High Grade Gold Mineralisation Continues at Okvau Gold Project

Emerald Resources NL (ASX: EMR) ("Emerald") is pleased to provide results from the most recent drill programme to delineate the oxide mineralised domain at the Okvau Gold Deposit.

Highlights

▪ **Results received to date from the drill programme include** (refer Appendix 1 for complete results):-

  ▪ **5m @ 9.26g/t gold from 5m (G53001) (EOH);**

  ▪ **9m @ 4.82g/t gold from 0m (G47009) (EOH);**

  ▪ **9m @ 4.06g/t gold from 0m (G47011) (EOH);**

  ▪ **7m @ 4.96g/t gold from 3m (G43062);**

  ▪ **9m @ 3.70g/t gold from 0m (G47010) (EOH);**

  ▪ **9m @ 3.53g/t gold from 0m (G45030) (EOH);**

  ▪ **7m @ 4.40g/t gold from 0m (G41045).**

▪ **Additional mineralisation outside the current reserve blocks in the near surface oxide material**

Okvau Gold Deposit Phase 3 Drilling Results

Emerald has embarked on a third phase of drilling to define the mineralised domain. The programme designed to delineate the mineralisation in the oxide portion of the Okvau Gold Project. This programme consists of a total of 1,200 shallow holes (~10m), infilling previous drilling to a 5m by 5m spacing (refer Figure 1). Currently 705 (5,542m) of the 835 (6,880m) drill collars have assay results returned.

Select results (+20gm) from these holes include (refer to Appendix 1):-

5m @ 9.26g/t from 5m (G53001) (EOH);	10m @ 2.75g/t from 0m (G39032) (EOH);
9m @ 4.82g/t from 0m (G47009) (EOH);	10m @ 2.62g/t from 0m (G41021);
9m @ 4.06g/t from 0m (G47011) (EOH);	10m @ 2.52g/t from 0m (G49010) (EOH);
7m @ 4.96g/t from 3m (G43062);	9m @ 2.65g/t from 0m (G45018) (EOH);
9m @ 3.70g/t from 0m (G47010) (EOH);	8m @ 2.78g/t from 0m (G43043);
9m @ 3.53g/t from 0m (G45030) (EOH);	3m @ 7.35g/t from 0m (G03004);
7m @ 4.40g/t from 0m (G41045);	7.5m @ 2.81g/t from 0m (G37015) (EOH);
0.5m @ 59.50g/t from 6m (G35008) EOH);	9m @ 2.25g/t from 0m (G42012) (EOH);
2m @ 13.78g/t from 0m (G39030);	6m @ 3.37g/t from 0m (G37020).

The results from the previously announced Phase 1 and Phase 2 simulated grade control drill programmes (refer ASX announcements 27 December 2017, 10 January 2018, 3 October 2018 and 24 October 2018) will be incorporated with this current drill programme to produce the final production ore blocks.

The results to date have indicated additional mineralisation outside the current reserve blocks in the near surface oxide material (refer Figure 2). This has likely been caused by a combination of natural processes such as supergene enrichment and the flattening of mineralised structures during the oxidation processes and the relocation of surface material by historical, artisanal mining activities.

