

# QUARTERLY ACTIVITIES REPORT PERIOD ENDED 30 September 2017

## **Snapshot of Medusa:**

- Un-hedged, low cash cost, gold producer focused on organic growth in the Philippines
- No long-term debt

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

Andrew Teo (Non-executive Chairman)

Raul Villanueva (Executive Director)

Ciceron Angeles (Non-executive Director)

Roy Daniel (Non-executive Director)

Boyd Timler (Executive Director)

#### Management:

#### **Boyd Timler**

(Managing Director)

#### Raul Villanueva

(President, Philippine subsidiaries)

#### Peter Alphonso

(Chief Financial Officer / Company Secretary)

#### James Llorca

(Manager of Geology & Resources)

#### **David McGowan**

(General Manager, Engineering)

## **Capital Structure:**

Ordinary shares: 207,794,301 Unlisted options: 4,365,500

#### Listing:

ASX (Code: MML)

#### **Address and Contact Details:**

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## **OVERVIEW:**

#### **Co-O MINE PRODUCTION**

- Production: 24,896 ounces at average head grade of 6.59 g/t gold (June 2017 qtr: 23,846 ounces at average grade of 6.38 g/t gold).
- Cash Costs: of US\$565 per ounce (June 2017 qtr: US\$539 per ounce).
- All-In-Sustaining-Costs ("AISC"): US\$973 per ounce (June 2017 qtr: US\$1,180 per ounce).
- Mill Performance: gold recovery averaged 94.6% (Jun 2017 qtr: 94.4%).
- Mine Development: Total advance was 6,371 metres of horizontal and vertical development (Jun 2017 gtr: 5,671 metres).
- Mine Infrasturcture Projects:
  - E15 Service Shaft: Reached depth of 380 metres, just below the 8 level.
  - Main Levels and Winzes: Development on Level 9 totalled 878 metres, with an additional 51 metres developed on Level 10.
  - Mine De-watering: Level 8 pumps are operational and performing in line with expectations.
- Production Guidance (2017/18): The FY17-18 production guidance remains at 80,000 to 90,000 ounces, at AISC of between US\$1,050 to US\$1,200 per ounce of gold produced.

#### **Co-O MINE EXPLORATION**

- Surface and Underground resource drilling
  - The total drilling for the quarter was 3,994 metres. The breakdown as follows:
    - Reserve drilling Levels 6 & 9 from 17 drill holes totalled 1,952 metres.
    - Resource definition drilling at Level 8, from 8 drill holes totalled 2,042 metres.
  - Results from the resource drilling returning grades over 40 g/t gold include; 75.5 g/t over 0.65 metres, 44.23 g/t over 0.5 metres, 157.8 g/t over 0.45 metres, 50.43 g/t over 0.75 metres and 58.67 g/t over 0.70 metres.

#### **REGIONAL & NEAR MINE EXPLORATION**

 Near Mine Exploration (MinEx): continued the reconnaissance activities within the mine environs.

## **RESOURCES & RESERVES**

An updated Mineral Resource and Ore Reserve estimates to 30 April 2017, was completed and released to the market on 07 August 2017.

#### **CORPORATE & FINANCIALS**

- Total cash and cash equivalent of gold on metal account at the end of the quarter was approximately US\$16.8 million (US\$11.5 million as at 30 June 2017).
- On 22 August 2017, Mr Ciceron "Jun" Angeles tendered his resignation as a Non-executive Director of Medusa, effective 31 October 2017.

## **TENEMENT PROJECT OVERVIEW**

The locations of the Company's Tenement on Figure 1.

