

#### **MEDUSA MINING LIMITED**

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#### **ANNOUNCEMENT**

5 September 2016

### INVESTOR PRESENTATION

(ASX: MML)

Please find attached an updated Investor Presentation which the Company will present at the Proactive Investor Night at the Chesterfield Mayfair Hotel in London on Thursday, 08 September 2016 at 7.30 pm.

Outlined below are Competent Persons' Consents in relation to resource and reserve information which appears in the Investor Presentation.

#### JORC CODE 2012 COMPLIANCE - CONSENT OF COMPETENT PERSONS

#### **Medusa Mining Limited**

Information in this report relating to **Exploration Results** is based on, and fairly represents, information and supporting documentation reviewed by Mr Gary Powell and compiled by Philsaga Mining Corporation's Co-O mine site technical personnel. Mr Gary Powell is a member of The Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Powell is a full-time employee of Medusa Mining Ltd and has sufficient experience, which is relevant to the style of mineralisation and type of deposits under consideration, and to the activity which they are 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 Powell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Carras Mining Pty Ltd**

The Information in this report relating to **Ore Reserves** is based on information compiled by Dr Spero Carras of Carras Mining Pty Ltd. Dr Carras is a Fellow of the Australasian Institute of Mining & Metallurgy and has 30 years of 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 as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Carras consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# MEDUSA MINING LIMITED



## **INVESTOR PRESENTATION - SEPTEMBER 2016**



"Gold producer focused on organic growth in the Philippines"

# **IMPORTANT NOTICE**



This presentation contains only a brief overview of Medusa Mining Limited and its associated entities ("Medusa") and their respective activities and operations. The contents of this presentation (including matters relating to the geology of Medusa's projects), may rely on various assumptions and subjective interpretations which are not possible to detail in this presentation and which have not been subject to any independent verification.

This presentation contains a number of forward-looking statements, including the statements relating to anticipated production tonnages, grades and future drilling results. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, whilst considered reasonable by Medusa, may be subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements. Except to the extent required by applicable law, Medusa disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and other similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Medusa does not warrant the accuracy, currency or completeness of the information with respect to forward-looking statements contained in this presentation, nor the future performance of Medusa.

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The information contained in this presentation is not a substitute for detailed investigation or analysis of any particular issue and has been prepared without consideration of your objectives and needs and financial position. Current and potential investors and shareholders should seek independent advice before making any investment decision in regard to Medusa or its activities.

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# **Investment Highlights**



### □ Proven developer/operator

- Co-O Mine, Philippines
- 10 year history; 670,000 ounces produced
- Robust tenements on prolific Philippine gold belt

### Significant mineral inventory (Co-O Mine)

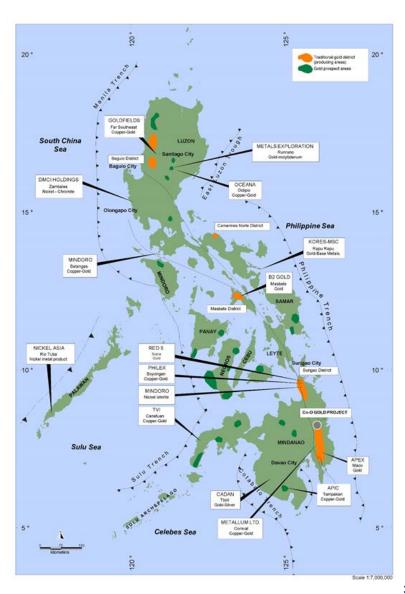
- 1.15Moz Resources, 427Koz Reserves (Jun 2015)
- Co-O deposit open at depth

### □ Strong growth potential

- 108,578 ounces gold produced FY15-16
- 105-115k ounces guidance for FY16-17
- Mine expansion projects underway

#### Balance Sheet / Financial Growth

- US\$22.0M cash & equivalents (30 Jun 2016)
- Unhedged; Jun 2016 qtr sell price US\$1,331/oz
- □ Full engagement with CSR programs
- ☐ ISO 14001 certified



# **Corporate Metrics**



## □ Share Capital

Ordinary shares: 207,794,301

Unlisted options: 3,740,500

Market capitalisation (at 01 Aug 2016): ~ US\$115M

### Cash On Hand

as at 30 June/16: US\$22.0M

□ Substantial Shareholders (at 30 Jun 2016)

