

Okvau Gold Project, Cambodia
Okvau DFS Delivers Ore Reserve of 907,000oz @ 2.0g/t
Emerald to Become +100,000ozpa Gold Producer

August 2017



### **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 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. In particular, the Managing Director, Mr Morgan Hart, who has overseen the successful development of gold projects for Equigold NL and, most recently, as Operations Director of Regis Resources Ltd. His experience in developing countries includes the development of the Bonikro Gold Project in Cote d'Ivoire. He has assembled a team of highly competent mining engineers and geologists for the development of the Okvau Gold Project.

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 Results is based on information compiled by Mr Craig Johnson, who is an employee to the Company and who is a Member of The Australasian Institute of Geoscientists. Mr Craig Johnson 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 Craig Johnson 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.

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.

## Okvau DFS | Robust and Compelling Project



#### **Ore Reserve and Mineral Resource Estimate**

- Initial Ore Reserve of 14.3Mt @ 2.0g/t Au for 907,000oz
- Mineral Resource Estimate of 17.7Mt at 2.0g/t gold for 1.14Moz (at 0.7g/t cut-off).
- 90% of Indicated Resources converted to Ore Reserves

#### **Economically robust project**

- 2.0Mtpa plant to produce 106,000oz pa on average over the initial operating Life-of-Mine ('LOM') of + 7 years
- C1 Cash Cost of US\$650/oz over LOM
- AISC of US\$731/oz over LOM
- Low development capital intensity of US\$122/oz of LOM production
- NPV<sub>(5%)</sub> to Pre Production Capital Costs ratio of 2.3x
- Operating margin of 46% at US\$1,250/oz gold price

#### **Development Timetable**

- Targeting commencement late in 4Q 2017
- Commercial gold production early 2019

#### **Financing**

- Financing plans underway, targeting conventional equity funding
- Cash reserves of A\$8.5M, well funded to progress pre-development activities and exploration pending development funding

#### **Project DFS Economics Attributable to Emerald**

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 ASIC <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\$298M4)
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

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

<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

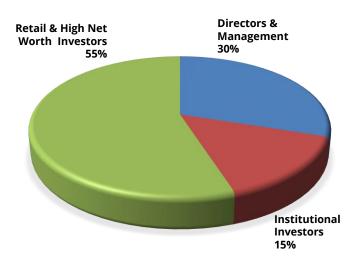
<sup>&</sup>lt;sup>4</sup> Exchange rate of US\$0.75

## **Capital Structure**

<b>EMERAL</b>	.D
RESOURCES	NL

ASX Code	EMR
Share Price	4.4 cents <sup>1</sup>
Shares on Issue	2,108M <sup>2</sup>
Market Cap	A\$92.7M
Cash & Investments	~A\$8.5M <sup>3</sup>
Debt	Nil
Enterprise Value (diluted)	\$84.3M

### **Shareholder Structure**



<sup>&</sup>lt;sup>1</sup> Share Price as at 3 August 2017

### **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 President of the Western Australian Chinese Chamber of Commerce Inc.

#### **Morgan Hart, Managing Director**

- Geologist
- Previously Executive Director (Operations) of Regis Resources Ltd (developed three gold mines in four years | Moolart Well, Garden Well and Rosemont)
- Previously Executive Director (Operations) of Equigold NL (developed the Bonikro Gold Project in Cote D'voire and managed operation of the Mount Rawdon and Kirkalocka Gold Mines in Australia)

#### **Justin Tremain. Executive Director**

- Founding Managing Director of Renaissance Minerals in 2010 and has overseen the Cambodian Gold Project since 2012
- Previously +14yrs investment banking experience 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 (dominant drilling company in Ghana in the 1990's)
- Previously Non-Executive Director of Equigold NL

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

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

#### **Mick Evans, Chief Operations Officer**

- Previously 7yrs with Regis Resources Ltd (managed the construction of gold plants at the Moolart Well, Garden Well and Rosemont)
- Previously 10yrs with Equigold NL (instrumental in the construction of the Bonikro gold plant in Cote D'Ivoire)