Managing Director, Morgan Hart said: "The results to date strongly support the DFS Ore Reserve estimate in the area tested and strongly adds to our confidence in our ability to reconcile reserve grade and ounces (during operations) with the intended mining equipment type, scale of operation and grade control methodology."
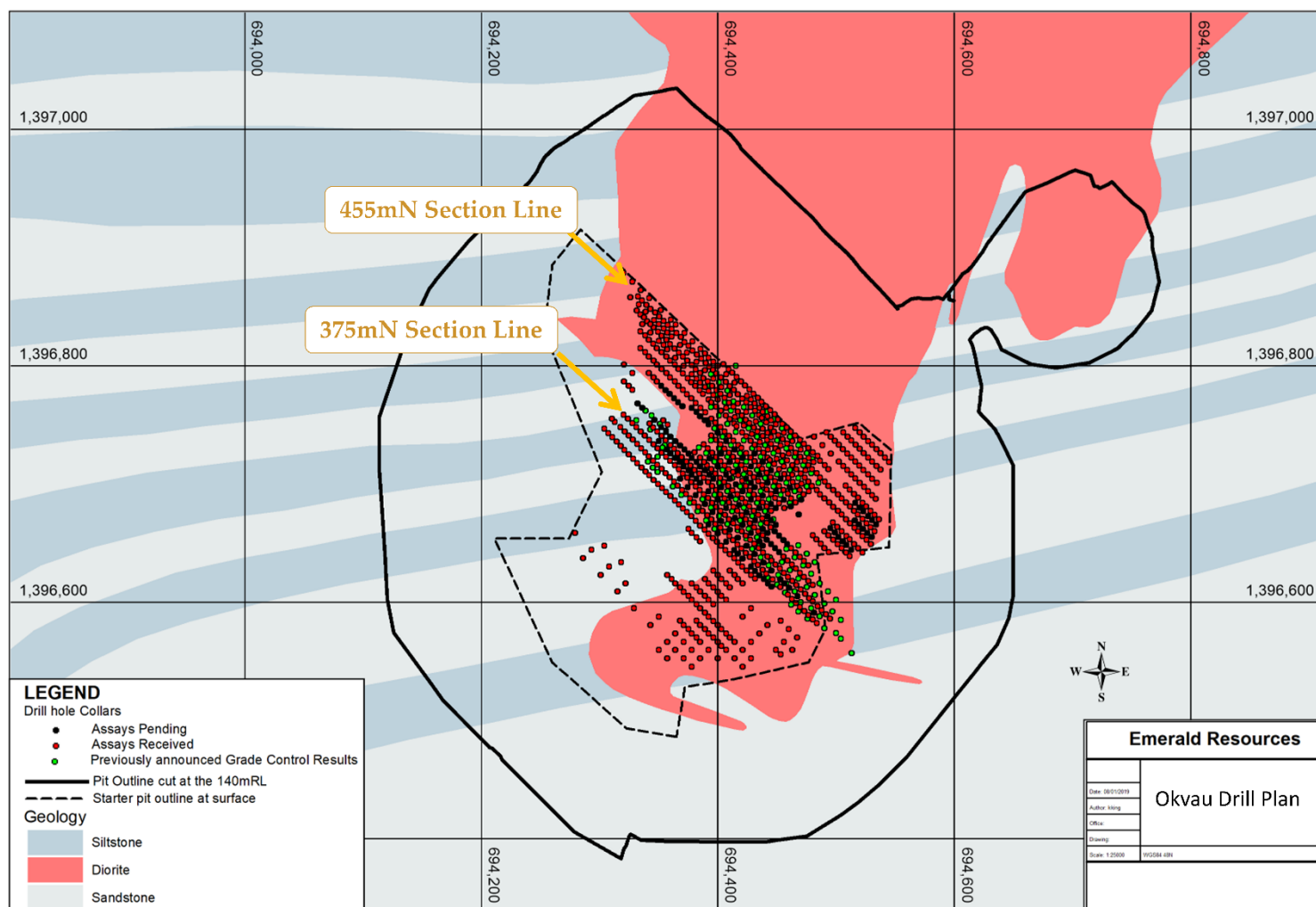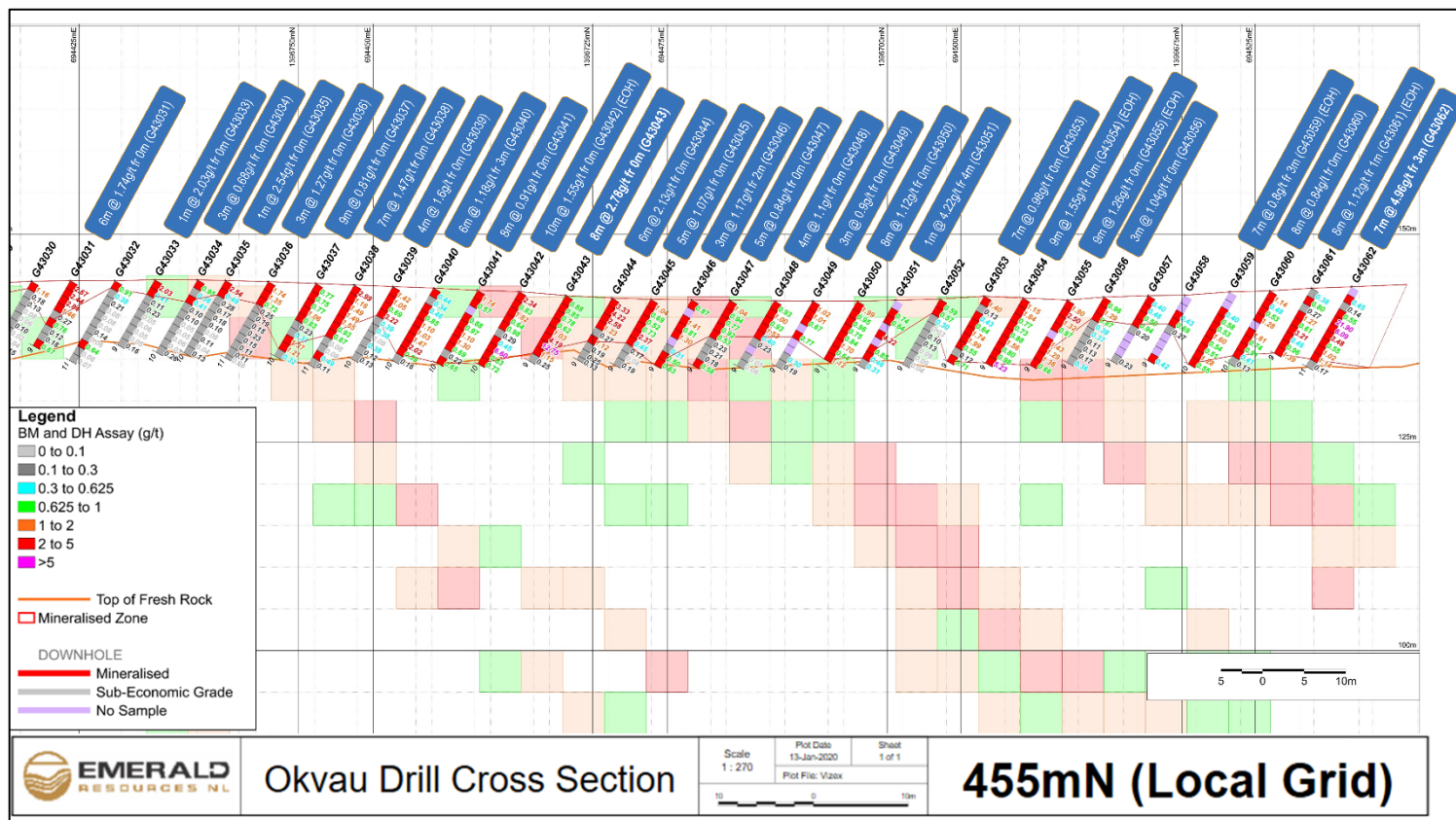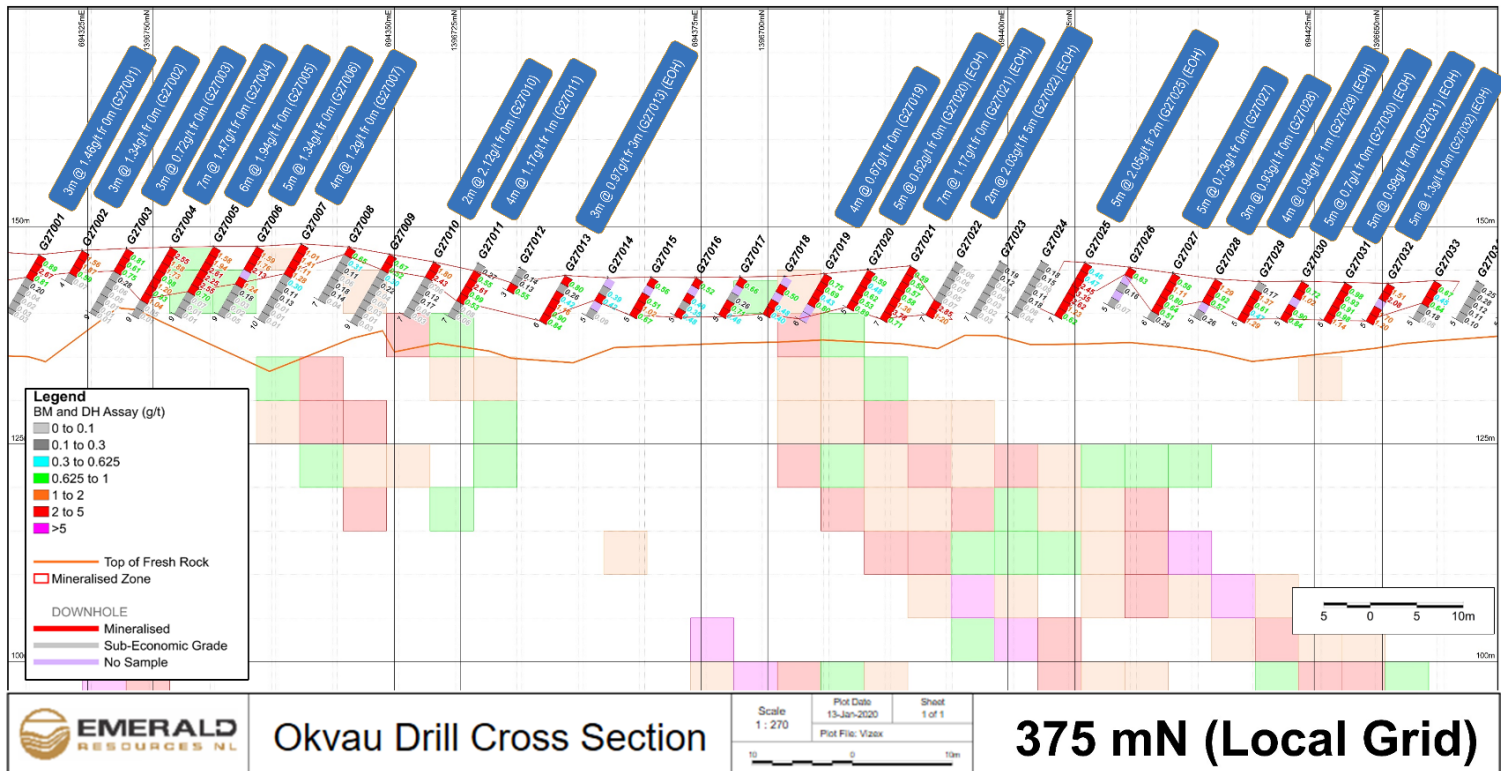
Figure 1 | Drill Hole Plan

Okvau Drill Plan — Emerald Resources

Figure 2 | Drill Cross Sections of 455mN & 375mN (Local Grid) with significant intercepts

Okvau Drill Cross Section — 455mN (Local Grid)

Okvau Drill Cross Section — 375 mN (Local Grid)

Scale 1:270 — Plot Date 13-Jan-2020 — Sheet 1 of 1 — Plot File: Vizex

Cambodian Gold Project

Summary

Emerald's main focus is the exploration and development of its Cambodian Gold Projects which comprise of a combination of 100% owned granted licences, applications and earn-in & joint venture agreements covering a combined area of 1,442 km². The 100% owned Okvau Gold Project ('Okvau Gold Project') is the Company's most advanced project which is located approximately 275 kilometres north-east of Cambodia's capital city of Phnom Penh in the province of Mondulkiri (refer Figures 3 and 4). The town of Kratie is located on the Mekong River approximately 90 kilometres to the west and the capital of Mondulkiri, Saen Monourom is located approximately 60 kilometres to the south-east. In May 2017, Emerald completed a Definitive Feasibility Study ('DFS') on the development of the Okvau Gold Project which demonstrated a robust project producing approximately 106,000 ounces of gold per annum on average over 7 years from a single open pit.

In July 2018 the Company was granted the Industrial Mining Licence covering 11.5 km² which allows for the development of the Okvau Gold Project. The Mining Licence has an initial 15-year period with the right to two renewals of up to 10-years for each renewal in accordance with Cambodian laws. The grant of the Mining Licence followed approval of the Okvau Gold Project by the Office of Council Ministers for both the rezoning of the project area to 'Sustainable Use' within the Phnom Prich Wildlife Sanctuary ('PPWS') and the granting of the Mining Licence. The rezoning of the Mining Licence area to 'Sustainable Use' lawfully permits commercial development under Cambodian law and follows the successful negotiation and approval by the Minister of Environment ('MoE') of the environmental contract (the 'Environmental Contract') and environmental licence ('Environmental Licence') in December 2017.

The Company has successfully completed the resettlement of 62 local families and site works to remove abandoned structures away from the Okvau Mining Licence area. Emerald has completed the installation of a security fence around the Project Development Area ("PDA") to ensure the safety of personnel, visitors and wildlife. Construction of a 35 tonne bridge across the Prek Te River has now been completed with substantial completion of upgrades to the existing 50km of dirt roads and current finalisation of the construction of 14km of new road to site which will allow for all year continuous access to the Okvau site.

