

**Mining Limited** 

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### **Awakening The Sleeping Giant**

Positive Pre-Feasibility Study New 'Bonanza' Gold Zones

Mt Kare Gold/Silver Project, PNG

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#### **Competent Person Statement**

Anthony W. Burgess, a qualified consultant for Indochine Mining Ltd, is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken, being reported herein as Exploration Results, to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition). Anthony W. Burgess has consented to the public reporting of these statements and results and the form and context in which they appear.

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# AWAKENING THE SLEEPING GIANT

- Major World Class Potential; Land of Giants
  - Same setting as adjoining 28Moz gold mine
  - \$3.0-5.0Bn asset potential; \$100M market cap
- New 'Bonanza' Zones Identified Drilling
  - 100-450g/t gold over 5-20m widths
  - 'Identical in every way' by discoverer of 10Moz at the adjoining world class gold mine
- Fast Tracking to Open Cut Production <3 yrs</p>
- Positive Pre-Feasibility Study (PFS)
  - Mid-tier gold producer potential in <3 years
  - c.150,000oz/yr gold; 1Moz/yr silver (8+ yrs)
  - Production Potential 250,000 oz/yr gold

Bonanza: Technical term for Very High Grades

### AWAKENING THE SLEEPING GIANT

- Investor Register World Class
  - Support by Major Funds; ~\$5 Trillion Assets UM
- Local Support Landowner Investigation Study
- News Flow Drill Results; Resource upgrade
  BFS; Mine lease applications
- Re-rating Potential Initiation of coverage soon
- Opportunity Exists prior to further drill results

### Mt Kare Gold/Silver Deposit



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# Started as 1988 Gold Rush



#### ~1 Million ounces gold extracted in nuggets in 1-2 years 1988-89

Near-surface potential upside

# Mt Kare - Growing Resource



#### Dec 2011 JORC Resource – Based on ~60,000m diamond core

Total JORC Resource	28.3Mt	1.9g/t Au	22g/t Ag	1.8Moz Au	2.13 Moz Au Equiv
High Grade Zone	5.9Mt	3.7g/t Au	30g/t Ag	0.7Moz Au	0.8 Moz Au Equiv

# High Grade is the Difference

#### What Are High Grades ?

- High grades: In the 5-40 g/t Gold range over 5-40m width
- These are a 10x upgrade of general assay values
- 38m @ 21g/t Gold, 30 g/t Ag
- 78m @ 6g/t Gold, 19 g/t Ag
- What Are Bonanza Grades ? <u>A Technical Term For Very High Grades</u>
  - Bonanza grades: 100-400 g/t Gold over 5-20m
  - These are 100x upgrade of general assay values
  - 17m @ 100 g/t Gold, 134 g/t Silver;
  - 5m @ 120 g/t Gold, 93 g/t Silver;
  - 4m @ 420 g/t Gold, 170 g/t Silver
  - Quartz-roscoelite veins generally occur with these bonanza grades & are used to target them





Quartz-roscoelite veining – high grade relationship

### Low Strip Ratio Open Pits

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### Main Drilling Area

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# In The Shadow Of A Major Mine



#### Porgera (Barrick) 28Moz Gold Mine

- One of the 10 Largest Gold Mines Globally
- 17Moz Produced (21 Years) at ~500,000 oz/yr

#### 15km From Mt Kare

- Established Infrastructure in Area
- 7km of Road Required to Connect to Site

#### Potential For Major High Grade Discovery

- Porgera started on high grade Zone VII
- Zone VII Resource started at 5M oz @ 27g/t gold
- Competent Person from Porgera confirmed identical high grade veins & structure at Mt Kare



### Mt Kare – Similar to Barrick's Porgera



#### Mt Kare & Porgera

Both share same deep
structural corridor –
Porgera Transfer Zone

Intrusives emplaced
in dilation zones along
Transfer Zone faults

Low sulphidation
epithermal gold deposits

 Earlier Stage 1 goldpyrite-minor base metal mineralisation associated with intrusives (6 Million years)

 Later Stage 2 quartzroscoelite mineralisation with high gold grades

# Proven Management Team



#### indichine Board & Management

Board			
Ian W Ross	Non-Exec Chairman	ex Ivanhoe	
John Shaw	Director	Geologist, Ex- Placer management when Porgera became a mine in PNG; On IAMGold board	
Stephen Gemell	Director	Mining engineer - Project development & mine operation skills	
Gavan H Farley	Director	Financial skills	
Management			
Stephen Promnitz	Chief Executive Officer	Exploration & Finance, Asia & Americas, Incl. PNG	
George Niumataiwalu project	Papua New Guinea Manager	Mining engineer with MBA; Previously took major PNG from resource to development	
Ashok Jairath	Chief Financial Officer Company Secretary	30 years in Finance	

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### **Capital Structure**

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### Pathway To Production

#### Future News Flow



Bonanza Zones evaluation

### Achievements



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# Progress in the Last 12 Months

### Last Year

- Limited Supplies
- Slow Camp Build
- No Drilling
- Limited Helicopter Support
- Poor Perception of Project