#### **Mark Clements, Company Secretary**

- +18yrs experience in corporate accounting and public company administration
- Company Secretary for a number of diversified ASX listed companies

<sup>&</sup>lt;sup>2</sup> Excludes 63.6M management and employee options on issue (20.0M @ 2.5c; 22.5M @ 3.2c, 2.5M @ 5.2c, 3.4M @

<sup>5.7</sup>c and 15.2M @ 6.45c)

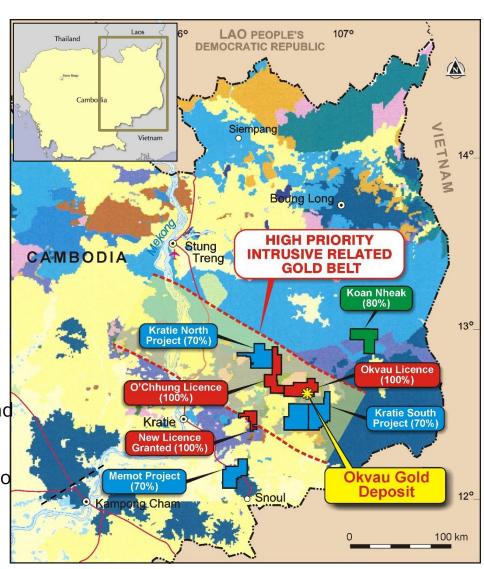
<sup>3</sup> As at 30 June 2017

### **Cambodia Overview & Project Location**



### First mover advantage in frontier terrain

- Democratic elections (5yr terms, next election July 2018)
- Growth orientated regime with pro-development Government (GDP ~7-10% pa)
- Attractive fiscal regime:
  - Direct foreign ownership | 100% ownership
  - No Government equity participation
  - 30% corporate tax rate
  - 2.5-3.0% Government royalty (gold)
  - Import duty exemptions
- Underexplored and prospective for large systems
- Sparsely populated | no competing agriculture land use
- Recently increased ground position from 400km<sup>2</sup> to 1,500km<sup>2</sup> | emerging gold district



# Okvau Resource 2.0g/t | 1.141 Million Ozs

EMERALD RESOURCES NL

- Estimate covers 650 metres of strike by 650 metres width of the mineralised vein system
- Drill spacing of 25m x 25m in the top 120m
- 42,257 metres of drilling (31,447 metres of diamond)
- Multiple Indicator Kriging (MIK) estimation of recoverable resources
- Select intersections include:
  - o 44m @ 1.88g/t from 4m
  - o 36m @ 5.25g/t from 95m
  - 33m @ 9.73g/t from 101m
  - 31m @ 4.63g/t from 153m
  - o 23m @ 6.94g/t from 102m
  - o 20m @ 9.86g/t from 175m
  - 14m @ 15.06g/t from 26m

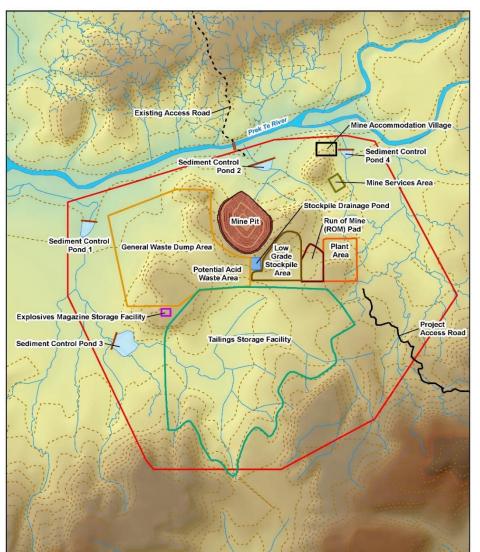
April 2017 JORC Resource (0.7g/t gold cut-off)						
Resource Classification Tonnage Grade Au Gold (Mt) (g/t) (Koz)						
Indicated	15.11	2.08	1,008			
Inferred	2.57	1.61	133			
Total	17.68Mt	2.01g/t	1,141			



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.

