

Okvau Gold Project, Cambodia Emerald to Become +100,000ozpa Gold Producer



**Investor Presentation | August 2018** 



### **Presentation Disclaimer**



#### **Forward Looking Statement**

This announcement 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 announcement has been prepared in compliance with the current JORC Code 2012 Edition and the ASX listing Rules. All material assumptions on which the forecast financial information is based have been included in this announcement.

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. 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 the 1 May 2017 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 announcement. 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 Grade Control 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.

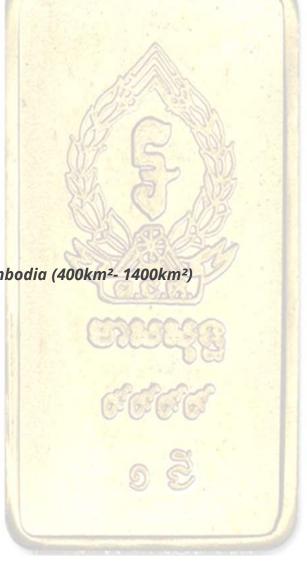
The information in this report that relates to the Mineral Resources for the Okvau Gold Deposit was prepared by EGRM Consulting Pty Ltd, Mr Brett Gossage, who is a consultant to the Company, who is a Member of the Australasian Institute of Mining & Metallurgy (AIG), and has sufficient experience relevant 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.

# **Emerald a Short History**



- 20th August 2014
  - Current board appointed to Emerald Oil and Gas
    - Change of business and Change of name to Emerald Resources
- 14th November 2016
  - Completed Merger with Renaissance Minerals
- 1st May 2017
  - Okvau Definitive Feasibility announced and;
  - o Maiden Ore Reserve of 14.3Mt @ 2.0g/t Au for 907,000oz
- 13th July 2017
  - Emerald announced significant expansion of its ground holdings in Cambodia (400km²- 1400km²)
- 13<sup>th</sup> November 2017
  - o Okvau Project received Environmental Approval for development
- 6<sup>th</sup> July 2018
  - Okvau Project Mining Lease granted
    - Project fully licenced for development
- In progress
  - Financing
  - o Development

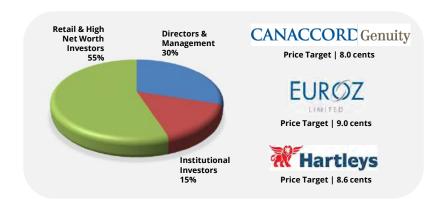


Reference is made to the Company's ASX release dated 1 May 2017 titled Okvau DFS Delivers Ore Reserve of 907,000oz. All material assumptions underpinning the production target or the forecast financial information continue to apply and have not materially changed



### **Capital Structure**

ASX Code	EMR
Share Price	3.6 cents <sup>1</sup>
Shares on Issue	2,111M
Options on Issue	49M <sup>2</sup>
Market Cap (undiluted)	<b>A\$63M</b> <sup>2</sup>
Cash & Listed Investments	<b>A\$1.2M</b> <sup>3</sup>
Debt	Nil <sup>3</sup>



<sup>1</sup> Share Price as at 2 August 2018

#### **Board & Management**

#### Simon Lee AO, Non-Executive Chairman

- Previously Chairman: Equigold NL, Samantha Gold NL, and Great Victoria Gold NL
- Previously Board Member of the Australian Trade Commission and Patron of the Western Australian Chinese Chamber of Commerce

#### Morgan Hart, Managing Director

- Previously Executive Director (Operations) of Regis Resources
   Ltd
- Previously Executive Director of Equigold NL

#### **Justin Tremain, Non-Executive Director**

- Founding Managing Director of Renaissance Minerals in 2010
- Previously investment banking in the natural resources sector (NM Rothschild & Sons and Investec Bank)

#### **Ross Stanley, Non-Executive Director**

- Extensive experience both in Australian and African mining enterprises
- Founder and majority shareholder of Stanley Mining Services
- Previously Non-Executive Director of Equigold NL

#### Ross Williams, Non-Executive Director

- Founding shareholder and Director of MACA Limited (mining & civil contractor)
- 16yrs banking experience having held executive positions with a major Australian Bank

#### Mick Evans, Chief Operating Officer

- Previously Chief Development Officer with Regis Resources Ltd (managed the construction of gold plants at the Moolart Well, Garden Well and Rosemont)
- Previously with Equigold NL (instrumental in the construction of the Bonikro gold plant in Cote D'Ivoire)