Topography of the tenure area is relatively flat with low relief of 80 metres to 200 metres above sea level. The Okvau Deposit and other gold occurrences within the tenure are directly associated with diorite and granodiorite intrusions and are best classed as Intrusive Related Gold mineralisation. Exploration to date has demonstrated the potential for large scale gold deposits with the geology and geochemistry analogous to other world class Intrusive Related Gold districts, in particular the Tintina Gold Belt in Alaska (Donlin Creek 38Moz, Pogo 6Moz, Fort Knox 10Moz, Livengood 20Moz).

In December 2019 the Mineral Investment Agreement ('MIA') was signed which provides certainty and stability of the fiscal regime for the development and operations of the Okvau Gold Project. Following confirmation of the key fiscal incentives of the MIA, the key assumptions and inputs of the DFS were reviewed resulting in a significant improvement in the NPV and IRR of the Project.

Figure 3| Cambodian Gold Project | Location

Figure 4| Cambodian Gold Project | Exploration Licence Areas
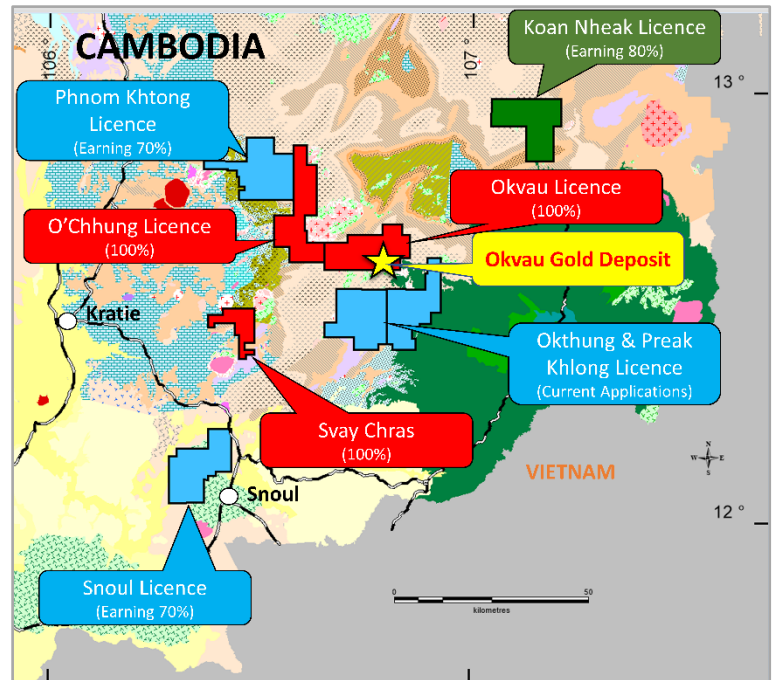
Okvau Gold Project | Definitive Feasibility Study

Following the approval of the MIA by the Cambodian Council of Ministers and subsequent execution by the Minister of Mines & Energy and the Minister of Economy & Finance, Emerald reviewed key assumptions and inputs of its DFS and the financial incentives of the MIA. Based on the prevailing gold price of US$1,450/oz, and updating the key assumptions and inputs, the NPV (5%) of the Okvau Gold Project significantly improved to US$337M (A$488M) pre-tax and US$238M (A$345M) post-tax with an outstanding Internal Rate of Return (IRR) of 69% pa pre-tax and 57% post-tax. The payback of the total capital funding requirement is now expected to be 17 months pre-tax and 20 months post-tax, from first gold pour.

The significant improvement in the NPV and IRR is the result of an ongoing effort by Emerald to critically examine and pursue improvements in all aspects of the 1.14Moz at 2.0g/t Au Okvau Gold Project economics. The comparison to the NPV announced as part of the DFS is outlined at Tables 3-4. Of note, the uplift is primarily based upon a gold price of US$1,450/oz and concessions negotiated within the MIA.

An initial DFS was completed in May 2017 which was subsequently updated in November 2019 for the development of a 2.0Mtpa operation at the Okvau Gold Project and was completed to +/-15% level of accuracy (refer Table 3). The completion of the DFS fulfilled a milestone set by Emerald since becoming involved in the project in March 2016. The DFS confirms an initial operating LOM of over 7 years, producing approximately 106,000 ounces of gold per annum on average, with ore processed through a plant utilising a single stage crushing circuit and SAG mill, sulphide flotation, regrind mill followed by conventional cyanide leaching.

The estimated operating costs highlight a financially robust project with an average LOM AISC of US$731/oz. The estimated development costs are US$91M with a further US$7M in mining contractor establishment costs and pre-production mining costs. The development costs include a US$4.4M allowance for spare parts and first fills.

An updated independent JORC Indicated and Inferred Mineral Resource estimate for the Okvau Deposit of 17.7Mt grading 2.01g/t gold containing 1.141Moz (at 0.70g/t gold cut-off) was updated by independent resource consultant EGRM Consulting Pty Ltd as part of the DFS (refer Table 1).

Table 1 | Okvau Mineral Resource Estimate

Okvau Mineral Resource Estimate									
	Indicated Resource			Inferred Resource			Total Resource		
Cut-off (Au g/t)	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)
0.70	15.11	2.08	1,008	2.57	1.61	133	17.68	2.01	1,141

The Project has a JORC Ore Reserve (Probable) estimate of 14.26Mt @ 1.98g/t Au for 907,000 ounces gold (refer Table 2).

Table 2| Okvau Ore Reserve Estimate

Okvau Ore Reserve Estimate		
Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)
14.26Mt	**1.98g/t Au**	**907koz**
Probable Ore Reserve		

Key operating and financial outcomes of the DFS, prepared in accordance with the requirements of the JORC Code (2012 Edition), are presented in Table 3.

Table 3| DFS Economics[1]

Ore Reserve	14.3Mt @ 2.0g/t gold for 907koz contained		
LOM Strip Ratio (waste t: ore t)	5.8:1		
Throughput	2.0Mtpa		
Life of Mine	7.2 years		
Processing Recovery	84%		
Recovered Ounces	762koz		
Average Annual Production	106koz		
Pre-production Capital Costs[2]	US$98M		
Sustaining Capital Costs[3]	US$23M		
Gold Price	**US$1,250/oz**	**US$1,450/oz**	**US$1,600/oz**
Gross Revenue	US$952M	US$1,104M	US$1,219M
LOM Net Revenue (net of royalties[4] and refining)	US$906M	US$1,051M	US$1,160M
Operating Cash Flow pre-tax	US$408M	US$554M	US$663M
Project Cash Flow pre-tax	US$290M	US$435M	US$544M
NPV$_{(5\%)}$ pre-tax	US$217M	US$337M	US$426M
NPV$_{(5\%)}$ post-tax[5]	US$155M	US$238M	US$296M
Payback pre-tax	2.2 years	1.4 years	1.2 years
Payback post-tax	2.4 years	1.7 years	1.3 years
IRR pre-tax	48%	69% pa	85%
IRR post-tax[5]	40%	57% pa	70%
LOM C1 Cash Costs[6]	US$658/oz	US$658/oz	US$658/oz
LOM All-In Sustaining Costs ('AISC')[7]	US$745/oz	US$754/oz	US$761/oz

1   All economics are 100% attributable to Emerald.

2   Includes US$4.4M of capital spares and first fills and US$7.0M of mining capital and pre-production mining costs.

3   Includes US$14.4M of rehabilitation and closure costs.

4   Royalties include Government royalty of 3.0% gross and a third party royalty of 1.5% gross (capped to A$22.5M).

5   Taxation is based on the Mining Investment Agreement and includes tax incentives for the first 5 years.

6   C1 Cash Costs include site based mining, processing and admin operating costs plus transport and refining costs.

7   Includes C1 Cash Cost plus royalties, sustaining capital costs, contributions to environmental & community funds and rehabilitation & closure costs.

Detailed information on all aspects of Emeralds' projects can be found on the Company's website;

www.emeraldresources.com.au.

For further information please contact;
Emerald Resources NL
Morgan Hart
Managing Director

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 Announcement dated 1 May 2017. 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.

The Company believes it has a reasonable basis to expect to be able to fund and develop the Okvau Gold Project for the reason set out above and in this document. However, there is no certainty that the Company can raise funding when required.

Competent Persons Statements

The information in this report that relates to Exploration and Drill Results 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 Keith 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 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 (AIG), 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 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 Fellow 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.