Ruffer LLP Group: 8.34%

Paradice Investment Management Pty Ltd: 5.88%

**55%** of shares institutionally held

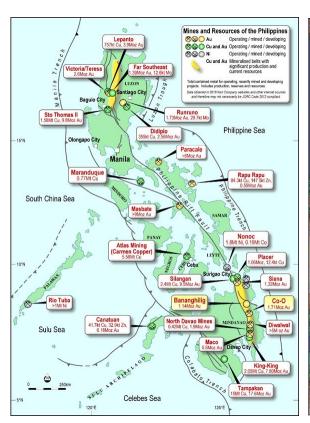


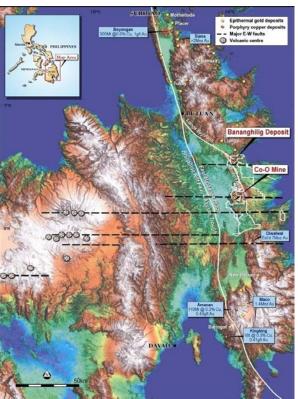


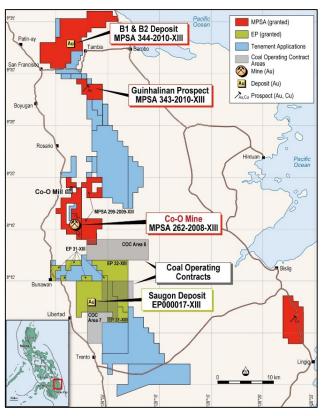
## **Core Assets**



- Located on the East Mindanao Ridge
  - + 500 km² of tenements on the main trend







## **Co-O Mine and Mill**



#### □ Process Plant

- New plant (2 years old)
- Conventional: crush SAG CIL
- Placated for 2,500 tpd

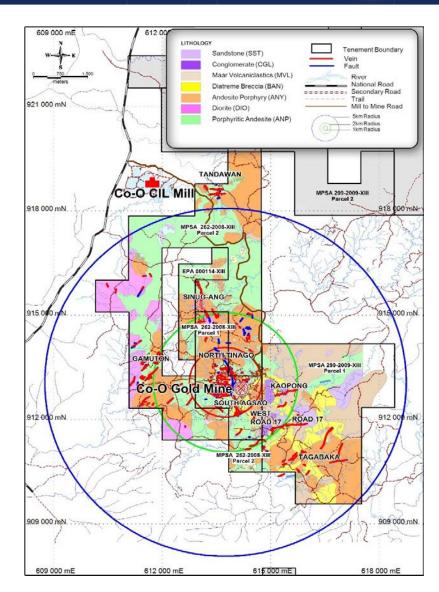
#### □ Co-O Mine

- 6 km from mill, 12 km haulage
- Underground high grade narrow vein ore body
- Developed to L8 (L9-L10)

### □ Geology

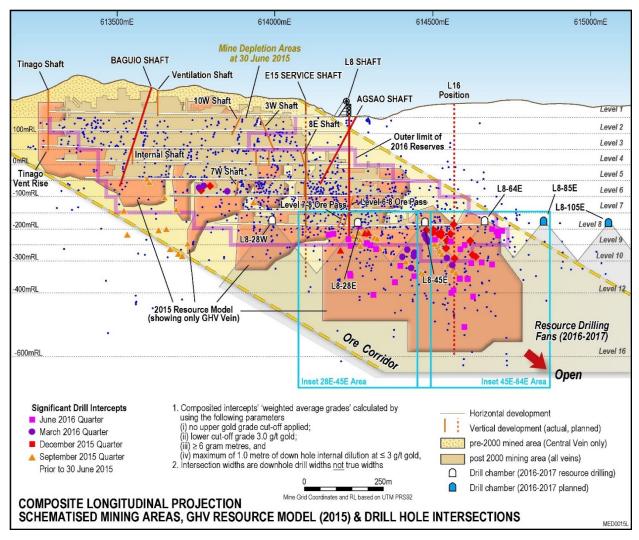
Epithermal deposit on flank of diatreme intrusive