# Progress in the Last 12 Months







### Progress in the Last 12 Months

### This Year

- Technical & Support Team in Place
- PFS Team in Place & PFS completed
- Camp Built & Expanded
- 3 Rigs (QED)
- Helicopters (Heli-Niugini)
- Assays results being sped up

# Progress in the Last 12 Months ASX:IDC







## Establishment Of Key Infrastructure To Support Both PFS And BFS Studies



# +1 Million Ounces Total Production

- 1 Million oz Gold Total Production
- 8Moz Silver Total Production

8.5 year mine life – initial planCIL Plant first 3- 4 years; 88% recoveryFlotation circuit for year 4-8; 83% recovery



#### Opportunity – Mine Optimisation

Improved Grade Optimisation Significant particulate gold near surface Improved Mine Scheduling

Production Targeted Within 3 Years



# 100-160,000 oz/yr Gold Production

#### 1.7 Mtpa Processing Plant

Produces 100-160,000 oz/yr gold in PFS Produces 700,000 – 1.1 Moz/yr silver Scheduling optimisation to refine annual production

CIL Plant first 3- 4 years; 88% recovery Flotation circuit for year 4-8; 83% recovery





# Infrastructure Uncomplicated

- Access Road (11km) To Connect With Existing Road Network
- Optimisation Potential Gas/Electricity & Mini-Hydro Options



# Capex – For Optimisation

#### Opportunities exist for capex reduction/optimisation

Capital Item	Initial Capital US\$M	Deferred Capital US\$M
Process Plant	96	54
Infrastructure (Roads, Bldgs, Water) (Accommodation) (Power plant, distrib)	<b>58</b> *32 12 *15	0
Tailings Facility	22	30
EPCM + Support	32*	9
Owners Costs	10	0
Establishment Capital Cost	218	
Mining Fleet	44**	

#### Generates 28% IRR

- Opportunity To Increase IRR Significantly
- \$2Bn Revenue In PFS
- \$800M OP Costs In PFS

Based on a US\$1650/oz gold price, \$30/oz silver

- **\*1** Opportunity for reduction
- **\*\***2 Assuming owner operated fleet, not leased

### Our Approach

- Focus on Development
- Working With Locals
- Grow Asset Post PFS

### Landowner Study Completed

- All Want Development
- Seen Porgera & LNG In Development
- Landowner Investigation Study Completed

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### Our Approach





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### Our Approach

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# Landowner Investigation Study



1<sup>st</sup> ever Detailed Field Interviews Completed



# Landowner Investigation Study









### **Consistent Resource**



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### Assays - High Grade Gold

Drill Hole	Metres Width	GOLD g/t	SILVER g/t	From (m)
146SD12	38m	20.8	57	78
Includes	5m	120.1	93	94
138SD12	32m	4.1	6	35
135SD12	40.6m	3.8	21	102
133SD12	52m	6.7	19	24
132SD12	78m	6	19	6
Includes	54m	8.2	18	0
131SD12	99	3.2	19	23
127SD12	16.9	3.9	20	19
126SD12	21	5.5	625	99
125SD12	27	3.1	4.3	77
123SD11	46.2	5.4	187	46.2
122SD11	17.7	100.3	134	59

Results to Come From 27 Holes

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- 58 Holes Recently Drilled.
- 7,790m Drilled Since Nov'11 (58 Holes) ~68,000m Drilled in Total (427 Holes)
- Wide Intercepts of Gold from near surface
- Resource Upgrade to Follow Results

# Mt Kare – High Grade Drill Targets



#### **Drill Targets**

- Priority around qtz-roscoelite bonanza grade intercepts = size definition & controls to demonstrate potential
- Priority around favourable EW fault orientations in new drill direction (Pink targets)
- Extensions of known quartzroscoelite mineralisation for pathways and favourable structures
- Drill extensions to south and north of resource
- Future deep holes to test repeat structures and intrusive

#### Geology

Folded interbedded calcareous mudstones, siltstones, sandstones, capped by limestone

Basic intrusives with alteration/mineralisation4

# Mt Kare – High Grade Drill Targets



Qtz-Roscoelite mineralisation in sub horizontal or vertical orientations

Target flexures & dilatant zones – Large quantities of gold can be found in small targets

#### indichine Mt Kare – Similar to Barrick's Porgera



Mt Kare	Porgera
500m higher	RL 2500m
Similar Geology	Similar Geology
Same Intrusive Composition, Age	Same Intrusive Composition, Age
Two stage mineralisation	Two stage mineralisation

Targets identified. Potential to discover high grade quartz-roscoelite mineralisation in all mineralized zones at Mt Kare 36
# Mt Kare – Similar to Barrick's Porgera



### Mt Kare & Porgera

Both share same deep
 structural corridor –
 Porgera Transfer Zone

Intrusives emplaced
 in dilation zones along
 Transfer Zone faults

Low sulphidation
 epithermal gold deposits

 Earlier Stage 1 goldpyrite-minor base metal mineralisation associated with intrusives (6 Million years)