# Okvau DFS Overview 2.0g/t Au for 907,000 ounces gold





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

- Forecast annual production of +106Kozpa over initial +7 year LOM
- 90% conversion of Indicated Resources to Ore Reserves
- 84% LOM metallurgical recovery
- 26 month pay back (pre-tax) and 30 month payback (post-tax)
- Low All-In Sustaining Costs (AISC) of US\$731/oz over LOM
- Pre-tax NPV<sub>(5%)</sub> US\$223M (A\$298M) & IRR 48%
   pa
- Post-tax NPV<sub>(5%)</sub> US\$160M (A\$213M) & IRR 40%
   pa

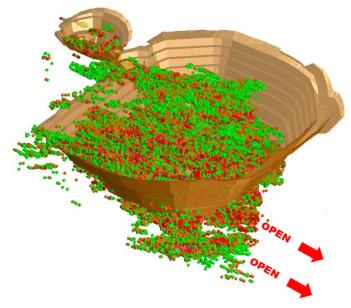
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# **Low All-in Sustaining Costs | High Margin**



### **Mining Physicals Summary**

	Life of Mine
Ore Mined (tonnes)	11.3Mt
Average Grade (g/t Au)	2.0g/t
Strip Ratio (Waste:Ore)	5.8:1
In Pit Gold (oz)	907koz
Gold Recovery	84%
Production Period	7.2 years
Annual Production (oz)	106,000koz



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**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% 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

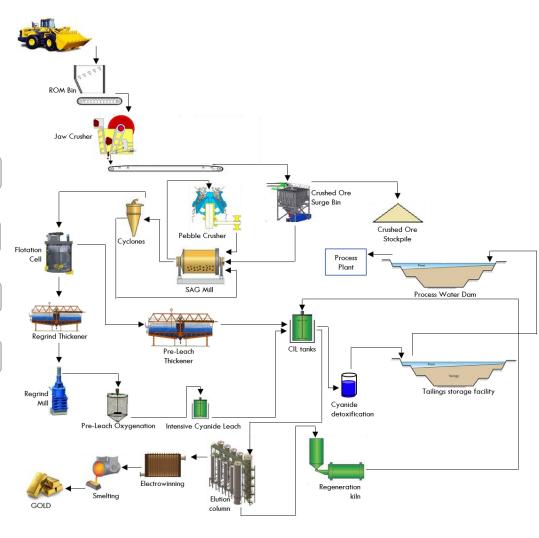
Fine regrind of concentrate only (no oxidation)

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
- Regrind cost ~\$1.05 per tonne
- Moderate cyanide consumption
- Bwi 17.5kWh/t

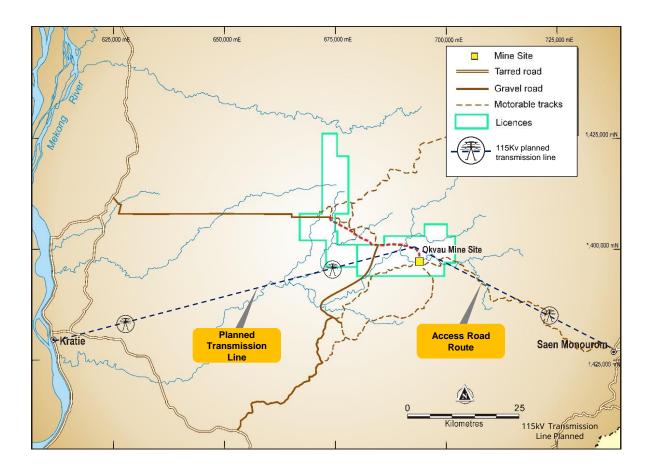




### Infrastructure



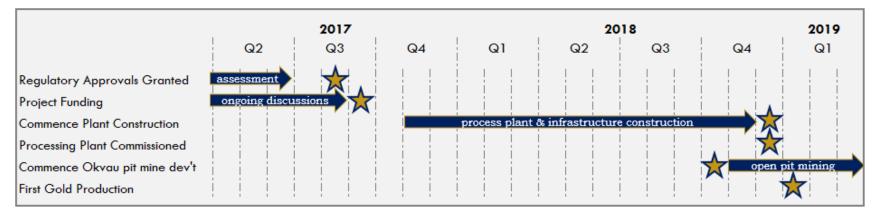
- ☑ Government currently constructing road to within 15km
- ✓ Flat terrain (130mRL to 180mRL)
- ☑ Power | planned 115Kv transmission line Kratie to Okvau at US\$0.118c Kwh
- ☑ Water supply within immediate vicinity of Project