<sup>&</sup>lt;sup>2</sup> Options comprise management and employee options ranging between 0.025 cents and 0.057 cents

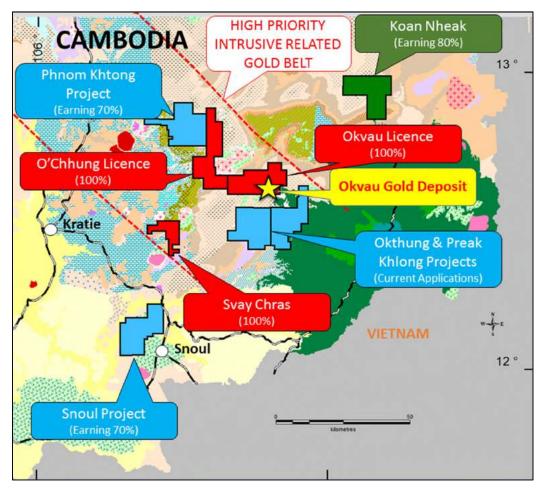
<sup>&</sup>lt;sup>3</sup> As per 30 June 2018 Quarterly Cashflow Report

# Cambodia Overview & Project Location



### First mover advantage in frontier terrain

- ✓ Attractive fiscal regime:
  - o 100% ownership
  - No Government equity participation
  - o 30% corporate tax rate for mining
  - o 3.0% Government Gold royalty (net)
  - o Import duty exemptions
- √ ~1,400 km² of underexplored terrain prospective for large scale gold systems
- ✓ Project sparsely populated | no competing agriculture land use
- ✓ Access to grid power @ US 11.8 cents/kWh
- ✓ Access to water from adjacent river



<sup>&</sup>lt;sup>1</sup>Joint Venture for Phnom Khtong and Snoul Projects ratified by Cambodia Ministry of Mines and Energy (MME) earning up to 70% (current 0%)
<sup>2</sup> Earn-In for Koan Nheak ratified by MME and EMR earning up to 80% (current 0%)

# Okvau Project Summary | Robust and Compelling Economics



#### **Economically robust project**

- JORC Ore Reserve of 14.3Mt @ 2.0g/t Au for 907,000oz
- 2.0Mtpa plant to produce 106,000oz pa
- AISC of US\$731/oz over LOM
- NPV<sub>(5%)</sub> of US\$223M being 2.3x Capital Costs of US\$98M
  - Increases to US\$283M at US\$1350/ounce (pre tax)
- IRR of 48% at US\$1,250/ounce (pre tax)
  - Increases to 58% at US\$1350/ounce (pre tax)
- Payback of 2-2.5 years

#### **Development Timetable**<sup>1</sup>

- Targeting construction commencement late 2018
- First gold production first quarter 2020

#### **Financing**

 Financing well advanced, targeting conventional debt/equity mix funding

**Project DFS Economics (100% Ownership)** 

Development Capital Costs <sup>1</sup>	US\$91M
Mining Contractor Capital & Pre-Production Mining	<u>US\$7M</u>
	US\$98M
LOM C1 Cash Costs <sup>2</sup>	US\$650/oz
LOM AISC <sup>3</sup>	US\$731/oz
Operating Cash Flow (pre-tax)	US\$419M (A\$558M <sup>4</sup> )
Project Cash Flow After Capital (pre-tax)	US\$298M (A\$397M <sup>4</sup> )
NPV (5%) (pre-tax)	US\$223M (A\$298M <sup>4</sup> )
NPV (5%) (post-tax)	US\$160M (A\$213M4)
Payback (pre-tax)	26 months
Payback (post-tax)	30 months
IRR (pre-tax)	48% pa
IRR (post-tax)	40% pa

<sup>&</sup>lt;sup>1</sup> Includes US\$4.4M of capital spares and first fills

<sup>&</sup>lt;sup>2</sup> C1 Cash Costs include site based mining, processing and admin operating costs plus transport and refining costs