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## Peer Comparisons



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## Investment Case



Scale & Grade Of Project

## Reliable Plan to Deliver Project

## Rare High Grade Open Cut Mine Potential

## Summary





# Appendix



### indiachine **Major Investment Destination**

## **PAPUA NEW GUINEA (PNG)**

- Population 7 million; 5-8% GDP Growth (2007-2012) 1
- 80% Exports minerals & petroleum (Gold 50%) 1
- Government Revenues from LNG to Exceed Minerals from 2014 1
- 齐 **Open To Foreign Direct Investment**
- History of Successful Resource Development 1
- Successful Elections Completed July/Aug 2012



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# Drilling – High Grade Confirmed



# 'Bonanza' High Grade Zones

3 'Bonanza' High Grade Zones Identified

- In the WRZ and BZ zones which are planned open cuts
- Confirmed by Ex-Porgera Resource Geo, Competent Person & Gold Finder'
- 'Identical signature' to bonanza zones at adjacent world class gold mine

e.g. Porgera Zone VII – 5Moz @27g/t Gold

### High Gold/Silver Grades Confirmed

- 17m @ 100g/t Gold, 134g/t Silver;
- 78m @ 6g/t Gold, 19g/t Silver
- 38m @ 21g/t Gold, 30g/t Silver
- Confirms past best results 20m @ 444g/t Gold, 160g/t Silver
- Focus Drill High Grade/ Bonanza Zones

# History Repeats – Past Results

Mt Kare has a JORC Resource of 1.8Moz gold, and 20 Moz silver, which includes some spectacular high grade zones in past drilling.

				Metres Down Hole	
MK9705	20.5mtrs	443.9 g/t gold	163 g/t silver	37.5 mtrs	
MK06-58	30.5mtrs	19.2 g/t gold	72 g/t silver	78 mtrs	
MK06-63	25 mtrs	22.6 g/t gold	70 g/t silver	98.2 mtrs	
MK9744	18 mtrs	20.6 g/t gold	65 g/t silver	159 mtrs	
P178	19 mtrs	5.4 g/t gold	337 g/t silver	70.5 mtrs	
MK9758	21.1 mtrs	2.9 g/t gold	252 g/t silver	95.5 mtrs	

Historical drilling by the prior owners CRA, Madison & Buffalo Gold returned bonanza gold/silver grades in most of the identified JORC resource areas at the Mt Kare project.

## Mt Kare History

1987-88	Discovery & Gold Rush Alluvial Miners Extracted >1moz Gold In Nuggets In 1 Year			
1988-92	CRA Drilling (32 Holes); CRA Alluvial SML			
1992-96 1996-08	Ownership Changes; Carpenters Pacific (Matu Mining) Canadian Juniors (Madison/Buffalo); 320 Holes Drilled			
2007	C.2moz Gold/Silver Resource Defined			
2009-10	Liquidation Of Madison PNG After Financial Crisis <ul> <li>\$60M In Past Expenditure</li> </ul>			
2009-11 2011	Winning Tender By Local Family Company; Transfer To Summit; Exploration License Extended; Summit Development Becomes Wholly Owned Subsidiary Of Indochine Mining; Project Re-started			

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## Mt Kare Resource

### Mt Kare Project - JORC Mineral Resource Statement (Dec 2011)

Cut-off: 0.5g/t gold

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Resource Classification	Million Tonnes	Gold g/t	Silver g/t	Gold Moz	Gold Equiv*
Indicated Resource	5.9	3.7	30.0	0.7Moz	0.8Moz
Inferred Resource	22.4	1.5	20.5	1.1Moz	1.33Moz
Total Resource	28.3	1.9	22.5	1.8Moz	2.13Moz

@ 2.3g/t AuEq

#### Notes

1) Cut-off grades: Nominal lower gold grade cuts are applied, and due to the nature of the deposit also approximate the geological mineralisation cut-off.

2) Material classified as Indicated Resources are within shells interpreted from the 2011 block model that define high grade Au mineralisation (+2g/t Au) which is close to surface. It is considered that material within these volumes have a high probability of being economically extracted, with the data risks considered.

3) Rounded estimates are used, which may cause apparent discrepancies in totals. Significant figures do not imply precision.

4) Gold equivalent grades (AuEq) are calculated based on a gold price of US\$1200/oz and a silver price of US\$22/oz, or 54.55 silver ounces per 1 gold ounce.

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## PFS Contractors/Support



Helicopter Support



Environmental & Social Impact Assessment

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Drill Support



Infrastructure



Metallurgy



Tailings/Geotechnical Engineering

#### EPAC

**PFS Management** 

Ivan Saracik, Dip Mech Eng, FAusIMM, CP(Man), MMICA. Mechanical Engineer with 30+ years' experience in Asia/Pacific, Africa & Australia



## **Contact Details**



Level 3 275 George Street Sydney NSW 2000

t: +61 2 8246 7007 f: +61 2 8246 7005

Stephen Promnitz Chief Executive Officer M: 0419 194 918

info@indochinemining.com

www.indochinemining.com