Appendix One | Significant Intercepts from Drill Programme

Hole Name	Easting	Northing	RL	Azi	Dip	End Depth (m)	From (m)	To (m)	Interval (m)	Gold (g/t)
G53001	694,516	1,396,747	143	315	-60	10	5	10	5.0	9.26
G03004	694,357	1,396,552	157	315	-60	6	0	3	3	7.35
G05001	694,286	1,396,637	156	315	-60	7	0	2	2	2.41
G05005	694,301	1,396,623	159	315	-60	11	0	3	3	1.60
G05009	694,315	1,396,609	162	315	-60	14	8	11	3	1.58
G05021	694,357	1,396,567	158	315	-60	9	8	9	1	7.75
G05023	694,364	1,396,559	156	315	-60	8	0	4	4	0.98
G07009	694,308	1,396,630	159	315	-60	14	0	3	3	0.74
G07013	694,322	1,396,616	161	315	-60	14	0	10	10	1.88
G07021	694,350	1,396,588	160	315	-60	7	0	2	2	1.24
G07025	694,364	1,396,574	157	315	-60	7	0	3	3	0.91
G07029	694,378	1,396,559	155	315	-60	11	0	4	4	0.69
G09020	694,371	1,396,581	156	315	-60	11	2	5	3	3.02
G09021	694,375	1,396,577	155	315	-60	8	0	5	5	0.81
G09022	694,378	1,396,574	155	315	-60	11	0	7	7	1.10
G09023	694,382	1,396,570	155	315	-60	8	0	8	8	0.83
G09024	694,385	1,396,567	154	315	-60	11	0	11	11	0.89
G09028	694,400	1,396,552	154	315	-60	10	8	10	2	6.56
G11010	694,382	1,396,584	154	315	-60	9	0	4	4	0.86
G11011	694,385	1,396,581	154	315	-60	11	4	7	3	0.73
G11012	694,389	1,396,577	154	315	-60	10	0	10	10	0.72
G11013	694,392	1,396,574	154	315	-60	10	0	7	7	0.75
G11014	694,396	1,396,570	153	315	-60	10	0	5	5	0.67
G11016	694,403	1,396,563	153	315	-60	10	0	9.5	9.5	1.13
G11017	694,407	1,396,559	153	315	-60	9	6	9	3	1.31
G11021	694,421	1,396,545	153	315	-60	4	0	4	4	0.86
G13002	694,357	1,396,623	149	315	-60	5	0	3	3	1.19
G13003	694,361	1,396,620	148	315	-60	5	0	5	5	1.23
G13004	694,364	1,396,616	148	315	-60	4	0	4	4	0.60
G13006	694,371	1,396,609	147	315	-60	3	0	3	3	0.65
G13010	694,385	1,396,595	149	315	-60	5	0	3	3	2.22
G13011	694,389	1,396,591	149	315	-60	5	0	5	5	1.50
G13012	694,392	1,396,588	150	315	-60	6	0	6	6	1.60
G13013	694,396	1,396,584	150	315	-60	7	0	5	5	1.22
G13015	694,403	1,396,577	152	315	-60	7	0	6	6	1.02
G13016	694,407	1,396,574	152	315	-60	9	5	8.5	3.5	1.15
G13017	694,410	1,396,570	153	315	-60	9	0	7	7	0.71
G13020	694,421	1,396,559	153	315	-60	8	0	4	4	1.11
G13022	694,428	1,396,552	152	315	-60	5	0	4	4.0	1.16
G15011	694,389	1,396,605	148	315	-60	9	8	8.5	0.5	7.60
G15013	694,396	1,396,598	148	315	-60	10	0	8	8	0.67
G15022	694,428	1,396,567	154	315	-60	13	0	6	6	1.06
G17013	694,407	1,396,602	148	315	-60	10	0	9	9	0.67
G17021	694,435	1,396,574	153	315	-60	11	0	6	6	1.29
G17025	694,449	1,396,559	150	315	-60	8	0	8	8	0.71
G19017	694,428	1,396,595	152	315	-60	3	1	3	2	3.23

G19021	694,442	1,396,581	152	315	-60	9	0	3	3	0.66
G19025	694,456	1,396,567	150	315	-60	12	0	5	5	1.15
G19027	694,463	1,396,559	149	315	-60	9	0	4	4	0.82
G21005	694,375	1,396,662	148	315	-60	10	0	7	7	1.84
G21006	694,378	1,396,658	148	315	-60	10	0	5	5	1.05
G21007	694,382	1,396,655	147	315	-60	9	0	5	5	1.15
G21008	694,385	1,396,651	146	315	-60	9	0	6	6	1.07
G21015	694,410	1,396,627	144	315	-60	5	0	5	5	1.65
G21016	694,414	1,396,623	144	315	-60	5	1	5	4	1.01
G21017	694,417	1,396,620	144	315	-60	6	1	5	4	1.29
G21027	694,453	1,396,584	149	315	-60	8	0	8	8	1.90
G23002	694,307	1,396,743	148	315	-60	6	0	3	3	0.97
G23003	694,311	1,396,740	148	315	-60	9	0	4	4	0.67
G23004	694,314	1,396,736	148	315	-60	7	0	5	5	1.19
G23005	694,318	1,396,732	149	315	-60	10	0	3	3	0.85
G23006	694,321	1,396,729	149	315	-60	7	0	5	5	0.73
G23007	694,325	1,396,725	149	315	-60	9	0	6	6	0.64
G23008	694,328	1,396,721	149	315	-60	11	0	4	4	2.15
G23011	694,370	1,396,679	145	315	-60	6	1	5	4	1.61
G23015	694,385	1,396,665	147	315	-60	8	0	4	4	1.03
G23016	694,389	1,396,661	146	315	-60	7	0	5	5	1.23
G23017	694,392	1,396,658	145	315	-60	7	0	5	5	1.71
G23018	694,396	1,396,654	145	315	-60	6	0	6	6	2.06
G23019	694,399	1,396,651	144	315	-60	5	0	5	5	1.85
G23020	694,403	1,396,648	144	315	-60	5	0	5	5	1.50
G23021	694,406	1,396,644	144	315	-60	5	2	5	3	1.10
G23022	694,410	1,396,641	144	315	-60	5	0	5	5	0.76
G23023	694,414	1,396,637	144	315	-60	5	1	5	4	0.89
G23024	694,417	1,396,634	144	315	-60	5	2	5	3	1.14
G23041	694,339	1,396,710	147	315	-60	6	0	3	3	0.90
G23042	694,342	1,396,707	147	315	-60	7	3	6	3	0.93
G23043	694,346	1,396,703	146	315	-60	7	1	7	6	0.95
G23044	694,349	1,396,700	146	315	-60	7	1	7	6	1.02
G25003	694,317	1,396,748	148	315	-60	8	0	3	3	1.14
G25004	694,321	1,396,744	148	315	-60	9	0	4	4	0.77
G25006	694,328	1,396,738	148	315	-60	7	0	5	5	0.78
G25008	694,335	1,396,730	149	315	-60	10	0	4	4	0.79
G25014	694,356	1,396,709	145	315	-60	7	4	7	3	0.77
G25016	694,363	1,396,702	145	315	-60	6	0	4	4	0.71
G25017	694,366	1,396,699	145	315	-60	6	3	6	3	0.90
G25018	694,370	1,396,695	145	315	-60	6	3	6	3	1.02
G25019	694,373	1,396,692	145	315	-60	6	0	6	6	0.70
G25020	694,377	1,396,688	145	315	-60	6	0	6	6.0	0.77
G25021	694,380	1,396,684	145	315	-60	7	0	7	7	0.92
G25022	694,384	1,396,681	146	315	-60	7	0	6	6	0.62
G25023	694,387	1,396,677	146	315	-60	4	0	2	2	1.28
G25024	694,391	1,396,673	146	315	-60	7	0	4	4	0.76
G25027	694,402	1,396,663	145	315	-60	6	0	3	3	1.01
G25028	694,406	1,396,659	145	315	-60	6	0	6	6	1.11
G25029	694,410	1,396,656	144	315	-60	5	0	5	5	1.32