670Koz produced to date, 1.15Moz resource as at 30 Jun 2015



# **Co-O Mine (long-section view)**





- → 1,000m W-E length per level
- Level 8 production
- Developing Levels 9 & 10
- L8, 400m from surface
- Favourable drilling results to L16
- Ore Body Plunges to the east
- Current Shafts
  - L8 Shaft
  - Agsao Shaft
  - Baguio Shaft
  - Ventilation Shaft
- E15 Service Shaft
  - under construction

# Strategy for Creating Shareholder Wealth



- □ Co-O mine infrastructure reinvestment
  - Construct the E15 Service Shaft and ventilation/de-watering upgrades by June 2017
  - Hoisting capacity to increase by +20%
  - Goal is to have Mine output to match the Processing Plant capacity by FY17-18: 600k → 720k tpa
- Drilling from level 8 is now unrestricted
  - FY16-17 budget <u>3 times</u> that of previous 2 years
- ☐ Unconstrained Mine + Defined Resources → improved LOMP
- □ 12 months to complete infrastructure and resource drilling to approximately L12

# **Production: Quarter on Quarter**



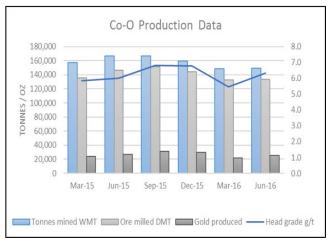
		Qtr	Qtr	Qtr	Qtr	Qtr	Qtr
Description	Unit	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
Tonnes mined	WMT	157,489	166,497	166,620	159,149	148,478	149,412
Ore milled	DMT	135,725	146,095	151,463	144,123	132,393	133,213
Head grade	g/t	5.84	6.01	6.80	6.79	5.47	6.32
Recovery	%	94%	94%	94%	94%	94%	94%
Gold produced	ozs	23,940	26,542	31,495	29,674	21,980	25,429
Gold sold	ozs	17,169	29,350	31,176	30,835	20,999	25,519
U/G Development	m	7,677	3,441	7,269	4,836	5,266	4,501

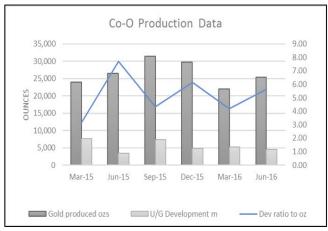


- Grades due to vein variability
- Quarterly averages; 140k tonnes milled, grade 6.2g/mt, 26koz
- Have maintained development requirements over past 18 months

# ☐ FY16-17; same metrics until E15 Service Shaft is complete June 2017

E15 improves hoisting capability by +20%



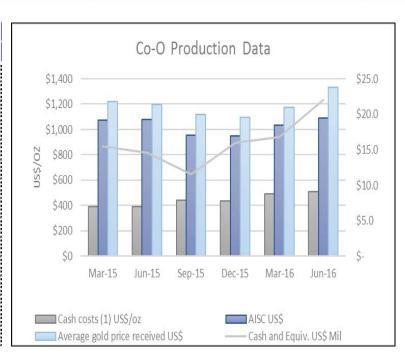


Total gold produced; Oct-05-Jun-16 ~ 670,000 ozs; FY15-16 108,578 ozs; Guidance FY16-17 105,000 - 115,000 ozs

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U/G Development	m	7,677	3,441	7,269	4,836	5,266	4,501
Dev ratio to oz		3.12	7.71	4.33	6.14	4.17	5.65
Cash costs <sup>(1)</sup>	US\$/oz	\$391	\$390	\$439	\$435	\$494	\$512
AISC	US\$	\$1,073	\$1,076	\$953	\$950	\$1,033	\$1,088
Average gold price received	US\$	\$1,217	\$1,197	\$1,121	\$1,096	\$1,173	\$1,331
Cash and Equiv.	US\$ Mil	\$ 15.5	\$ 14.6	\$ 11.6	\$ 16.0	\$ 16.8	\$ 22.0



<sup>(1)</sup> Net of development costs and includes royalties and local business taxes but no by-product credits

- ☐ June Qtr. **US\$1,331/oz** realized (unhedged)
- □ AISC reflective of the high infrastructure investments; E15, TSF #5, mine development, Level 8 drilling stations
- □ 30 June 2016 Cash & equivalents: US\$22.0M