### **Development Timetable**



- Permitting
  - Environmental & Social Impact Assessment Completed
  - Environmental approval Q3 2017
  - Mining approval Q3 2017
  - Negotiation of a Mineral Investment Agreement Q4 2017
- Resettlement
  - Resettlement of 58 affected households well advanced and managed by provincial resettlement committee Q3 2017
- Exploration
  - Drilling of untested and underexplored targets Q3 2016 through to Q2 2017









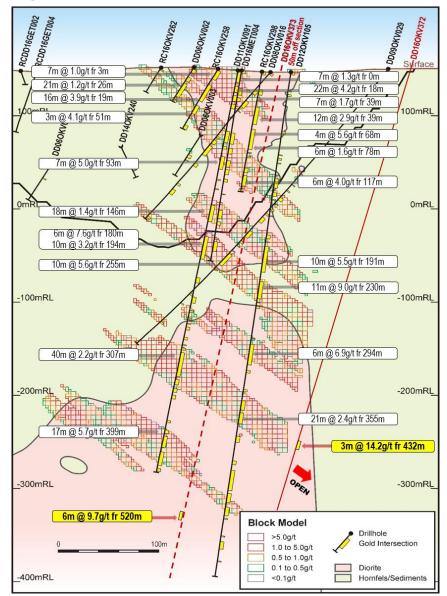


# Resource Growth Potential of the Okvau Deposit



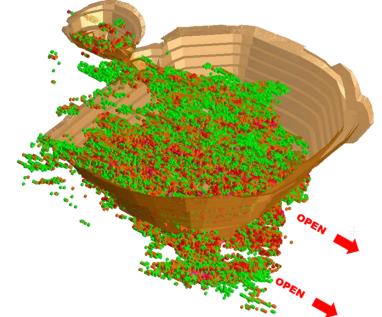


# Okvau Resource Growth Depth extensions





- Some of the highest grade intersections sit beneath open pit floor, including:
  - o 11m @ 9.0g/t from 230m
  - 23m @ 15.3g/t from 352m
  - 17m @ 5.7g/t from 399m (incl. 11m @ 8.4g/t)
- Latest results from drilling at depth include:
  - o 3m @ 14.3g/t from 432m
  - o 6m @ 9.7g/t from 520m



Latest drilling results released in the Company's ASX release dated 1 May 2017 titled Okvau DFS Delivers Ore Reserve of 907,000oz.