G25030	694,413	1,396,653	144	315	-60	5	0	3	3	0.66
G25031	694,417	1,396,649	144	315	-60	5	0	5	5	0.83
G25040	694,453	1,396,613	145	315	-60	6	0	6	6	0.98
G25042	694,462	1,396,603	146	315	-60	7	0	2	2	1.00
G25046	694,477	1,396,589	146	315	-60	7	0	2	2	1.35
G25047	694,480	1,396,585	146	315	-60	4	0	4	4	1.44
G25048	694,484	1,396,582	146	315	-60	7	1	7	6	2.35
G27001	694,320	1,396,759	147	315	-60	8	0	3	3	1.46
G27002	694,324	1,396,755	147	315	-60	4	0	3	3	1.34
G27003	694,328	1,396,752	147	315	-60	9	0	3	3	0.72
G27004	694,331	1,396,748	148	315	-60	9	0	7	7	1.47
G27005	694,335	1,396,744	148	315	-60	9	0	6	6	1.94
G27006	694,338	1,396,741	148	315	-60	9	0	5	5	1.34
G27007	694,342	1,396,737	148	315	-60	10	0	4	4	1.20
G27010	694,353	1,396,726	146	315	-60	7	0	2	2	2.12
G27011	694,356	1,396,723	146	315	-60	7	1	5	4	1.17
G27013	694,364	1,396,716	144	315	-60	6	3	6	3	0.97
G27019	694,385	1,396,695	145	315	-60	6	0	4	4	0.67
G27020	694,388	1,396,691	145	315	-60	5	0	5	5	0.62
G27021	694,392	1,396,688	145	315	-60	7	0	7	7	1.17
G27022	694,395	1,396,684	146	315	-60	7	5	7	2	2.03
G27025	694,406	1,396,674	146	315	-60	7	2	7	5	2.05
G27027	694,413	1,396,667	145	315	-60	6	0	5	5	0.73
G27028	694,417	1,396,663	144	315	-60	5	0	3	3	0.93
G27029	694,420	1,396,660	144	315	-60	5	1	5	4	0.94
G27030	694,424	1,396,656	144	315	-60	5	0	5	5	0.70
G27031	694,427	1,396,653	144	315	-60	5	0	5	5	0.99
G27032	694,431	1,396,649	143	315	-60	5	0	5	5	1.30
G27037	694,449	1,396,632	144	315	-60	5	1	5	4	1.77
G27038	694,452	1,396,628	144	315	-60	5	0	5	5	1.03
G27039	694,456	1,396,625	144	315	-60	5	0	5	5	0.99
G27042	694,466	1,396,615	145	315	-60	6	2	5	3.0	1.30
G27043	694,470	1,396,611	146	315	-60	7	1	3	2	1.13
G27044	694,474	1,396,607	146	315	-60	7	1	6	5	0.69
G27046	694,480	1,396,600	146	315	-60	4	0	3	3	2.10
G27048	694,488	1,396,593	146	315	-60	7	0	3	3	1.05
G27049	694,491	1,396,590	146	315	-60	7	0	2	2	1.31
G27050	694,495	1,396,586	146	315	-60	7	0	5	5	1.58
G29004	694,342	1,396,751	146	315	-60	7	2	6	4	1.36
G29009	694,360	1,396,733	145	315	-60	7	1	7	6	0.97
G29010	694,363	1,396,730	144	315	-60	7	0	7	7	0.71
G29011	694,366	1,396,726	144	315	-60	5	0	3	3	0.90
G29013	694,373	1,396,719	144	315	-60	5	0	5	5	0.81
G29014	694,377	1,396,715	144	315	-60	5	2	5	3	0.85
G29015	694,380	1,396,712	144	315	-60	5	1	5	4	1.55
G29016	694,384	1,396,709	144	315	-60	9	0	2	2	1.18
G29017	694,388	1,396,705	144	315	-60	10	1	3	2	1.06
G29019	694,395	1,396,698	145	315	-60	12	0	6	6	2.20
G29020	694,398	1,396,695	145	315	-60	13	0	5	5	0.80
G29023	694,409	1,396,685	146	315	-60	13	9	12	3.0	0.90

G29026	694,420	1,396,674	145	315	-60	6	0	6	6	1.26
G29027	694,424	1,396,670	144	315	-60	10	0	10	10	0.88
G29028	694,427	1,396,667	143	315	-60	10	0	4	4.0	0.89
G29029	694,431	1,396,663	143	315	-60	9	0	6	6	1.07
G29030	694,434	1,396,660	143	315	-60	10	0	9	9	1.02
G29031	694,438	1,396,657	143	315	-60	10	0	4	4	0.73
G29036	694,455	1,396,639	143	315	-60	6	1	3	2	1.05
G29037	694,459	1,396,635	143	315	-60	9	0	8	8	1.19
G29038	694,462	1,396,632	143	315	-60	10	0	10	10	0.81
G29040	694,469	1,396,625	144	315	-60	10	7	8	1	2.27
G29043	694,480	1,396,614	145	315	-60	4	0	3	3	0.74
G31013	694,354	1,396,754	145	315	-60	7	0	4	4	0.91
G31014	694,357	1,396,750	145	315	-60	7	0	7	7	1.36
G31021	694,385	1,396,722	144	315	-60	11	0	3	3	1.63
G31022	694,391	1,396,716	144	315	-60	8	0	6	6	2.42
G31023	694,394	1,396,712	144	315	-60	11	0	3	3	1.25
G31024	694,398	1,396,709	145	315	-60	11	0	10	10	0.91
G31025	694,402	1,396,705	145	315	-60	12	0	12	12	0.73
G31026	694,405	1,396,702	145	315	-60	13	0	8	8	1.03
G31027	694,409	1,396,698	146	315	-60	13	0	5	5	1.38
G31028	694,412	1,396,695	146	315	-60	13	0	4	4	1.43
G31029	694,416	1,396,691	146	315	-60	14	0	2	2	2.10
G31030	694,420	1,396,688	146	315	-60	13	8	9	1	2.43
G31033	694,430	1,396,677	144	315	-60	11	0	5	5	1.66
G31034	694,434	1,396,674	143	315	-60	10	0	5	5	1.39
G31035	694,438	1,396,671	143	315	-60	10	0	6	6	0.85
G31036	694,441	1,396,667	143	315	-60	10	0	9	9	1.23
G31037	694,445	1,396,663	143	315	-60	10	0	10	10	0.94
G31042	694,462	1,396,646	143	315	-60	9	0	5	5	2.14
G31043	694,466	1,396,642	143	315	-60	9	0	5	5	0.73
G31044	694,469	1,396,638	143	315	-60	10	0	5	5	0.91
G31047	694,388	1,396,719	144	315	-60	8	0	7	7	1.55
G33023	694,391	1,396,730	144	315	-60	10	1	3	2	1.60
G33024	694,395	1,396,726	144	315	-60	10	0	7	7	1.43
G33025	694,398	1,396,723	144	315	-60	10	0	2	2	1.63
G33026	694,402	1,396,719	144	315	-60	10	0	8	8	1.59
G33027	694,406	1,396,715	145	315	-60	11	0	11	11	0.90
G33028	694,409	1,396,712	145	315	-60	12	0	12	12	1.37
G33029	694,413	1,396,710	145	315	-60	13	0	5	5	0.85
G33031	694,421	1,396,703	146	315	-60	13	0	3	3	0.82
G33032	694,424	1,396,698	146	315	-60	13	1	7	6	0.70
G33033	694,427	1,396,695	146	315	-60	13	0	3	3	2.10
G33034	694,430	1,396,691	145	315	-60	12	0	3	3	1.33
G33035	694,434	1,396,688	145	315	-60	12	0	4	4	0.84
G33036	694,438	1,396,684	144	315	-60	11	7	8	1	3.77
G33037	694,441	1,396,681	143	315	-60	10	0	9	9	1.11
G33038	694,445	1,396,677	143	315	-60	10	3	6	3	1.21
G35008	694,346	1,396,790	143	315	-60	7	6	6.5	0.5	59.50
G35009	694,349	1,396,787	143	315	-60	7	0	4	4	1.84
G35024	694,402	1,396,734	144	315	-60	11	0	2	2	1.14