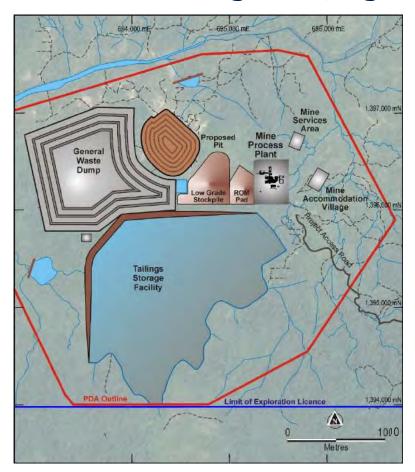
<sup>&</sup>lt;sup>3</sup> Includes C1 Cash Costs plus royalties, sustaining capital costs and rehabilitation & closure costs

<sup>&</sup>lt;sup>4</sup> Exchange rate of US\$0.75

<sup>&</sup>lt;sup>1</sup> Timetable subject to completion of financing for the development of the Okvau Gold Project
Reference is made to the Company's ASX release dated 1 May 2017 titled Okvau DFS Delivers Ore Reserve of 907,000oz. All material assumptions underpinning the production target or the forecast financial information continue to apply and have not materially changed

# **Low All-in Sustaining Costs | High Margin**





### Gold Price US\$1,250/oz

- 26 month pay back
- Project NPV & IRR:
  - o Pre-tax US\$223M (A\$298M) & 48%
  - o Post-tax US\$160M (A\$213M) & 40%

### **Operating Cost Summary**

	Life of Mine
On-Site Mining	US\$333/oz
On-Site Processing	US\$265/oz
On-Site G&A	US\$48/oz
Transport and Refining	US\$5/oz
C1 costs	US\$650/oz
Royalties <sup>1</sup>	US\$50/oz
Sustaining Capital & Closure Costs	US\$31/oz
AISC	US\$731/oz

<sup>1</sup> Includes Government royalty of 2.5% gross and OZ Minerals royalty of 1.5%

### **Capital Cost Summary**

Treatment Plant	US\$45.2M
Infrastructure (Road, Power, TSF, Camp, Plant Mobile Equipment & Process Plant Infrastructure)	US\$26.6M
Earthworks and Construction Overheads	US\$4.7M
EPCM and Commissioning	US\$7.4M
Owners Costs, Spares, First Fills & Household Resettlement	US\$7.0M
Estimated Capital Costs	US\$90.9M
Mining Contractor Establishment & Mobilisation	US\$2.2M
Pre-Production Mining Costs	US\$4.9M
Total Capital Requirement	US\$98.0M

# Metallurgy & Processing Extensive test work completed

#### **Conventional Flotation & Leaching**

Coarse primary grind (>106µm) and sulphide flotation

Low mass pull (8%), high grade concentrate

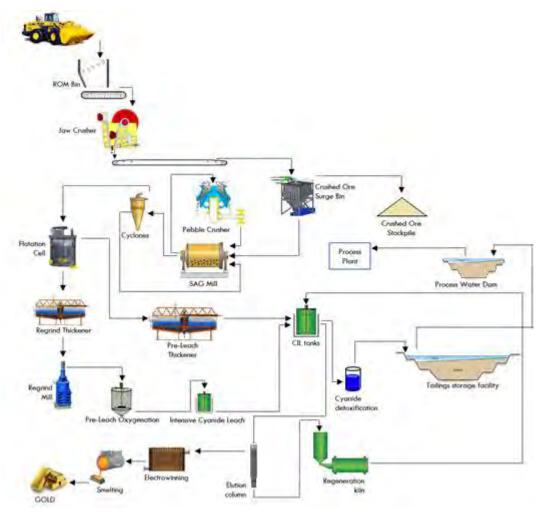
Fine regrind of concentrate only (no oxidation)

Leaching (flotation tails and concentrate) & Elution

#### **Gold recoveries of 84%**

- Single stage crushing with SAG mill
- Flotation and regrind account for only ~12% of total power consumption
- Moderate cyanide consumption (1.23kg/t of ore)
- Mean BWI of 17.5kWh/t





Reference is made to the Company's ASX release; dated 1 May 2017 titled "Okvau DFS Delivers Ore Reserve of 907,000oz". All material statements and assumptions continue to apply and have not materially changed