## Infrastructure Investment







## □ Process Plant expanded 2012-13

- Jaw crusher SAG Gravity CIL Dore
- Placard for 2,500 tpd (720kpa)
- Currently at 1,600 tpd (600kpa)
- Consistent 94% recovery
- TSF #5 completed FY15-16, 5 years capacity
  - Costs in FY15-16 AISC

## No major investments required for current Life of Mine Plan



## Infrastructure Investment





### **☐** Mine Infrastructure

- L8 restricted to 1,100 tpd due to man/material movements
- Inclined shafts limited to 500 tpd

### □ E15 Service Shaft

- Completion date; June 2017
- L8 becomes dedicated skipping shaft at 1,700 tpd
- E15 can skip 300 tpd

## ☐ Skipping capacity

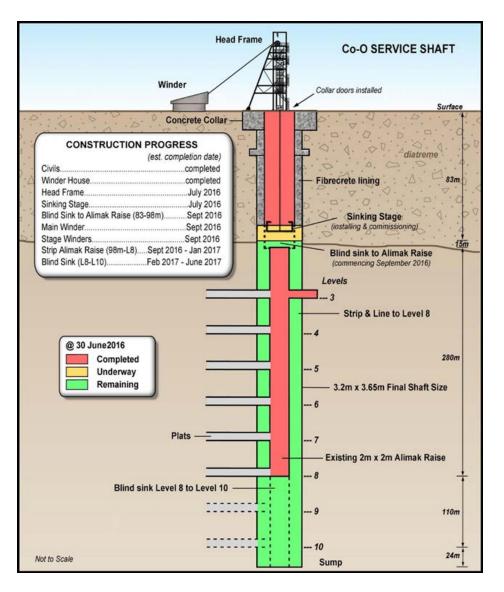
- Current 1,900 tpd (1,600t O 300t W)
- Post E15: 2,300 tpd (1,950t O 350t W)

### Ventilation and de-watering

- Upgrades/expansion ETA Jan/17
- Efficiency improvements throughout mine
- ☐ HV Substation for E15 Shaft

## E 15 Service Shaft





## **□** Completion Schedule

Civils 100%

Winder house 100%

Head Frame 100%

Winders (on site) Sep16

Stage Winders Sep16

HV / MV Sep16

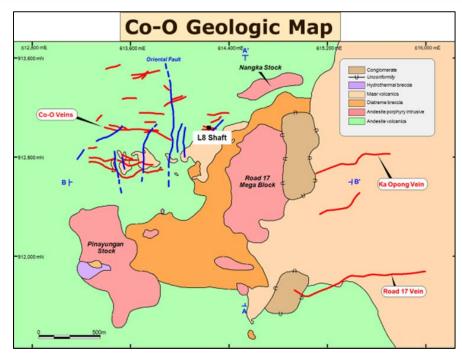
Strip Rise Sep 16 to Jan 17

Sink L8-L10 Feb 17 to Jun 17

#### □ E15 costs

- +65% in the FY15-16 AISC
  - 90% of hardware already purchased
  - HF, Ropes, sinking deck, winders





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Co-O vein system at surface

Co-O vein system at Level 8

## □ Epithermal High Grade Gold Vein System

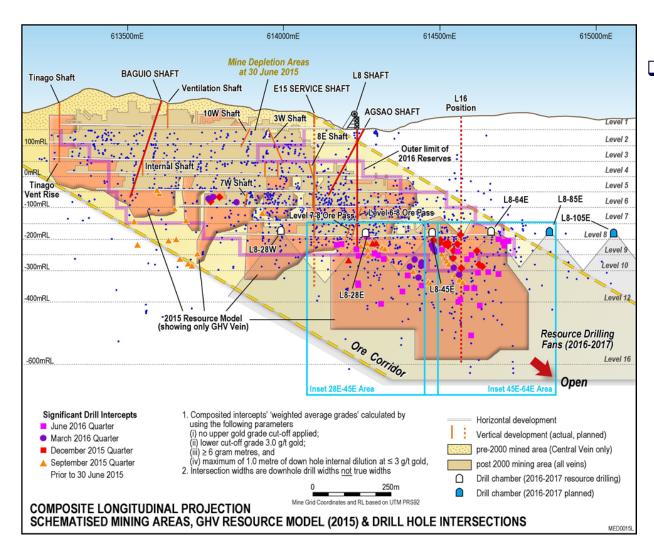
- Left map: system sits on north flank of Diatreme Intrusion (orange)
- With depth; vein system propagates to the east and north