G35025	694,406	1,396,730	144	315	-60	9	0	6	6	1.22
G35026	694,409	1,396,726	144	315	-60	10	0	5	5	1.23
G35027	694,413	1,396,723	144	315	-60	11	0	11	11	0.93
G35028	694,416	1,396,720	145	315	-60	12	10	12	2	1.98
G35028	694,416	1,396,720	145	315	-60	12	0	2	2	1.77
G35030	694,423	1,396,713	145	315	-60	11	0	4	4	0.65
G35031	694,427	1,396,709	145	315	-60	12	1	4	3	1.59
G35032	694,430	1,396,706	145	315	-60	12	0	4	4	1.68
G35033	694,434	1,396,702	145	315	-60	12	0	7	7	1.83
G35038	694,452	1,396,684	143	315	-60	9	0	5	5	0.96
G35039	694,456	1,396,680	143	315	-60	9	1	9	8	1.50
G35045	694,480	1,396,657	142	315	-60	7	0	4	4	0.80
G35046	694,483	1,396,653	143	315	-60	9	2	9	7	0.65
G35047	694,487	1,396,649	143	315	-60	9	1	9	8	0.84
G35048	694,490	1,396,646	143	315	-60	9	0	5	5	0.60
G37003	694,341	1,396,808	143	315	-60	7	0	1	1	2.69
G37005	694,349	1,396,801	142	315	-60	5	0	4	4	1.01
G37006	694,352	1,396,797	143	315	-60	6	0	6	6	0.57
G37007	694,357	1,396,794	143	315	-60	7	0	3	3	1.25
G37008	694,360	1,396,790	142	315	-60	5	0	4	4	1.31
G37011	694,371	1,396,780	142	315	-60	5	0	5	5	1.02
G37012	694,374	1,396,776	142	315	-60	5	0	4	4	1.63
G37013	694,378	1,396,773	142	315	-60	6	0	6	6	0.81
G37014	694,381	1,396,768	142	315	-60	6	0	4	4	1.23
G37015	694,389	1,396,761	144	315	-60	8	0	7.5	7.5	2.81
G37016	694,395	1,396,755	144	315	-60	11	0	6	6	1.94
G37020	694,409	1,396,741	144	315	-60	11	0	6	6	3.37
G37021	694,413	1,396,737	144	315	-60	9	0	6	6	1.75
G37022	694,417	1,396,733	144	315	-60	11	0	8	8	1.80
G37023	694,420	1,396,730	144	315	-60	11	0	8	8	0.77
G37024	694,424	1,396,726	144	315	-60	11	10	11	1	2.35
G37024	694,424	1,396,726	144	315	-60	11	0	3	3	0.65
G37025	694,428	1,396,722	144	315	-60	11	0	7	7	0.63
G37028	694,437	1,396,713	145	315	-60	11	0	3	3	0.84
G37029	694,441	1,396,709	144	315	-60	11	0	6	6	1.42
G37030	694,445	1,396,706	144	315	-60	11	0	3	3	0.74
G37031	694,448	1,396,702	143	315	-60	10	3	5	2	1.61
G37034	694,459	1,396,692	142	315	-60	9	0	4	4	0.83
G37035	694,465	1,396,684	142	315	-60	9	0	9	9	0.86
G37043	694,494	1,396,657	143	315	-60	9	0	7	7	0.82
G37045	694,501	1,396,649	144	315	-60	10	0	2	2	1.24
G37046	694,505	1,396,646	144	315	-60	7	0	2	2	1.36
G37048	694,511	1,396,639	144	315	-60	10	0	3	3.0	0.84
G37049	694,385	1,396,764	143	315	-60	7	0	5	5	1.01
G37050	694,462	1,396,688	142	315	-60	9	0	4	4	1.22
G39003	694,341	1,396,822	142	315	-60	6	0	6	6	0.86
G39004	694,345	1,396,819	142	315	-60	6	0	4	4	1.16
G39007	694,360	1,396,804	141	315	-60	5	0	5	5	0.86
G39008	694,364	1,396,801	141	315	-60	5	1	3	2	1.40
G39009	694,367	1,396,797	141	315	-60	5	1	5	4	1.13

G39012	694,381	1,396,783	142	315	-60	6	0	5.5	5.5	0.81
G39013	694,384	1,396,779	142	315	-60	8	1	3	2	1.15
G39015	694,392	1,396,771	143	315	-60	9	0	4	4	1.06
G39016	694,395	1,396,769	143	315	-60	10	0	8	8	1.22
G39017	694,399	1,396,766	144	315	-60	11	0	7	7	1.34
G39018	694,403	1,396,762	145	315	-60	12	0	2	2	2.81
G39019	694,407	1,396,758	145	315	-60	12	0	2	2	2.70
G39022	694,416	1,396,749	145	315	-60	11	0	3	3	1.19
G39023	694,420	1,396,744	144	315	-60	11	1	2	1	4.76
G39025	694,428	1,396,737	144	315	-60	11	0	4	4	1.29
G39026	694,431	1,396,733	144	315	-60	11	0	8	8	0.86
G39027	694,435	1,396,730	144	315	-60	11	0	8	8	0.79
G39028	694,438	1,396,726	144	315	-60	11	0	6	6	0.97
G39029	694,442	1,396,722	144	315	-60	11	0	9	9	0.58
G39030	694,444	1,396,720	144	315	-60	11	0	2	2	13.78
G39031	694,448	1,396,717	144	315	-60	11	0	5	5	2.77
G39032	694,452	1,396,713	143	315	-60	10	0	10	10	2.75
G39033	694,456	1,396,709	142	315	-60	9	0	4	4	2.59
G39034	694,460	1,396,705	142	315	-60	9	0	3	3	0.68
G39035	694,463	1,396,702	142	315	-60	9	0	3	3	1.43
G39036	694,467	1,396,698	142	315	-60	9	0	6	6	0.83
G39037	694,469	1,396,695	142	315	-60	9	0	6	6	1.12
G39038	694,472	1,396,691	142	315	-60	9	0	5	5	1.01
G39049	694,511	1,396,653	144	315	-60	8	4	5	1	2.73
G39050	694,515	1,396,649	144	315	-60	10	0	6	6	2.52
G39052	694,522	1,396,642	145	315	-60	8	0	4	4	1.26
G39053	694,353	1,396,812	141	315	-60	5	3	5	2.0	1.01
G40002	694,343	1,396,828	142	315	-60	8	4	7	3	0.89
G40003	694,350	1,396,821	141	315	-60	7	3	5	2	1.47
G40004	694,354	1,396,818	141	315	-60	7	0	7	7	1.18
G40006	694,364	1,396,807	141	315	-60	7	0	6	6	0.86
G40007	694,371	1,396,800	141	315	-60	6	0	6	6	0.82
G40009	694,382	1,396,789	142	315	-60	8	0	3	3	0.77
G40010	694,385	1,396,786	142	315	-60	9	0	4	4	0.95
G40011	694,389	1,396,782	143	315	-60	8	0	3	3	1.09
G40012	694,392	1,396,779	143	315	-60	8	0	6	6	0.98
G40013	694,396	1,396,775	143	315	-60	10	0	10	10	0.80
G40014	694,400	1,396,772	144	315	-60	11	0	10	10	1.26
G40016	694,407	1,396,765	145	315	-60	11	0	3	3	1.88
G40017	694,415	1,396,757	145	315	-60	11	6	7	1	3.49
G40019	694,429	1,396,742	144	315	-60	10	0	2	2	1.60
G40020	694,436	1,396,736	144	315	-60	11	0	9	9	0.74
G40021	694,442	1,396,729	144	315	-60	11	0	4	4	0.65
G40022	694,450	1,396,721	144	315	-60	11	0	8	8	0.68
G40023	694,456	1,396,715	143	315	-60	9	0	6	6	0.94
G40024	694,463	1,396,708	142	315	-60	9	0	4	4	0.62
G40025	694,471	1,396,700	142	315	-60	9	0	8	8	0.77
G40026	694,477	1,396,694	142	315	-60	9	0	5	5	0.74
G41006	694,346	1,396,833	142	315	-60	8	2	7.5	5.5	1.06
G41007	694,349	1,396,829	141	315	-60	8	4	8	4.0	1.32