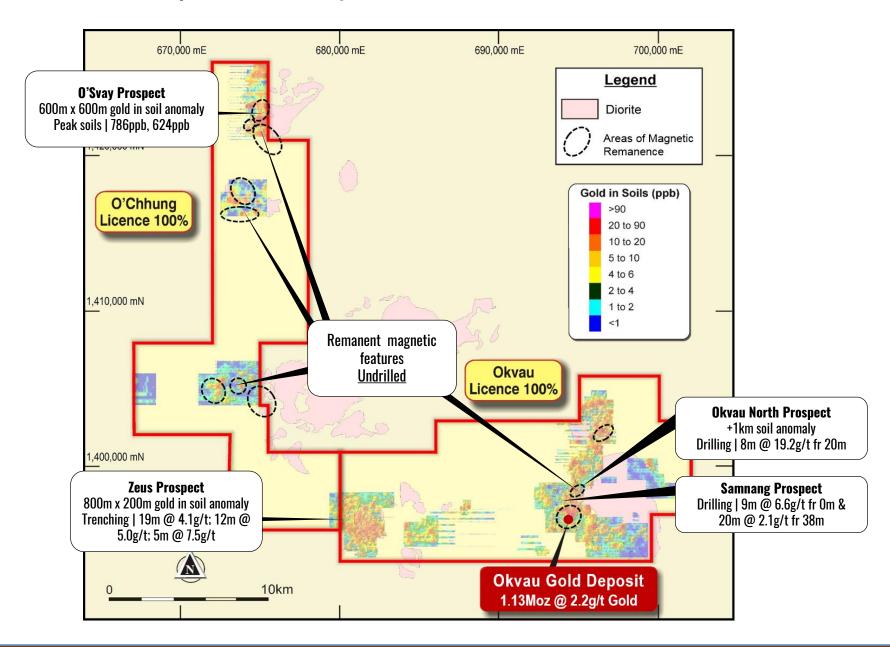
# Frontier Terrain | Substantial Upside





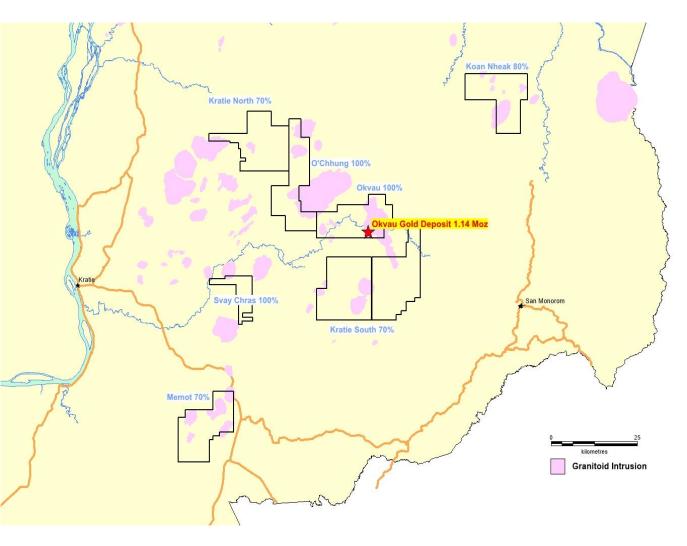
## Okvau Surrounds | Geochemistry





## Regional Potential | New Joint Ventures

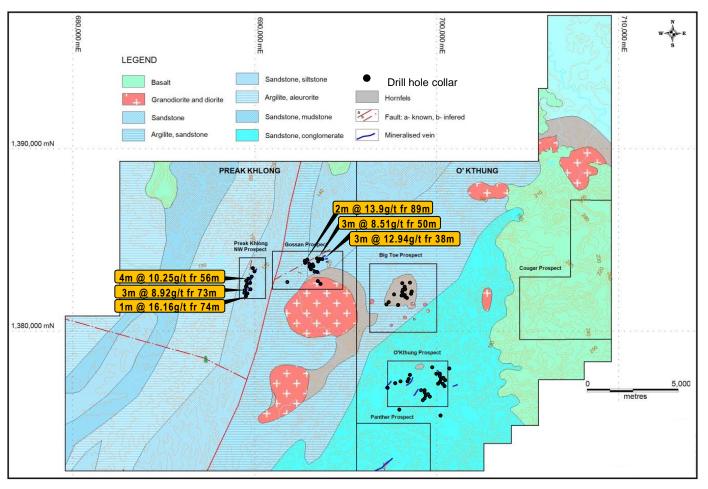




- ~1,500km² of prospective unexplored terrain
- Dominant land position in Cambodia covering the core a north-west trending zone of cretaceous age (100Ma) granitoid intrusions
- Multiple Gold occurrences with direct associations with granitoid intrusions with critical pathfinder multi-elements (bismuth, arsenic, tellurium
- All areas within 50-60km of the Okvau Gold Deposit

