 April 2023, 29 April 2022, 31 January 2022, 20 December 2017, 4 February 2013 and 17 August 2012



Figure 6 | Plan of Okvau Pit with significant intersections from Samnang and Okvau North prospects



¹ Refer Company's ASX release dated 20 December 2017 2 Refer Company's ASX release dated 4 July 2023

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

³ Refer Company's ASX release dated 30 October 2023 4 Refer Company's ASX release dated 24 January 2024

⁵ Refer Company's ASX release dated 18 April 2024 6 Refer Company's ASX release dated 31 July 2024



About Emerald Resources NL

Overview

Emerald is a developer and explorer of gold projects. Emerald's Okvau Gold Mine, Cambodia was commissioned in June 2021 and in full production by September 2021. Emerald has now poured over 300kozs of gold from its operations.

Emerald has significant exploration and resource growth potential in Cambodia through its holdings in a number of other projects which are made up of a combination of granted mining licences (100% owned by Emerald) and interests in joint venture agreements. Together, Emerald's interests in its Cambodian Projects covers a combined area of 1,428km².

Emerald has significant exploration and resource growth potential in Australia with two highly prospective Western Australian gold projects comprising in excess of 1,300km² of tenure including the Dingo Range Gold Project which covers in excess of 900km² of the entire Dingo Range greenstone belt.

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.

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 is 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 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	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 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. 	 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. 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 subsample From 2017 reverse circulation (RC) drilling is used to collect both a 4m composite and 1m samples. The 4m composited 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. 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. 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. Standards, duplicates and blanks are inserted in sample batches to test laboratory performance.
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	 A track-mounted Boart Longyear LF70 M/P drill rig is used to drill HQ3 and NQ2 diamond core. A track mounted Boart Longyear DB540 M/P drill rig is used to drill 5.25 inch RC holes. Core diameter varies – HQ, HQ3, NQ, NQ2, NQ3, NTW and BTW used at various times. 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.



Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 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. 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. There is no relationship between sample recovery and grade.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All RC chips and diamond core is routinely logged (qualitatively) by a geologist, to record details of regolith (oxidation), lithology, structure, mineralisation 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. A geotechnical log is produced for all diamond core. Core has been logged to an appropriate level of detail by a geologist to support mineral resource estimation. 100% of core is logged, with the mineralised intersections logged to greater detail. 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. Standard field data are similarly recorded (qualitatively) routinely by a geologist for all soil sampling sites.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 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). This sample technique is industry standard and is deemed appropriate for the deposit style at Okvau.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 	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 >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 >100ppm upper



Criteria	JORC Code explanation	Commentary
Criteria	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.	detection limit are repeated by Au-AAGRA22 method, graphite furnace with gravimetric finish. 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 >250ppm upper limit for Ag, As, Bi, Cu, Sb, Te by ME-MS42 are repeated by ME-IC41: ICP-AES. 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. Fire assay is considered a total gold assay. This method has a lower detection limit of 0.01g/t Au. All magnetic susceptibility measurements of drill samples are made with a Terraplus KT-10 magnetic susceptibility meter. 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. 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. All assay data, including internal and external QA/QC data and control charts of standard, replicate and duplicate assay results, are communicated electronically. Reviews of QA/QC data by Emerald Technical staff concluded that the quality of assay data is
Verification of	The verification of significant intersections by	sufficient to support reporting of the Okvau Resource Estimate. • The calculations of all significant intercepts (for
sampling and assaying	 either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 The calculations of all significant intercepts (for drill holes) are routinely checked by senior management. Two close spaced (twin) holes confirm confidence in the existence and projection of mineralised intercepts over short ranges. 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.



Criteria	JORC Code explanation	Commentary
		Brett Gossage visited the site in December 2016 and Keith King has visited the site frequently, with the most recent being April 2024, and visually verified the results in the assay database against mineralised intersections evident in the stored half core.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 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. All locations are surveyed to the Okvau Mine Site Local Grid. Collar coordinates are routinely converted to the Indian 60 Cambodia grid. 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. 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). 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.
Data spacing and distribution Orientation of	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. Whether the orientation of sampling achieves 	 Intersection spacing for the Okvau Resource Estimate is typically 25m by 25m or better 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 and wider still beyond 450m vertical RC grade control drilling (pattern from 5m by 5m) and in pit mapping is also available This drill spacing is considered to be sufficient to establish geological and grade continuity appropriate for the declaration of a Mineral Resource. No samples within a "zone of interest" are ever composited. Drill holes are usually designed to intersect
data in relation to geological structure	unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	 brill notes are usually designed to intersect target structures with a "close-to-orthogonal" intercept. Drilling has been done at various orientations; moderately to steeply northwest dipping is the most common. Most of the drill holes intersect the mineralised zones at sufficient angle for the risk of significant sampling orientation bias to be low.
Sample security	The measures taken to ensure sample security.	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



Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 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. 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. 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. All bulk residues are stored permanently at the ALS laboratory in Vientiane. No information is available regarding sample security procedures for the historical drilling results reported. 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. Comprehensive QAQC audits have been conducted on this project by Duncan Hackman (August 2009, February 2010 & November 2011), SRK (February 2013), Nola Hackman (January 2014), Brian Wolfe (2015) and Brett Gossage (2017). Senior Emerald Technical staff routinely review the available quality data and have concluded the data quality is robust and appropriate for resource estimation studies. Senior Emerald Technical staff routinely review of the both the ALS Sample Preparation facility in Phnom Penh, Cambodia and the ALS Assay Laboratory in Vientiane, Laos were made in October 2023.

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	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The 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. The tenure is considered to be completely secure. The Okvau Exploration Licence is located within the broader Phnom Prich Wilderness Sanctuary area but located outside of the 'core zone'.



Criteria	Explanation	Commentary
		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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 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. 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 followup; 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.
Geology	Deposit type, geological setting and style of mineralisation.	 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 mineralisation 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. Mineralisation is structurally controlled and mostly confined to the diorite. The highest grade intersections generally occur at the diorite-hornfels contact. 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.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar; elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar; dip and azimuth of the hole; down hole length and interception depth; hole length. If the exclusion of this information is justified on the basis that the 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. 	The Okvau Resource Estimate is based on a database of 390 drill holes, for a total of 83,144m. The database is comprised of 123 diamond holes (36,482m), 226 RC drill holes (26,707m) and 41 RC collars and diamond tails (19,955m). 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 and wider still beyond 450m vertical
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high 	Compositing done the Okvau Resource Estimate is discussed in Section 3.



Criteria	Explanation	Commentary
	 grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	The majority of drill holes intersect the mineralisation at a sufficient angle for the risk of sampling orientation bias to be low.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Appropriate maps are included in the body of this release.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	All significant drilling results are intersections with a minimum of 2 gram metre values.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Surface geological mapping and detailed structural studies have helped inform the geological model of the Okvau Deposit. Emerald has completed a Definitive Feasibility Study. This study included metallurgical, geotechnical and hydrological studies.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further drilling at the Okvau Deposit will be undertaken to test lateral extensions of the known mineralisation Further drilling will be undertaken to test new targets, as potential is recognized.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	Explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 During site visits, field observations were compared with the corresponding information in the database. Visual checks were made to confirm that mineralised intervals evident in the drill core corresponded with assay results in the database. Collar positions were checked on the ground to confirm positional accuracy.



Critoria	Evaluation	Commentary
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	Open Pit Resource Estimation Site visits are regularly conducted by Keith King, with the most recent being April 2024. No material issues have been identified as part of these visits. A site visit was completed to the Okvau site by Brett Gossage on 6 December 2016. In addition, the ALS sample preparation laboratory in Phnom Penh was reviewed on 30/10/2023. The ALS laboratory in Vientiane, Laos was reviewed on 23/10/2023. No material issues were identified at either laboratory. Diamond drilling was being completed during the site visit. The drilling and sampling was completed consistent with good industry practice. The core management facilities were observed, and appeared to be organised and well suited to managing the logging and sampling procedures efficiently. 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. Based on the site reviews, no data quality issues have been identified sufficient to affect the currently designated classification of the resources. Underground Resource Estimation Site visits are regularly conducted by Keith King, with the most recent being April 2024. No material issues have been identified as part of these visits. The ALS sample preparation laboratory in Phnom Penh was reviewed on 30 October 2023 by Keith King and no material issues were identified. The ALS Assay Laboratory in Vientiane, Laos, was reviewed on 23 October 2023 by Keith King and no material issues were identified. Diamond drilling and RC drilling were being completed during the site visits. The drilling and sampling were completed consistent with good industry practice.
Carlonial		 observed and appeared to be organised and well suited to managing the logging and sampling procedures efficiently. Based on the site reviews, no data quality issues have been identified sufficient to affect the currently designated classification of the resources.
Geological Interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Open Pit Resource Estimation 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). 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. A mineralisation constraint was modelled based on a cross sectional and flitch interpretation that was completed by Emerald using a 0.5gt Au lower cutoff grade. The interpretation included 2m external dilution and a maximum 5m internal dilution. This