#### Note:

Colour code changes on the 2 maps

# **Co-O Long-Section**

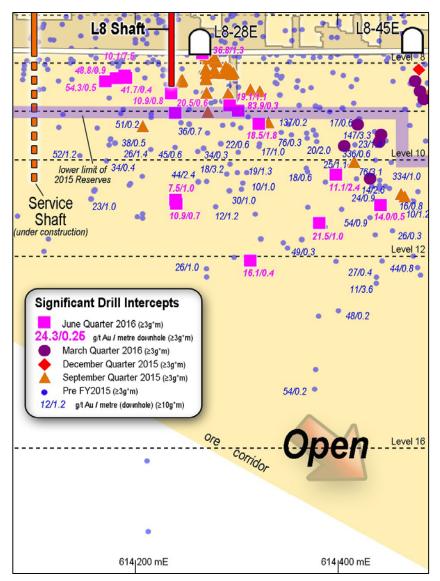


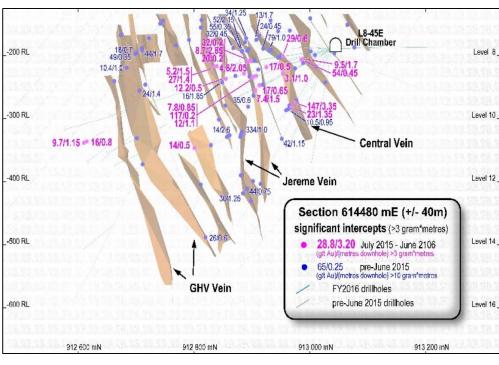


### ☐ Features

- Looking North
- Levels 1,000m W-E
- L8 at 400m depth
- Long-section shows the GH Vein only
- Blue frames; location of drilling sections
- Location of Shafts and other infrastructure