# Regional Potential | Kratie South JV (70%)



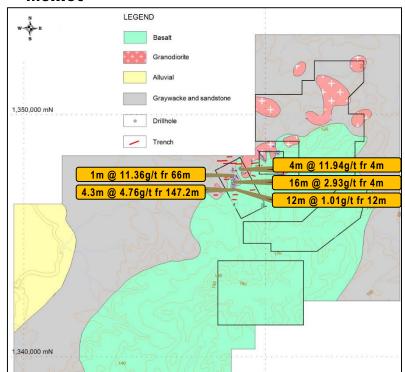


- 15km south of the Okvau Gold Deposit
- Mineralisation associated with a major north east trending shear zone believed to be on the same structure associated with the Okvau Gold Deposit
- Drill results include; 3m @ 8.9g/t gold form 73m, 4m @ 10.2g/t gold from 56m, 3m @ 12.9g/t gold from 38m, 3m @ 8.5g/t gold from 58m

# Regional Potential | Memot (70%) & Koan Nheak (80%) JVs

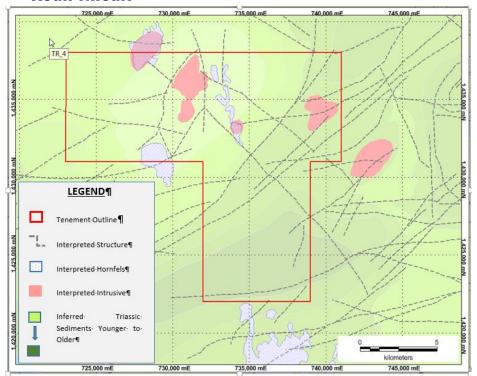


#### **Memot**



- 70km south-west of the Okvau Gold Deposit
- Numerous mapped small intrusives with associated sulphide rich altered veins
- Drill results include:
  - 4m @ 11.9g/t gold from 4m
  - 16m @ 2.9g/t gold from 4m
  - 12m @ 1.01g/t gold from 12m
  - 4m @ 4.8g/t gold from 147m

#### **Koan Nheak**



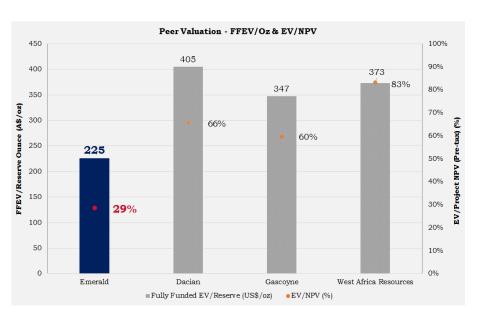
- 50km north-east of the Okvau Gold Deposit
- Multiple stream sediment anomalies associated with small intrusives
- Rock chips to 33g/t gold
- Undrilled

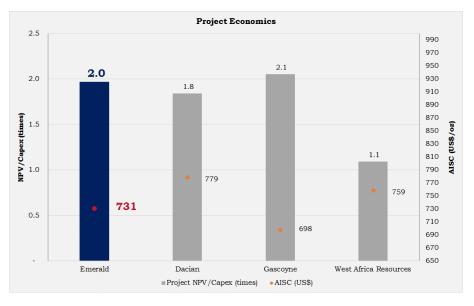
# **Peer Comparisons | 35-40% Discount to Peers**



	NPV/Capex	AISC (US\$/oz)	Annual Production (oz)	Reserve (oz)	FFEV/Reserve (US\$/oz)	EV/NPV %
Emerald	2.0	731	106,000	907,000	225	36%
Dacian <sup>1</sup>	1.8	779	146,000	1,200,000	405	66%
Gascoyne	2.1	698	90,000	552,000	347	60%
West Africa Resources	1.1	759	93,000	894,000	373	83%

<sup>&</sup>lt;sup>1</sup> Dacian NPV based on broker estimates





Source: Company reports

<sup>1.</sup> FFEV = Fully Funded Enterprise Value (EV including development capital)