G41008	694,353	1,396,825	141	315	-60	8	0	8	8	2.45
G41014	694,374	1,396,804	141	315	-60	8	0	3	3	0.87
G41017	694,385	1,396,794	142	315	-60	8	0	5	5	1.52
G41018	694,388	1,396,790	142	315	-60	9	0	9	9	1.03
G41019	694,391	1,396,787	143	315	-60	10	0	3	3	2.09
G41020	694,399	1,396,779	144	315	-60	10	0	7	7	0.91
G41021	694,402	1,396,776	144	315	-60	11	0	10	10	2.62
G41022	694,406	1,396,773	144	315	-60	11	1	6	5	0.77
G41023	694,410	1,396,769	145	315	-60	12	0	6	6	2.05
G41024	694,413	1,396,765	145	315	-60	12	0	1	1	3.09
G41025	694,417	1,396,761	145	315	-60	12	0	3	3	1.40
G41026	694,420	1,396,758	145	315	-60	10	1	7	6	2.74
G41027	694,424	1,396,754	144	315	-60	10	0	5	5	1.49
G41028	694,426	1,396,751	144	315	-60	10	0	7	7	1.66
G41029	694,430	1,396,748	144	315	-60	11	9	11	2	2.91
G41030	694,433	1,396,744	144	315	-60	10	0	3	3	1.56
G41031	694,438	1,396,741	144	315	-60	11	0	8	8	0.88
G41032	694,441	1,396,737	144	315	-60	11	0	11	11	0.92
G41033	694,445	1,396,734	144	315	-60	11	0	3	3	1.13
G41034	694,449	1,396,730	144	315	-60	10	0	3	3	0.80
G41035	694,451	1,396,728	144	315	-60	11	0	2	2	2.71
G41036	694,455	1,396,724	143	315	-60	10	1	9	8	1.26
G41037	694,459	1,396,720	143	315	-60	10	0	5	5	1.43
G41038	694,463	1,396,716	142	315	-60	9	0	6	6	2.19
G41041	694,473	1,396,705	142	315	-60	9	0	5	5	1.11
G41042	694,477	1,396,702	142	315	-60	9	0	5	5	0.88
G41043	694,480	1,396,698	142	315	-60	9	0	7	7	0.87
G41044	694,484	1,396,695	142	315	-60	9	0	4	4	0.75
G41045	694,487	1,396,691	142	315	-60	9	0	7	7	4.40
G41047	694,498	1,396,681	142	315	-60	9	0	8	8	0.72
G41053	694,519	1,396,660	143	315	-60	10	1	6	5	1.15
G41054	694,522	1,396,656	144	315	-60	10	0	4	4	1.20
G41056	694,529	1,396,649	144	315	-60	11	0	2	2	1.03
G41058	694,343	1,396,835	142	315	-60	5	0	5	5	1.53
G41059	694,395	1,396,783	143	315	-60	9	0	4	4	0.83
G41060	694,490	1,396,688	142	315	-60	9	0	3	3	1.08
G42003	694,339	1,396,846	142	315	-60	6	5	6	1	2.15
G42004	694,346	1,396,839	142	315	-60	4	3	4	1	2.41
G42006	694,354	1,396,832	141	315	-60	8	0	8	8	1.16
G42007	694,357	1,396,828	141	315	-60	7	0	7	7	1.59
G42008	694,361	1,396,825	141	315	-60	7	0	7	7	1.64
G42009	694,368	1,396,818	141	315	-60	7	0	7	7	0.80
G42010	694,374	1,396,811	142	315	-60	8	0	5	5	1.25
G42012	694,389	1,396,796	142	315	-60	9	0	9	9	2.25
G42013	694,396	1,396,789	143	315	-60	9	0	6	6	2.14
G42014	694,403	1,396,782	144	315	-60	10	0	9	9	0.87
G42015	694,410	1,396,775	144	315	-60	10	0	3	3	1.13
G42019	694,432	1,396,753	144	315	-60	9	7	9	2	3.08
G42020	694,438	1,396,747	144	315	-60	9	0	2	2	2.12
G42021	694,442	1,396,743	144	315	-60	11	0	9	9	0.72

G42022	694,445	1,396,740	144	315	-60	11	0	5	5	1.17
G42023	694,453	1,396,733	144	315	-60	10	0	6	6	0.95
G42024	694,460	1,396,726	143	315	-60	9	0	6	6	1.78
G42025	694,467	1,396,719	142	315	-60	9	0	8	8	0.91
G42026	694,474	1,396,711	142	315	-60	8	0	3	3	0.74
G43006	694,332	1,396,859	142	315	-60	6	0	5	5	0.94
G43008	694,340	1,396,852	142	315	-60	7	4	5	1.0	2.51
G43012	694,354	1,396,838	141	315	-60	8	3	8	5	2.53
G43013	694,358	1,396,835	141	315	-60	7	0	7	7	0.93
G43014	694,361	1,396,831	141	315	-60	8	0	8	8	1.15
G43015	694,365	1,396,828	141	315	-60	7	0	7	7	1.58
G43016	694,369	1,396,824	141	315	-60	6	0	6	6	0.79
G43017	694,372	1,396,820	141	315	-60	8	0	8	8	0.98
G43018	694,375	1,396,817	141	315	-60	8	0	8	8	0.91
G43019	694,379	1,396,813	142	315	-60	8	0	4	4	0.95
G43022	694,390	1,396,802	143	315	-60	9	0	2	2	1.34
G43023	694,393	1,396,799	143	315	-60	10	0	4	4	2.41
G43024	694,399	1,396,794	143	315	-60	10	0	4	4	1.62
G43025	694,403	1,396,790	143	315	-60	10	4	7	3	0.65
G43026	694,407	1,396,786	143	315	-60	10	0	8	8	0.59
G43027	694,410	1,396,783	144	315	-60	10	7	10	3	0.69
G43028	694,413	1,396,780	144	315	-60	11	0	3	3	0.71
G43031	694,424	1,396,769	144	315	-60	9	0	6	6	1.74
G43033	694,431	1,396,762	145	315	-60	9	0	1	1	2.03
G43035	694,437	1,396,756	144	315	-60	10	0	1	1	2.54
G43036	694,441	1,396,752	144	315	-60	11	0	3	3	1.27
G43037	694,444	1,396,748	144	315	-60	10	0	9	9	0.81
G43038	694,447	1,396,744	144	315	-60	11	0	7	7	1.47
G43039	694,451	1,396,741	144	315	-60	10	0	4	4	1.60
G43040	694,455	1,396,738	144	315	-60	10	3	9	6	1.18
G43041	694,458	1,396,734	143	315	-60	10	0	8	8	0.91
G43042	694,462	1,396,731	143	315	-60	10	0	10	10	1.55
G43043	694,466	1,396,726	143	315	-60	9	0	8	8	2.78
G43044	694,470	1,396,723	142	315	-60	9	0	6	6	2.13
G43045	694,473	1,396,720	142	315	-60	9	0	5	5	1.07
G43046	694,477	1,396,716	142	315	-60	9	2	5	3	1.17
G43047	694,480	1,396,713	142	315	-60	9	0	5	5	0.84
G43048	694,484	1,396,709	142	315	-60	9	0	4	4	1.10
G43049	694,487	1,396,705	142	315	-60	9	0	3	3	0.90
G43050	694,491	1,396,702	142	315	-60	9	0	8	8	1.12
G43051	694,494	1,396,698	142	315	-60	9	4	5	1	4.22
G43053	694,502	1,396,691	143	315	-60	9	0	7	7	0.98
G43054	694,505	1,396,688	142	315	-60	9	0	9	9	1.55
G43055	694,509	1,396,684	142	315	-60	9	0	9	9	1.26
G43056	694,512	1,396,681	142	315	-60	9	0	3	3	1.04
G43059	694,522	1,396,670	143	315	-60	10	3	10	7	0.80
G43060	694,526	1,396,667	143	315	-60	10	0	8	8	0.84
G43061	694,529	1,396,663	144	315	-60	9	1	9	8	1.12
G43062	694,533	1,396,660	144	315	-60	11	3	10	7	4.96
G43063	694,396	1,396,796	143	315	-60	10	0	5	5	3.34

G44006	694,360	1,396,839	141	315	-60	7	0	6	6	1.02
G44007	694,364	1,396,835	141	315	-60	7	0	7	7.0	0.76
G44009	694,378	1,396,821	141	315	-60	8	0	5	5.0	0.66
G44015	694,407	1,396,793	143	315	-60	10	0	9	9	1.06
G44016	694,414	1,396,786	143	315	-60	10	5	9	4	0.61
G44018	694,428	1,396,772	144	315	-60	11	0	5	5	2.50
G44019	694,431	1,396,768	144	315	-60	10	9	10	1	4.66
G44019	694,431	1,396,768	144	315	-60	10	0	3	3	1.10
G44021	694,438	1,396,761	144	315	-60	10	0	3	3.0	1.33
G44022	694,442	1,396,757	144	315	-60	9	0	3	3	0.91
G44023	694,445	1,396,754	144	315	-60	10	0	9	9	1.02
G44024	694,449	1,396,750	144	315	-60	10	0	9	9	1.03
G44025	694,456	1,396,743	143	315	-60	10	0	7	7	0.84
G44026	694,463	1,396,736	143	315	-60	9	0	8	8	1.56
G44027	694,470	1,396,729	142	315	-60	9	0	4	4	1.38
G44028	694,477	1,396,722	142	315	-60	9	0	9	9	1.32
G44029	694,481	1,396,719	142	315	-60	9	0	8	8	1.21
G45001	694,405	1,396,801	144	315	-60	11	0	3	3	1.24
G45002	694,409	1,396,797	144	315	-60	10	0	6	6	0.77
G45003	694,412	1,396,794	143	315	-60	10	0	9	9	1.03
G45004	694,416	1,396,790	143	315	-60	10	0	6	6	0.88
G45005	694,419	1,396,787	143	315	-60	11	0	4	4	0.74
G45006	694,423	1,396,784	143	315	-60	11	0	2	2	1.13
G45010	694,437	1,396,770	144	315	-60	11	0	5	5	1.06
G45011	694,441	1,396,766	144	315	-60	11	0	4	4	1.00
G45012	694,444	1,396,762	144	315	-60	10	0	2	2	2.16
G45013	694,448	1,396,759	144	315	-60	11	0	7	7	1.12
G45014	694,451	1,396,755	143	315	-60	10	0	7	7	0.99
G45015	694,454	1,396,751	143	315	-60	10	0	9	9	1.15
G45016	694,458	1,396,748	143	315	-60	9	0	6	6	1.06
G45017	694,462	1,396,744	142	315	-60	9	0	6	6	1.21
G45018	694,465	1,396,741	142	315	-60	9	0	9	9	2.65
G45019	694,469	1,396,737	142	315	-60	9	0	9	9	1.90
G45020	694,473	1,396,734	142	315	-60	9	0	5	5	0.99
G45021	694,477	1,396,730	142	315	-60	6	0	5	5	1.79
G45022	694,480	1,396,727	142	315	-60	8	0	4	4	1.07
G45023	694,484	1,396,724	142	315	-60	8	1	8	7	0.99
G45024	694,487	1,396,720	142	315	-60	8	0	7	7	1.17
G45025	694,491	1,396,716	142	315	-60	8	0	6	6	0.94
G45026	694,494	1,396,713	142	315	-60	8	0	5	5	1.27
G45030	694,508	1,396,699	142	315	-60	9	0	9	9	3.53
G45031	694,512	1,396,695	142	315	-60	9	2	9	7	1.48
G45035	694,525	1,396,681	143	315	-60	8	3	8	5	1.12
G45036	694,529	1,396,677	143	315	-60	10	1	10	9	0.86
G45037	694,533	1,396,674	143	315	-60	10	2	10	8	1.26
G45038	694,536	1,396,670	144	315	-60	10	1	9	8	0.86
G47001	694,481	1,396,740	141	315	-60	8	0	8	8	0.96
G47003	694,488	1,396,733	142	315	-60	8	0	6	6	1.53
G47007	694,502	1,396,719	142	315	-60	8	1	8	7	1.91
G47008	694,506	1,396,715	142	315	-60	9	0	3	3	0.81