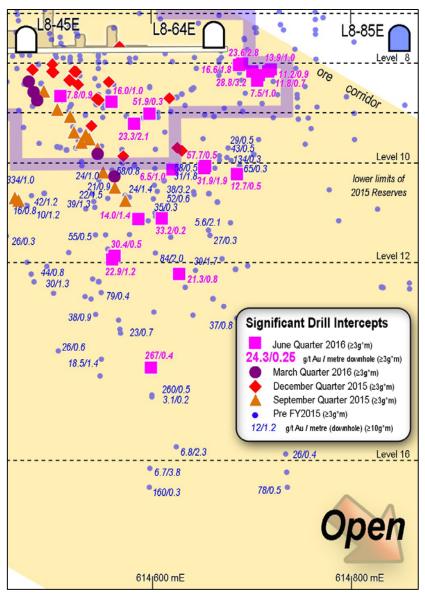


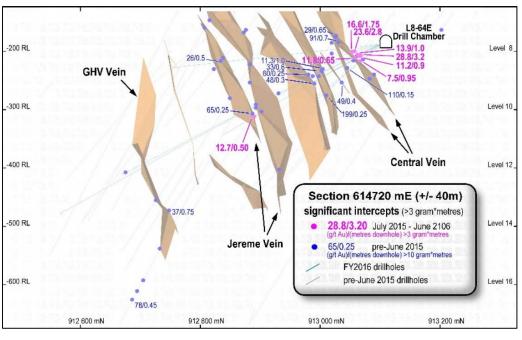


## □ Drilling results:

- Grams per tonnes / intersection (m)
- 4 primary veins with multiple sub-veins



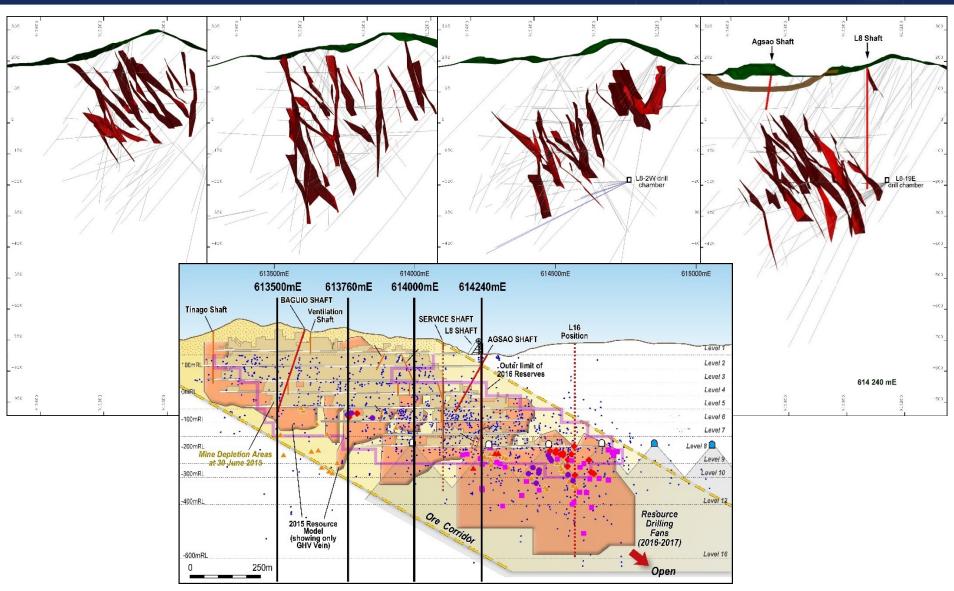




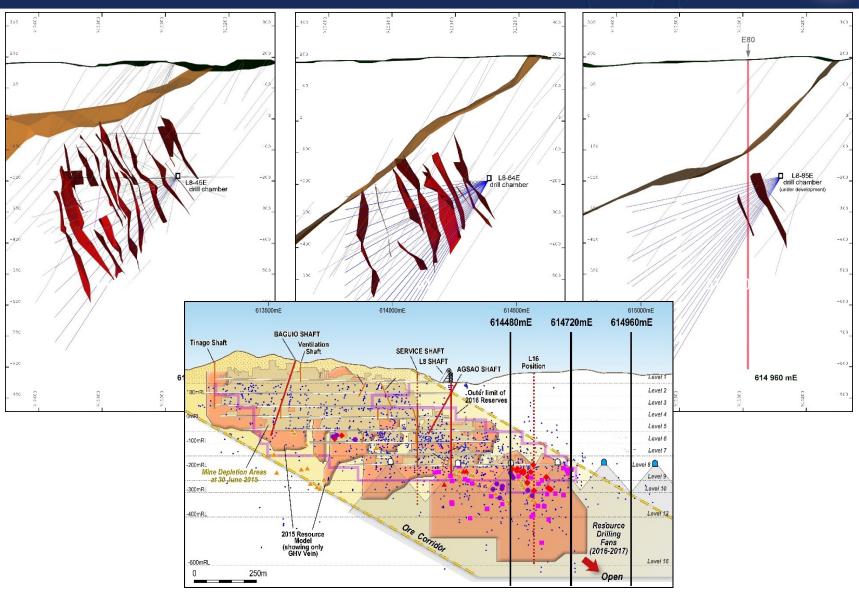
## Drilling results:

- Pre-2015 holes L12-L16 drilled from surface
- □ 30 June 2016 Reserves and Resources to be published mid-September 2016