<sup>2.</sup> AUD:USD = US\$0.75

<sup>3.</sup> Based on share price of 13 July 2017

## **Investment Proposition**



- New frontier, unexplored terrain covering 1,500km<sup>2</sup> with compelling geochemical anomalies
- 100% project ownership
- Low operating costs due to high grade, simple single open pit bulk mining approach and availability of competitive hydro power:
  - 907,000oz open pit at 2.0g/t
  - o LOM average 106,000 oz pa over 7 year mine life
  - AISC of US\$731/oz initial 7 year mine life
  - $\circ$  NPV<sub>(5%)</sub> Pre-tax of US\$222M
  - IRR 48% pa, capital payback 26 months
- Development team with proven track record
- Targeting development later part of Q4 2017 and production early 2019
- Significant exploration potential | targeting continued Okvau resource growth and new regional discoveries







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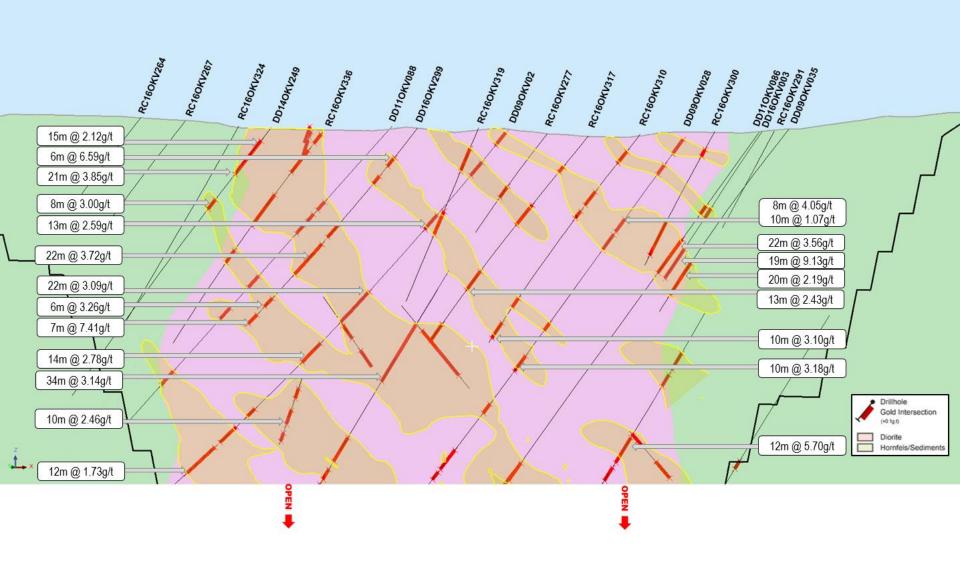
# **Appendices**





### **Okvau Cross Section**





# **Gold Price & Discount Rate Sensitivity**



Gold Price	US\$1,100	US\$1,200	US\$1,250	US\$1,300	US\$1,400
Pre-Tax					
Net Project Cash Flow	US\$188M	US\$261M	US\$298M	US\$334M	US\$407M
Project NPV <sub>(5%)</sub>	US\$133M	US\$193M	US\$223M	US\$253M	US\$\$313M
Project IRR	32% pa	43% pa	48% pa	53% pa	64% pa
Post-Tax					
Net Project Cash Flow	US\$138M	US\$189M	US\$215M	US\$240M	US\$291M
Project NPV <sub>(5%)</sub>	US\$95M	US\$138M	US\$160M	US\$181M	US\$224M
Project IRR	27% pa	36% pa	40% pa	45% pa	54% pa

Discount Rate	5%	7.5%	10%
Pre-Tax			
Project NPV	US\$223M	US\$194M	US\$168M
Post-Tax			
Project NPV	US\$160M	US\$138M	US\$118M

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### Ore Reserves and Mineral Resource Estimate



#### **Ore Reserve**

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

#### **Mineral Resource Estimate**

Okvau April 2017 Mineral Resource Estimate									
	Ind	icated Reso	ource	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)
0.50	19.58	1.74	1,093	3.47	1.35	151	23.05	1.68	1,244
0.70	15.11	2.08	1,008	2.57	1.61	133	17.68	2.01	1,141
1.00	11.01	2.54	898	1.67	2.04	109	12.68	2.47	1,007

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