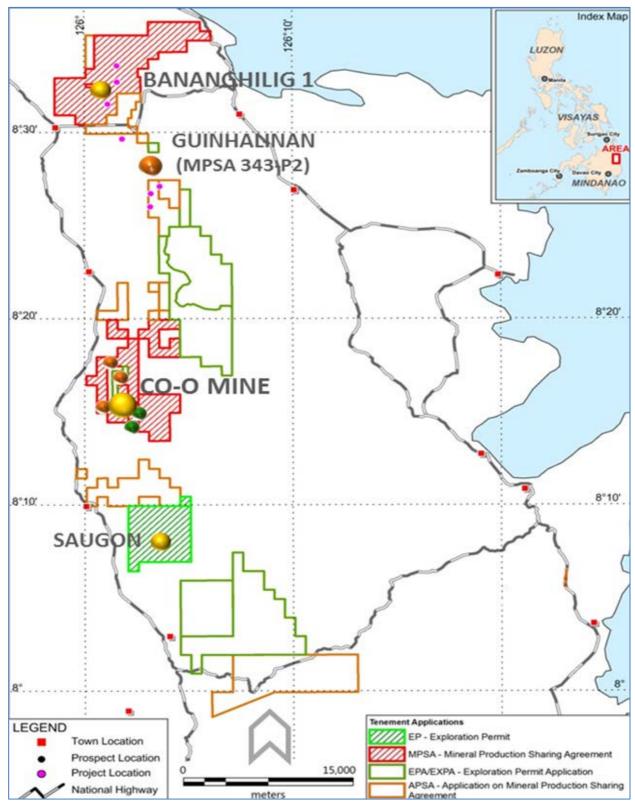


Figure 1: Location diagram showing the company's Tenements covering the Co-O mine and mill operations areas.

## Co-O MINE

#### **PRODUCTION**

The production statistics for the September 2017 Quarter and comparatives for the previous four quarters are summarised in Table I below.

"For the June and September quarters combined, the Co-O operations have produced 48,742 ounces of gold at a feed grade of 6.54 g/t (which matches the new reserve grade)"

Table I. Gold production statistics

Description	Unit	Sep 2016 Quarter	Dec 2016 Quarter	Mar 2017 Quarter	Jun 2017 Quarter	Sep 2017 Quarter
Ore mined	WMT	149,394	134,740	140,865	139,967	143,317
Ore milled	DMT	132,371	120,731	122,960	123,670	121,616
Head grade	g/t	5.26	4.75	4.93	6.38	6.59
Recovery	%	94.5%	94.2%	94.3%	94.4%	94.6%
Gold produced	ounces	21,157	17,350	18,390	23,846	24,896
Gold sold	ounces	21,152	17,909	17,837	22,296	27,602
U/G development	metres	4,960	5,758	6,004	5,671	6,371
Cash costs (*)	US\$/oz	\$592	\$625	\$644	\$539	\$565
All-In-Sustaining-Costs	US\$/oz	\$1,334	\$1,498	\$1,555	\$1,180	973
Average gold price received	US\$/oz	\$1,315	\$1,219	\$1,229	\$1,252	1,274
Cash & cash equivalent	US\$M	\$19.6M	\$12.9M	\$10.6M	\$11.5M	\$16.8M

Note:

(\*) Net of capitalised development costs and includes royalties and local business taxes.

The Company produced 24,896 ounces of gold for the quarter, at an average head grade of 6.59 g/t gold from 121,616 tonnes of ore processed, which is a 4% improvement on the previous quarter. Tonnes processed was restricted by mine ore hoisting, while mill feed grade was influenced by better quality development ore and a higher proportion of stope ore in the mill feed blend.

The overall ore mined for the quarter was slightly better than with the previous quarter. The total material (ore & waste mined) for the September quarter was in line with the previous quarter, with most of the waste material continuing to be backfilled into empty stopes, reducing the need to hoist waste to the surface.

Underground development for the quarter achieved 6,371 metres.

All-In-Sustaining-Costs ("AISC") for the September 2017 quarter was US\$973 per ounce of gold, a significant improvement over previous quarters.

The September quarter AISC also includes some exceptional costs:

- E15 Service Shaft and surface civil works for future infrastructure (buildings);
- upgrades to the mine water treatment plant (ponds, filter house and warehouse relocation costs); and
- Tailings Storage Facility ("TSF#5) upstream diversion dam#2 and diversion channel.

The mine completed a total of 6,371 metres of development, a 12% increase over the June Quarter. Of this, 3,697 metres was horizontal and 2,674 metres was vertical development. The focus continued to be Levels 7, 8 and 9 to open up new stoping blocks on the high-grade GH Vein. Development also continued on Level 10.

The in-stope broken ore inventory at the end of the quarter was 34,662 tonnes (WMT) at 7.00 g/t gold.

#### **Production Shafts**

Overall material hoisted was 142,799 tonnes (DMT) for ore and waste combined.