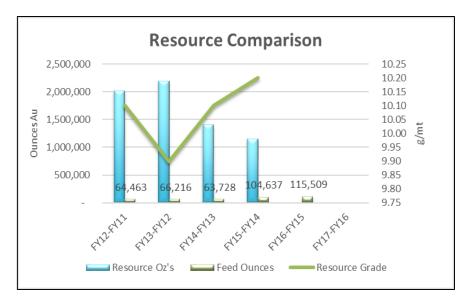


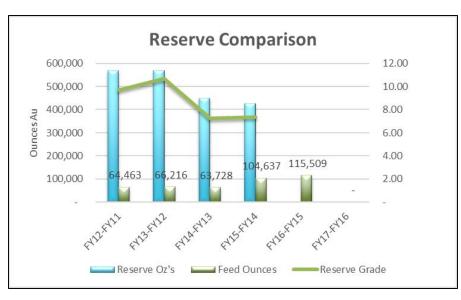


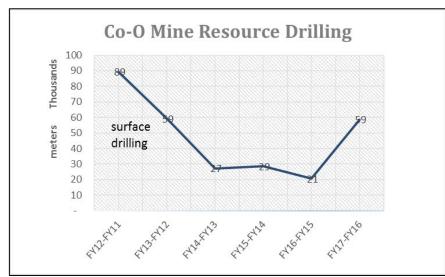


# Resources & Reserves





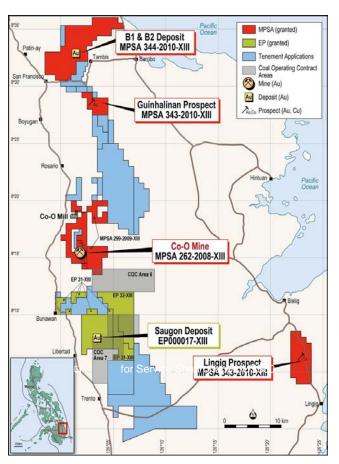




- □ 30 June 2015 Resources & Reserves
  - 1.15M ounces Resource
  - 427K ounces Reserve
- 30 June 2016 R&R should be available mid to late September

# **Exploration**





- Strategic land holding along well-mineralised East Mindanao Cordillera (503 km²)
- ☐ Regional
  - Bananghilig (B1)
    - o Re-estimating resource (JORC 2012)
    - o 2013 Ind & Inf resource 24.5Mt, 1.14 g/t, 1.4Mozs (JORC 2004)
  - Coal Project; complete resource estimation, partner with generator
  - Near Mine Exploration
    - o FY16-17 focus is on targets within 15km of processing plant
- Generative
  - Leveraging Medusa's strengths
    - Philippines established Company +10 years, proven track record
    - o Narrow vein, underground, high grade gold
    - Exploration team >100 years of cumulative experience within SEA geological setting

Tier 1: Mindanao Region, Tier 2: Philippines, Tier 3: SE Asia

# Social Responsibility – License to Operate



### □ Best in class community engagement

- Community health centers and Services
- Co-O Mine 16 bed hospital with doctors
- Road maintenance support
- Construction of community buildings, water projects

### Education

- Scholarships and assistance
- Adopt-a-school programs in 23 schools
- +10,000 students benefitting

## Environmental Stewardship

- Adopt-a-creek
- Re-forestation programs with stakeholders
- National Green Program

### □ Government Affairs

- Engaged with 4 levels of government
  - o Indigenous
  - Local / Municipal
  - Regional
  - National

### □ ISO 14001 Certification

- Certified June 2016
- Fully permitted
- Fully compliant

# Summary



- Unhedged, low cash costs, no long term debt
- Knowledge of business, operations and exploration in Philippines
- Mine capital projects removing constraints, increasing production (progressively over next 6 to 12 months)
- Resource definition and expansion drill program
- □ Capital projects + new reserves → +110k oz pa by FY17-18
- Near-mine exploration potential
- New leadership team, operationally focussed

12 months to establish operational efficiencies and drilled-off resource base to deliver consistent results

## **APPENDICES**



## MINERAL RESOURCE AND RESERVE QUALIFICATIONS

#### **Notes**

- 1. Estimates of Mineral Resources are inclusive of the estimates of Ore Reserves.
- 2. Bananghilig and Saugon Mineral Resources were previously prepared and first disclosed under the JORC Code 2004, and have not been updated to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported (08 August 2013).
- 3. Rounding to the nearest 1,000 may result in some slight discrepancies in totals
- 4. Co-O mineral resources and ore reserves are estimated in accordance with the JORC Code 2012
- 5. JORC Code 2012 Table 1 parameters for Co-O Mineral Resources and Ore Reserves are in MML's ASX release dated 4th September 2015.