Criteria	Explanation	Commentary
		interpretation was completed applying the interpreted geological controls. • 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. • 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 mineralisation continuity and 3D geometry. Underground Resource Estimation • 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). • Wireframe solids representing each mineralised structure were created using implicit vein modelling in Micromine. The wireframes have been modelled to identify structures grading 1.5g/t over a minimum width of 3m, though incorporate lower grade material where appropriate to ensure continuity of the structure.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The mineralisation has been delineated over a strike length of approximately 650m, a width of approximately 500m and to a depth of 650m below surface.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. 	 Secondary variables (sulphur, arsenic, bismuth, antimony, copper, and tellurium) have been estimated using Ordinary Kriging (OK). 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





Criteria	Explanation	Commentary
Criteria	Explanation	 The grade estimates were statistically and visually validated prior to acceptance. Underground Resource Estimation A downhole composite length of 1m has been used in the Underground resource estimation. A global variogram model was generated and fitted for all mineralised domains. The parent block size within the estimated domain is 5mN x 5mE x 5mRL, with subblocking to 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 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. A multiple pass estimation strategy was applied. A maximum search distance of 63m and 157m were used for passes 1 and 2 respectively. Input composite counts for the estimates were variable and set at a minimum of four and a maximum of 12 data points across a minimum of two drill holes withing the search ellipse to estimate a single block for pass 1 (average distance between points for estimation of pass 1 is approx. 22m with 84% of the estimated ounces with an average distance of less than half the range). This criterion was relaxed to a minimum of three data points and a maximum of 8 data points from a minimum of one hole for pass 2. (average distance between points for estimation of pass 2 is approx. 51m with 88% of the estimated ounces with an average distance of less than half the range) Composite grades were capped at 66g/t for all mineralised domains. The assigned density for mineralised domains is 3.05t/m³. All material for this estimation is below the current designed pit and is logged as fresh material. 3.05t/m³ has been selected as the density for mineralised zones as they have been observe
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method	 visually validated prior to acceptance. Tonnages are estimated on a dry basis, as described above.
Cut-off parameters	 of determination of the moisture content. The basis of the adopted cut-off grade(s) or quality parameters applied. 	 Open Pit Resource Estimation 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 0.625g/t was chosen as the base case for reporting Mineral Resources. Underground Resource Estimation
		A 3g/t Au cut-off grade is estimated to be the minimum grade required for economic extraction at current metal prices. Page 21 of 28.



Criteria	Explanation	Commentary
Criteria Mining factors or assumptions	• 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	 Commentary Open Pit Resource Estimation 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. 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
	assumptions made.	 zones. Underground Resource Estimation The resource model assumes underground mining is completed and a moderate to high level of mining selectivity is achieved in mining. It has been assumed that high quality grade control will be applied to ore/waste delineation processes applying a pattern sufficient to ensure adequate coverage of the mineralisation zones.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	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%.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing 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.	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. Renaissance has submitted its detailed Environmental Impact Assessment to the Ministry of Environment in Cambodia and has been granted the licences needed to operate the project.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Over 9,000 dry bulk density measurements were taken from selected core samples and routine in pit grab samples, measured using the immersion method. The measurements have been sub-divided into fresh and oxidised samples and have also grouped by lithology. Based on the above the bulk densities have been assigned as either 1.89t/m³ or 2.87t/m³ for diorite oxide and fresh respectively and 1.89t/m³ or 2.78t/m³ for hornfels oxide and fresh respectively. 2.95t/m³ has been selected as the density for fresh high grade mineralised zones (>=0.8g/t Au) as they have