#### Level 8 Shaft:

The September 2017 quarter saw the winding ropes changed out in the L8 Shaft as well as other general shaft maintenance. Major winder maintenance is planned for the next quarter.

The completion of the Level 8 pump station has controlled the dewatering such that flooding of the shaft is now rare.

## Agsao Inclined Shaft:

Breakdown of pumps on the Level 5 resulted in flooding of the Level 5 reducing the availability of the Agsao and Baguio shafts.

With the completion of the Level 8 pump station, the flooding was restricted to Level 5. Work has commenced to allow the 5 level pumps to operate more reliably and effectively, which will minimise future flooding events.

## Baguio Inclined Shaft:

Same conditions as with the Agsao Inclined Shaft.

#### L8 Winzes:

29E and 12E Winzes continue to hoist material from Level 9 and Level 10 to Level 8. The 43E Winze has now reached the Level 9 and all three winzes have been linked together by development on the Level 9. Development of the 43E Winze is continuing to the Level 10.

The 48E Winze has also reached the Level 9 and continuing onto Level 10 level. The 35E Winze winder chamber is complete and a sinking winder is being set up to continue development of this winze.

For the September quarter, there was a total of 674 metres of horizontal development and 255 metres of vertical development on Levels 9 and 10. Stoping activities continued on Level 9

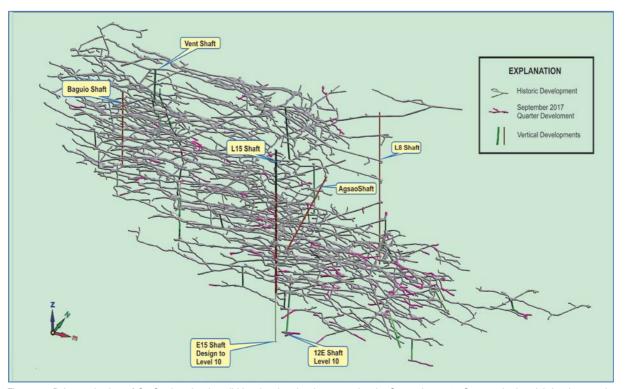


Figure 2: 3D Isometric view of Co-O mine showing all historic mine development, plus the September 2017 Quarters horizontial development in Pink, also showing the primary vertical development in Brown and Green. E15 is shown here at Level 8, with design to Level 10 (+24 metres). Note; the majority of horizontal devlopment is on Levels 7-8-9

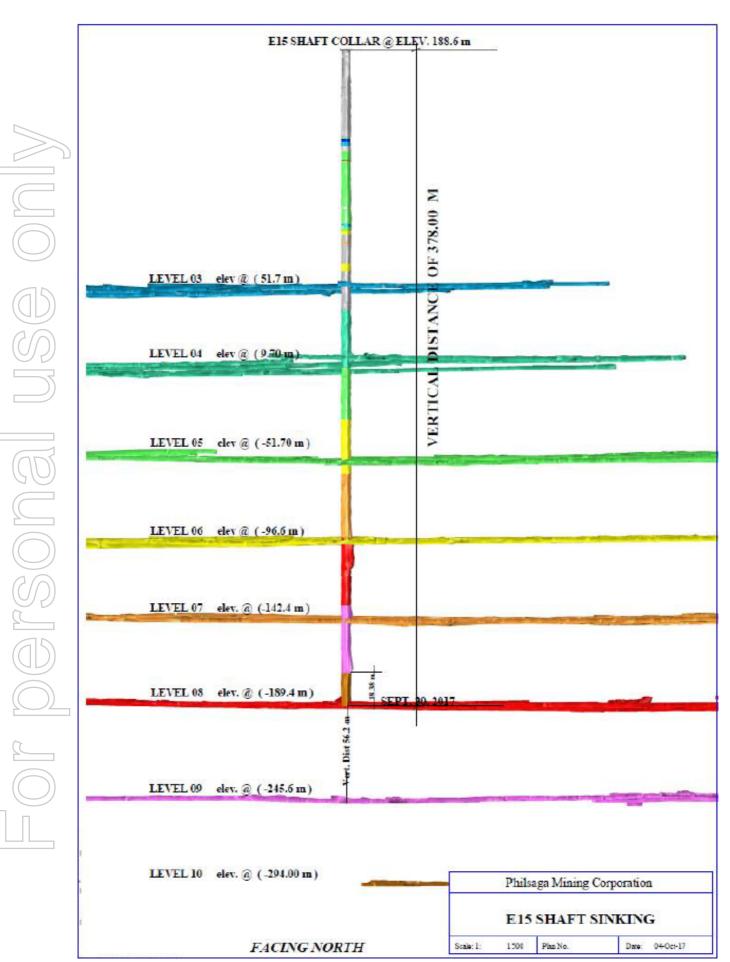


Figure 3: Cross section of E15 shaft showing progress to the end of the September 2017 Quarter.