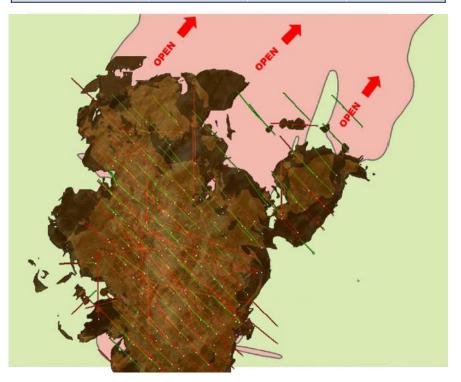
# Okvau JORC Reserve 2.0g/t Au for 907,000 ounces gold

- 650 metres of strike by 600 metres width of the mineralised vein system
- Drill spacing of 25m x 25m in the top 120m
- Select intersections include<sup>2</sup>:
  - o 36m @ 4.57g/t Au from 95m (DD16MET005)
  - o 18m @ 4.53g/t Au from 83m (DD16OKV299)
  - 17m @ 4.72g/t Au from 45m (RC16OKV336)
  - 31m @ 3.11g/t Au from 81m (RC16OKV275)
  - 16m @ 3.90g/t Au from 19m (RC16OKV272)
  - 58m @ 3.0g/t Au from 47m (DD11OKV073)<sup>3</sup>
  - o 33m @ 9.73g/t Au from 101m (DD06OKV004)3
  - o 31m @ 4.63g/t Au from 153m (DD08OKV013)3
  - o 23m @ 6.94g/t Au from 102m (DD11OKV063)3
  - o 22m @ 5.58g/t Au from 117m (DD11OKV064)3
  - o 20m @ 9.86g/t Au from 175m (DD11OKV084)3
- 'OPEN' to the north, north-east and to the south at depth



April 2017 JORC Resource (0.7g/t gold cut-off) <sup>1</sup>				
Resource Classification	Tonnage (Mt)	Grade Au (g/t)	Gold (Koz)	
Indicated	15.11	2.08	1,008	
Inferred	2.57	1.61	133	
Total	17.68Mt	2.01g/t	1,141	

April 2017 JORC Ore Reserve (0.625g/t gold cut-off) <sup>1</sup>			
Reserve Classification	Tonnage (Mt)	Grade Au (g/t)	Gold (Koz)
Probable Ore Reserve	14.26	1.98g/t	907,000



<sup>&</sup>lt;sup>1</sup> Reference is made to the Company's ASX releases dated 1 May 2017 titled Okvau DFS Delivers Ore Reserve of 907,000oz

<sup>&</sup>lt;sup>2</sup> Reference is made to ASX releases dated 2 December 2016 and 18 October 2016

<sup>&</sup>lt;sup>3</sup> Historical drilling result herein applied 0.5g/t Au lower cut, 4m continuous internal dilution, no top cut applied

### **Okvau Cross Section**



Stacked, sheeted sulphidic shear zones dipping to the south-east

Possible grade and volume upside along diorite/sediment contacts

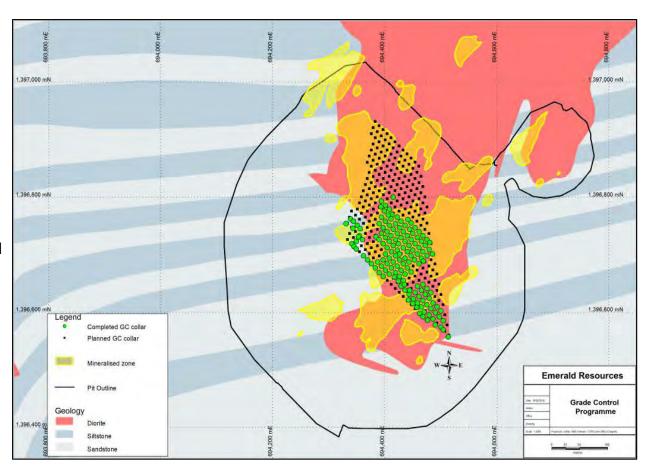
Contact intercepts include: 19m @ 9.13g/t gold and 22m @ 3.56g/t gold DD110KV088 RC160KV319 15m @ 2.12g/t 6m @ 6.59g/t 21m @ 3.85g/t 8m @ 3.00g/t 8m @ 4.05g/t 10m @ 1.07g/t 13m @ 2.59g/t 22m @ 3.56g/t 22m @ 3.72g/t 19m @ 9.13g/t 20m @ 2.19g/t 22m @ 3.09g/t 13m @ 2.43g/t 6m @ 3.26g/t 7m @ 7.41g/t 10m @ 3.10g/t 14m @ 2.78g/t 10m @ 3.18g/t 34m @ 3.14g/t 10m @ 2.46g/t 12m @ 5.70g/t Hornfels/Sediments 12m @ 1.73g/t