Criteria	Explanation	Commentary
Classification	The basis for the classification of the Mineral	 been observed to have a higher density than the surrounding material due to the massive sulphides associated with mineralisation. A density of 3.05t/m3 has been selected for the density of the mineralised zones of the underground model. In the competent person's view, this bulk density is an accurate representation of the identified mineralised zones. The bulk density has been derived by selecting the bulk density measurements that lay within the interpreted mineralised zones (1,259 samples). Open Pit Resource Estimation
	Resources into varying confidence categories. 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). Whether the result appropriately reflects the Competent Person's view of the deposit.	 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. 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. 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. 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. Material classified as Measured, includes stockpiled ore delineated by grade control drilling and mined using normal open pit mining practices. The result appropriately reflects the Competent Person's view of the deposit. Underground Resource Estimation 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 pass 1 were considered as Indicated Mineral Resource. Inferred Mineral Resource blocks were estimates not considered Indicated Resource but still within the interpreted mineralisation zone and within estimation pass 2. The result appropriately reflects the
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Competent Person's view of the deposit. Open Pit Resource Estimation No audits or reviews of the Mineral Resource estimate have taken place. However, previous estimates have been generated by independent consultants. Underground Resource Estimation No audits or reviews of the Mineral Resource



Criteria	Explanation	Commentary
Discussion of relative accuracy / confidence	•	 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. Material classified as Measured, includes stockpiled ore delineated by grade control drilling and mined using normal open pit mining practices. No quantitative analysis in confidence limits has been undertaken. Production data supports the Open Pit grade

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	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	 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. The Mineral Resources reported are inclusive of the Ore Reserves.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	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.
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material. Modifying Factors have been considered. 	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.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	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



Criteria	Explanation	Commentary
Criteria Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining 	estimation stage no additional mining loss or mining dilution has been applied in the 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. • 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%).
	parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods.	 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. 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. Minimum mining width has not been applied in optimization but has been applied to the resource model as 5mx5mx5m. 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. 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. 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. 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
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the 	resource estimate and mining depletion withing the original design. The metallurgical process proposed is CIL in association with flotation to process arsenopyrite and antimony which occurs in association with the gold mineralisation. The process is established and used by a number of gold producers successfully. A total of 6 metallurgical holes were drilled in two passes for metallurgical testing. Compositing of samples was done by level to



Criteria	Explanation	Commentary
	 corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	simulate process feed for the holes drilled in the second pass. • 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. • Metallurgical recovery demonstrated by operations to date is approaching that indicated by test work with progressive adjustments being made to the metallurgical circuit. • No recoverable minerals are defined by specification in this case.
Environmental	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.	 Project approval has been obtained and the project is now in operation in compliance with environmental requirements. 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.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	All required infrastructure is now in existence at the site in support of ongoing operations.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 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. 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 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. 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. 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. No allowance has been made for refining charges on gold sales in the Ore Reserve study



Criteria	Explanation	Commentary
		but has been accounted for in the financial model and succeeding budgets.
Revenue factors	 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. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 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. 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.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	 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. 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. It has been assumed that supply and demand for gold will continue on the same average basis.
Economic	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 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. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 The project was developed on the following basis: 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. Analysis of sensitivities was conducted on the Whittle shell selected for design. Financial modelling of NPV and IRR was conducted with sensitivity estimates in the DFS. Remodelling of economic analysis has been conducted for each yearly budget since project commencement.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 Consultation with stakeholders at local district and provincial levels has been ongoing since the baseline studies commenced a number of years ago. A comprehensive, government approved Environmental and Social Impact Assessment (ESIA) has governed the operations successfully for over three years.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the 	 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. Emerald has received all material approvals and licences necessary to operate the project. Emerald has a government approved Industrial Mining Licence over a project area of approximately 11km² within the existing Okvau



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	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.	Exploration Licence and government approved ESIA and Mineral Investment Agreement which governs the operations.
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	 No Measured Mineral Resources existed in the resource model and all Probable Ore Reserves have been derived from Indicated Mineral Resources. The results of classification accurately reflect independent specialist mining consultant, Mr Glenn Williamson's view of the project.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	No audit has been conducted of the Ore Reserve estimate
Discussion of relative accuracy/confidence	 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. 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. 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. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The grade estimates were statistically and visually validated prior to acceptance in the resource estimation process. Reconciliation of production against reserve shows a close comparison. 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.