#### E15 Service Shaft

E15 Service Shaft has progressed to Level 8, a total of 378 metres from the shaft collar, the final design depth to level 10 is 512 metres. 134 metres of blind sinking remains;

Highlights for the September 2017 quarter were:

- stripping of the Alimak raise continued, breaking through into the Levels 7 and 8;
- drawbridge chambers were excavated on the Level 8;
- civil works commenced on Levels 6 and 7 with installations and concreting of the drawbridge beams:
- Level 9 development has reached the E15 Shaft position and level 10 development is continuing and will be in position prior to the shaft reaching that level;
- preparations for the commencement of blind sinking below Level 8; and
- remaining shaft hardware has been designed, tendered and on order; level bridges, shaft bottom guide steel and rope guide counter weights (cheese weights), modification for the headframe from sinking to operations configuration.

As of 30 September, E15 is at Level 8. With anticipated blind sinking rates, delivery of shaft hardware, excavation work below Level 10 and commissioning, it is anticipated there will be a slight slippage in the completion schedule, now expected after March 2018.

## **Dewatering**

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Construction of the new Level 8 pump station was completed by the end of the June quarter and continuously operated during the September quarter, performance has been as expected.

Work has commenced on upgrades to the Level 5 station to improve reliability of the pumps currently in place. This will minimize flooding events on Level 5.

Work has continued on the mine dirty water clarification system. The new filter press shed has been constructed and additional filter presses have been installed. Installation of piping and conveyor system is expected to be completed in the December 2017 quarter. Demolition of the old store shed has been completed, to make way for the construction of an additional settling pond. When completed, the existing settling ponds will be taken off line one at a time and improved for more effective and efficient operation. This work is expected to be completed by the 4<sup>th</sup> quarter (ending June 2018) next year.

Planning has commenced on the whole of mine long-term dewatering system.

#### **Processing Plant**

The process plant throughput was 121,616 tonnes at a grade of 6.59 g/t gold, in line with the previous month (123,670 tonnes at a grade of 6.38 g/t gold). The processing plant throughput is limited by the mine hoisting production. The process plant improved recoveries to 94.6% for the guarter (June 2017 quarter: 94.4%).

## **HEALTH, SAFETY & ENVIRONMENT**

There where no environmental issues reported for the quarter.

There were four lost time injuries recorded during the September 2017 quarter to give a LTIFR of 1.83 (incidents per million man hours). There were a further 12 low severity incidents for the quarter. All these incidents have been investigated with action plans developed to focus on the root causes, risks, behaviour and the sites safety culture.

#### Co-O MINE GEOLOGY

## **Co-O Mine Drilling**

For the September quarter, a total of 3,994 metres were drilled which is about 60% more compared to the previous quarter. The breakdown of the drilling meterage are from Levels 6, 8 and 9. The resource drilling from Level 8 downward aggregated 2,042 metres while the reserve definition drilling from Levels 6 and 9 aggregated 1,952 metres.

The underground drilling campaign from Level 8 targeting resource definition between Levels 8 to Level 16 (Figure 2) continued over this quarter with good results. This program is targeting to increase and upgrade the current mineral resource base and intercept the depth and strike extensions of the mineralized vein system between Levels 8 to Level 12 (-200m to -400m RL) and Levels 12 to Level 16 (-400m to -600m RL).

Significant results obtained during the quarter are reported in Table II and relative positions shown in longitudinal section in Figures 4.