G47009	694,509	1,396,712	143	315	-60	9	0	9	9	4.82
G47010	694,513	1,396,708	143	315	-60	9	0	9	9	3.70
G47011	694,516	1,396,705	143	315	-60	9	0	9	9	4.06
G47012	694,520	1,396,701	143	315	-60	9	0	6	6	1.76
G49001	694,492	1,396,744	140	315	-60	7	0	6	6	2.10
G49002	694,495	1,396,740	141	315	-60	7	6	7	1	3.94
G49003	694,499	1,396,737	142	315	-60	8	1	8	7	2.24
G49004	694,502	1,396,733	142	315	-60	9	2	8	6	0.91
G49005	694,506	1,396,729	142	315	-60	9	0	9	9	1.40
G49006	694,509	1,396,726	142	315	-60	9	0	1	1	17.90
G49008	694,516	1,396,719	143	315	-60	9	0	6	6	1.83
G49009	694,520	1,396,715	143	315	-60	10	0	9	9	1.54
G49010	694,523	1,396,712	143	315	-60	10	0	10	10	2.52
G49011	694,527	1,396,708	143	315	-60	10	0	6	6	2.08
G49012	694,530	1,396,704	143	315	-60	10	6	7	1.0	2.02
G51001	694,506	1,396,744	142	315	-60	9	1	7	6	1.80
G51002	694,510	1,396,740	142	315	-60	9	0	9	9	1.48
G51003	694,513	1,396,737	142	315	-60	9	5	9	4	1.79
G51009	694,534	1,396,715	144	315	-60	10	0	9	9	0.99
G53003	694,523	1,396,740	144	315	-60	7	0	1	1	2.74
G53004	694,527	1,396,736	144	315	-60	11	0	4	4	0.94

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

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - 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.	- For the drill programme, air core (AC) drilling is used to collect 1m samples these are split with a cone splitter at the drill rig to produce a 3-5kg sub-sample. - Drilling 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. - Oxide matrix standards, field duplicates and pulp blanks are inserted in sample batches to test laboratory performance.
Drilling techniques	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).	A track mounted UDR650 multipurpose drill rig is used to drill 5.5-inch AC holes.
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 AC 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.
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 AC drill chips are 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.
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 sub-sampling 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.	- Most AC samples are dry and there is no likelihood of compromised results due to moisture. - All types of samples are prepared for assay at the NATA accredited ALS Cambodia sample preparation facility in Phnom Penh; and that facility has been inspected, at the request of Renaissance, numerous times and most recently by Mr Brett Gossage, Mr Keith King and Mr Morgan Hart in Dec 2016. Samples are dried for a minimum of 12 hours at 105°C; - AC samples are split to 1kg and pulverized in an Essa LM2 Ring Mill. A standard >85% pass rate is achieved (with particle size analysis performed on every tenth sample as a check). - Field duplicate samples are collected at an AC drill rig to monitor sampling precision. - This sample technique is industry norm, and is deemed appropriate for the material.
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. - 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.	- All drill samples are sent to the NATA accredited ALS Laboratory in Vientiane, Laos, for fire assay (Au-AA25: 30g 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. - Samples are sent to the similarly accredited ALS Lab in Brisbane, Australia and ALS Lab Perth, Australia, for multi-element ICP analysis, after partial extraction by aqua regia digest ME-MS42: ICP-MS for Ag, As, Bi, Sb, Te, Hg and Cu by ME-MS-41 ICP-AES. - Fire assay is considered a total gold assay. - The Au-AA25 method has a lower detection limit of 0.01g/t gold. - 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.

Criteria	JORC Code explanation	Commentary
		• Industry-standard QAQC protocols are routinely followed for all sample batches sent for assay, which includes the insertion of commercially available pulp CRMs and pulp blanks into all batches - usually 1 of each for every 20 field samples. Additional blanks used are home-made from barren quarry basalt. 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 - no issues were raised with the results reported here. • All assay data, including internal and external QA/QC data and control charts of standard, replicate and duplicate assay results, are communicated electronically.
Verification of sampling and assaying	• The verification of significant intersections by 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. • All field data associated with drilling and sampling, and all associated assay and analytical results, are archived in a relational database, with industry-standard verification protocols and security measures in place.
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 first surveyed with a hand-held GPS instrument (which generates relatively inaccurate RL values). The locations of all holes used in Mineral Resource estimates are verified or amended by survey using a differential GPS by and external contractor with excellent accuracy in all dimensions using a local base station reference). All locations are surveyed to the Indian 1960 Zone 48N 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. • Down-hole surveys are routinely undertaken at 25-30m intervals for all types of drilling, using a single-shot or multi-shot REFLEX survey tool (operated by the driller and checked by the supervising geologist).
Data spacing and distribution	• 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.	• This drill spacing is considered to be sufficient to establish geological and grade continuity appropriate for the declaration of estimates of resources. • No samples within a "zone of interest" are ever composited.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• Drill holes are usually designed to intersect target structures with a "close-to-orthogonal" intercept. • 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 to the ALS Sample Preparation facility in Phnom Penh is managed by Renaissance personnel. AC drill samples are transported from the drill site to the Okvau field camp, 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.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• 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) and Nola Hackman (January 2014), Wolfe (July 2015). • Mr Brett Gossage reviewed the data used in the Okvau Resource up to December 2016 and concluded that there are no concerns about data quality.

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 drill programme is located within the Okvau exclusivity licence and within the 11.5km² that is currently under the application for an Industrial Mining Licence. Both the licences are held or applied for (100%) in the name of Renaissance Minerals (Cambodia) Limited which is a wholly owned subsidiary of Emerald Resources NL. • Industrial Mining Licence was issued on 27th June 2018. • Tenure is considered secure.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Renaissance Minerals (Cambodia) Ltd was formerly named OZ Minerals (Cambodia) Ltd, 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 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.
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 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. • 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.
		• Details of significant drilling results are shown in Appendix One.

Data aggregation methods	• 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. • 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.	• Drill intercepts are identified at a 0.5g/t Au cut-off grade, with a continuous internal dilution of 4m (in any single zone of waste). A weighted average grade is calculated as the sum of the products of sample length and grade for each sample in the relevant interval, divided by the total length of the interval. All intercepts reported have a value greater than 2 gram metres. • No high grade top cuts have been applied. • No rounding has been applied. • All results reported are gold only.
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 (e.g. 'down hole length, true width not known').	• Most of the drill holes intersect the mineralised zones at sufficient angle for the risk of significant sampling orientation bias to be low. • The drill programme was planned with a consistent dip and azimuth (-60 degrees towards 315) due to floor conditions, some holes were drilled with a vertical dip.
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 and sections 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	• All significant drilling results being intersections with a minimum 2 gram metre values are reported in Appendix One.

Criteria	Explanation	Commentary
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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. • The Company completed a Definitive Feasibility Study in May 2017 which was subsequently updated in November 2019. The DFS 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 is being undertaken at the Okvau Deposit, including infill drilling and extensional drilling to test lateral and depth extensions of the known mineralisation. • Further drilling will be undertaken to test new regional targets, as potential is recognized.