#### Mineral Resources:

#### Co-O:

- A minimum lower cut-off of 3.2 g/t gold, minimum mining widths of 1.2 metres, minimum diluted grade of 2.7 g/t gold, minimum grade x width of 3.2 g.m/t have been applied.
- various upper cuts (up to 300 g/t gold) have been applied to different veins.
- a gold price of US\$1,500 has been applied

#### Bananghilig:

- a lower cut-off of 0.8 g/t gold has been applied, and various upper cuts

#### <u>Saugon</u>

- a lower cut-off of 2.0 g/t gold has been applied

Rounding to the nearest 10,000 may result in some slight discrepancies in totals

#### Ore Reserves:

Ore Reserves are a subset of Mineral Resources

#### Co-O:

- minimum mining widths of 1.25 metres (stopes ≥50°) and 1.5 metres (stopes <50°) have been applied, and where the vein width was equal to or greater then the minimum mining width, and extra 0.25 metres dilution was added to the hanging wall.
- a further 10% dilution have been allowed for slabbing in mining of low angle stopes under draw,
- shape dilution of 5% of extra tonnage at 2 g/t gold, for extra development and to reflect pinch and swell of veins and faulting,
- 85% mining recovery for stopes < 10 g/t gold,
- 90% mining recovery for stopes ≥10 g/t gold,
- 25% recovery factor for sill pillars in empty stopes are included in reserve, at a grade of 7 g/t gold, to reflect current selective mining practice,
- 30% recovery factor has been applied to remnant ore blocks, at their respective stope grades,
- stopes containing <500 tonnes were removed to account for loss ore,
- a cut-off grade of 2.0 g/t gold has been applied for development ore
- a cut-off grade of 3.8 g/t gold has been applied to developed stopes
- a cut-off grade of 4.3 g/t gold has been applied to un-developed stopes
- a gold price of US\$1,250 has been applied

# MINERAL RESOURCES & ORE RESERVES

(as at September 2015)



Deposit	Category	Tonnes <sup>4</sup>	Grade <sup>4</sup> (g/t gold)	Gold <sup>4</sup> (ounces)
MINERAL RESOURCES 1,2				
Co-O Resources 1 (JORC Code 2012)	Indicated	1,546,000	12.2	604,000
	Inferred	1,958,000	8.6	545,000
Total Co-O Resources	Indicated & Inferred	3,504,000	10.2	1,149,000
Bananghilig Resources <sup>3</sup> (JORC Code 2004)	Indicated	16,060,000	1.5	766,000
	Inferred	8,460,000	1.4	370,000
Total Bananghilig Resources	Indicated & Inferred	24,520,000	1.4	1,136,000
Saugon Resources <sup>3</sup> (JORC Code 2004)	Indicated	47,500	7.0	10,700
	Inferred	34,000	4.6	5,000
Total Saugon Resources	Indicated & Inferred	81,500	6.0	15,700
Total Resources	Indicated	17,653,000	2.4	1,380,700
Total Resources	Inferred	10,452,000	2.7	920,000
TOTAL RESOURCES	Indicated & Inferred	28,156,500	2.6	2,300,700
ORE RESERVES <sup>2</sup>				
Co-O Reserves <sup>2</sup> (JORC Code 2012)	Probable	1,811,000	7.3	427,000
TOTAL RESERVES	Probable	1,811,000	7.3	427,000

#### Notes:

The information in this presentation has been extracted from Medusa's ASX release for Mineral Resources and Ore Reserves dated 5 September 2015.

- 1 Estimates of Mineral Resources are inclusive of the estimates of Ore Reserves.
- 2 Co-O mineral resources and ore reserves estimated under guideline of JORC Code 2012.
- Bananghilig and Saugon mineral resources were previously prepared and first disclosed under the JORC Code 2004, and have not been updated to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.
- Rounding to the nearest 1,000 may result in some slight discrepancies in totals.
- 5 See Appendix 1. for Mineral Resource and Ore Reserve Qualifications.
- JORC Code 2012 Table 1 parameters for Co-O Mineral Resources and Ore Reserves are in MML's ASX release dated 5 September 2015.



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#### **Board of Directors:**

Andrew Teo (Non-executive Chairman)

Raul Villanueva (Executive Director)

Roy Daniel (Non-executive Director)

Ciceron Angeles (Non-executive Director)

### **Management:**

Boyd Timler (Chief Executive Officer)

Raul Villanueva (President, Philippines subsidiaries)

Peter Alphonso (Chief Financial Officer)

Gary Powell (Manager Geology and Resources)

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