Intercepts and interpretation allow for 2m of external dilution in addition to the a 0.5g/t lower cut, 4m continuous internal dilution, no top cut

### **Okvau Grade Control Simulation**



- Infill Grade Control simulation (drilling) confirms continuity, grade and tonnage estimate of resource model
- Holes drilled (infill to resource drilling) on a 10m x10m infill pattern to an average vertical depth of 25m
- 152 holes completed to date with best results of;
  - o 11m @ 11.70g/t from 19m to EOH
  - 4m @ 22.93g/t from 18m
  - o 3m @ 26.36g/t from 19m
  - o 5m @ 10.48g/t from14m
  - o 6m @ 10.35g/t from 12m
  - 12m @ 4.74g/t from 17m to EOH
  - o 18m @ 3.68g/t from 12m
  - o 8m @ 7.59g/t from 16m



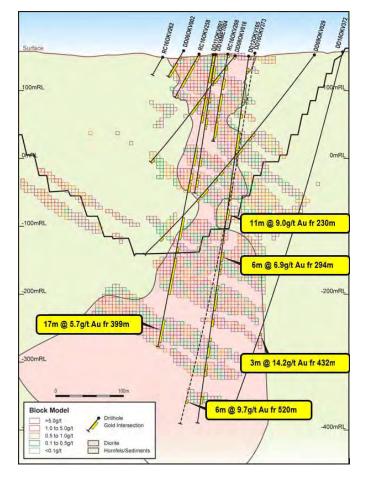
# Okvau Resource Growth

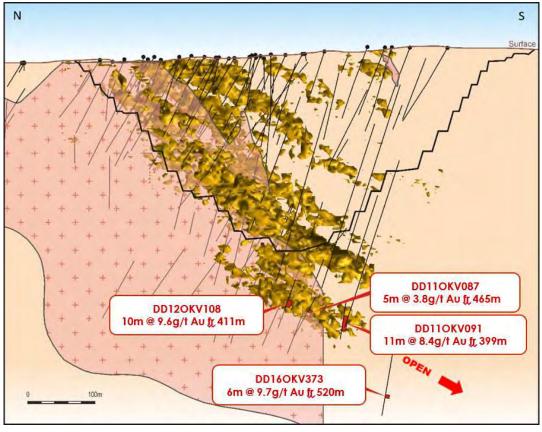
### **Depth extensions**

- Some of the highest grade intersections sit beneath open pit floor including:
  - o 17m @ 4.5g/t from 320m (DD11OKV091)
  - o 10m @ 9.6g/t from 411m (DD12OKV108)
  - o 11m @ 8.4g/t from 399m (DD11OKV091)
  - 6m @ 9.7g/t from 520m (DD16OKV373)







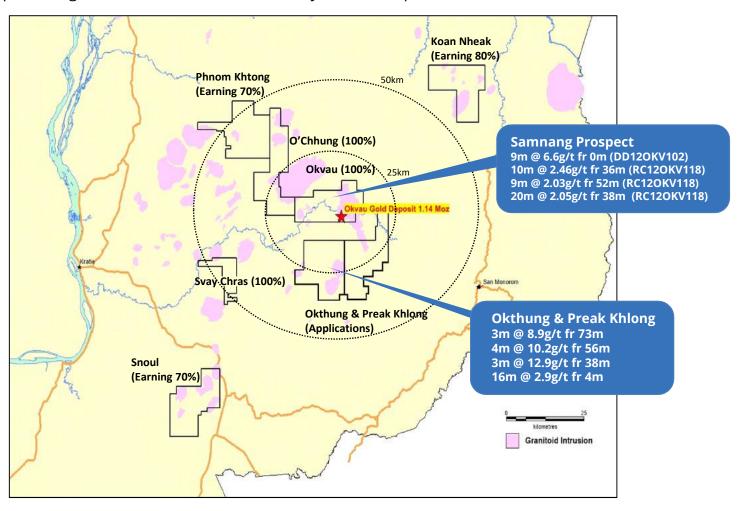


Refer to the Company's ASX releases dated 1 May 2017 and Renaissance Minerals Limited ASX release dated 17 September 2012

# **Regional Potential | New Joint Ventures**



- Dominant land position of ~1,400km² covering a north-west trending zone of granitoid intrusions
- Multiple Gold occurrences with direct associations with intrusions with pathfinder multi-elements (bismuth, arsenic, tellurium)
- Small percentage of total licenced area tested by modern exploration



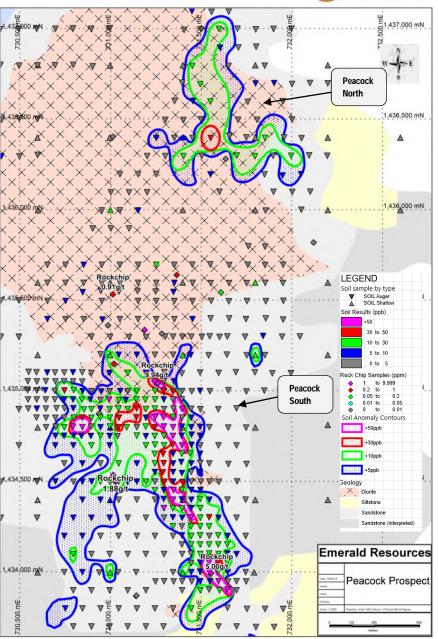
Refer to the Company's ASX Announcement dated 13 July 2017 and Renaissance Minerals Limited dated 1 May 2017, 4 February 2013 and 17 August 2012

# **Angkor JV Koan Nheak Project**

- Two gold in soil anomalies discoveries
- Northern anomaly 0.7km x 0.3km (at >10ppb Au)
- Southern anomaly 1.4km x 0.4km (at >10ppb Au)
- Peak value Auger sampling 806 ppb Au
- Peak value EMR rock chip 9.94 g/t Au
- Geological setting similar to Okvau on the southern extremity of a Diorite intrusion
- Emerald earning 80%
- Anomaly scheduled for reconnaissance drill testing in the upcoming months

Refer to the Company's ASX releases dated 27 December 2017 and 3 August 2018



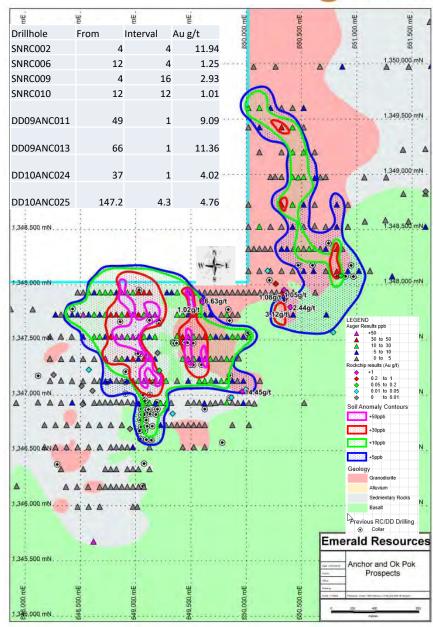


# **Mekong Minerals Snoul Project**

- EMR Auger soil results redefines existing MM shallow soil results
- 3km, x 1.5km gold in soil anomaly (at >10ppb Au)
- Peak value EMR auger sampling 22.6ppm
   Au
- Peak value EMR rock chip 14.45 g/t Au
- Geological setting similar to Okvau on the southern extremity of a Diorite intrusion
- Emerald earning 70%
- Anomaly scheduled for reconnaissance drill testing in the upcoming months

Refer to the Company's ASX release dated 3 August 2018





Refer to the Company's ASX release dated 13 July 2017 for complete drilling results

# **Summary**



- 1. Experienced, well credentialed Board and senior management, well equipped to develop Okvau and other gold projects
- 2. Emerald developing a single pit, 2.0g/t, 907,000 ounce gold reserve at US\$731/ounce (AISC)
- 3. Resource open with strong potential to expand and convert additional reserves
- 4. Okvau project has an IRR of 48%(pre tax) at US\$1,250 gold price, increases to 58% at US\$1,350
- 5. Cambodia, new frontier for mineral exploration, supportive government and attractive fiscal regime
- 6. Emerald holds a significant land holding in Cambodia with high prospectivity
- 7. Emerald well positioned to seek further opportunities and build a "Mining and Development House", utilizing the skilled in-house development team

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