**Table II.** Co-O Mine underground drill hole results ≥ 3 gram-metres/tonne gold (Refer Appendix A for JORC Code, 2012 Edition - Table 1 Report)

(Refer	(Refer Appendix A for JORC Code, 2012 Edition - Table 1 Report)																			
Hole Number	East	North	RL	Depth (metres)	Azim (°)	Dip (°)	From (metres)	To (metres)	Width (metres)	Gold (g/t)	Accumulations (gm*m)									
	UNDERGROUND RESOURCE DRILLING – LEVEL 6																			
L6-20W-001	613784	912900	-98	100	182	2	8.50	9.00	0.50	6.97	3.48									
L6-22E-001	614245	912900	-93	130	12	3	16.50	17.50	1.00	14.00	14.00									
							50.80	51.90	1.10	3.24	3.56									
							142.40	142.80	0.40	8.63	3.45									
L6-52E-001	614510	912815	-90	150	9	0	42.60	43.65	1.05	7.75	8.14									
							47.80	48.80	1.00	3.69	3.69									
			UNE	DERGROU	ND RESC	OURCE [	DRILLING – I	LEVEL 8												
L8-28E-029	614265	912866	-191	552	240	-29	50.60	51.60	1.00	31.23	31.23									
L8-28E-030	614268	912865	-191	551	176	-52	529.10	529.50	0.40	7.35	2.94									
							529.50	530.50	1.00	3.27	3.27									
L8-2W-017	613991	913098	-188	576	219	-14	294.90	295.50	0.60	3.96	2.38									
							362.70	363.70	1.00	12.13	12.13									
L8-2W-021	613994	913097	-188	552	177	.77 -17	293.20	293.80	0.60	3.82	2.29									
							293.20	293.80	0.60	3.82	2.29									
																	310.80	311.80	1.00	15.15
							509.50	510.50	1.00	21.33	21.33									
L8-45E-030	614462	913038	-191	572	223	-57	217.90	218.60	0.70	23.80	16.66									
L8-45E-031	614462	913037 -	913037	-191	551	220	-48	37.70	38.25	0.55	38.33	21.08								
							309.85	310.80	0.95	4.25	4.04									
L8-45E-032	614464	913037	-191	550	550 191	-68	110.80	111.80	1.00	35.30	35.30									
												232.40	232.90	0.50	8.13	4.07				
										238.05	239.05	1.00	35.90	35.90						
							319.90	320.90	1.00	26.20	26.20									
L8-45E-033	614465	913036	-190	551	177	-8	144.80	145.30	0.50	4.54	2.27									
							157.85	158.40	0.55	3.89	2.14									
							327.00	328.10	1.10	22.63	24.89									
							363.50	364.60	1.10	82.17	90.39									
L8-82E-013	614902	913103	-186	606	162	-40	41.90	42.50	0.60	7.50	4.50									
							66.60	67.150	0.55	4.35	2.39									
							123.40	124.40	1.00	8.80	8.80									
L8-82E-014	614903	913103	-186	606	153	-41	120.35	121.00	0.65	75.73	49.22									
							191.00	191.50	0.50	44.23	22.11									

Hole Number	East	North	RL	Depth (metres)	Azim (°)	Dip (°)	From (metres)	To (metres)	Width (metres)	Gold (g/t)	Accumulations (gm*m)												
L8-82E-015	614903	913103	-186	599	153	-37	119.30	119.50	0.20	21.20	4.24												
							119.50	120.10	0.60	6.80	4.08												
							120.90	121.65	0.75	13.33	10.00												
							165.20	165.75	0.55	13.77	7.57												
							186.95	187.40	0.45	157.80	71.01												
							191.05	191.60	0.55	4.44	2.44												
L8-82E-016	614901	913103	-186	602	176	-31	88.45	89.10	0.65	6.77	4.40												
							92.50	92.85	0.35	17.63	6.17												
L8-82E-017	614901	913102	-186	600	186	-30	84.85	85.35	0.50	4.17	2.08												
							87.30	88.25	0.95	3.62	3.44												
								148.05	148.55	0.50	26.10	13.05											
							467.25	468.00	0.75	50.43	37.82												
L8-82E-018	614901	913103	-186	551	185	185 -24	52.65	53.60	0.95	6.90	6.56												
									75.95	76.50	0.55	15.47	8.51										
													98.60	99.60	1.00	24.47	24.47						
										99.60	100.65	1.05	17.83	18.72									
								100.65	101.60	0.95	8.00	7.60											
													101.60	102.05	0.45	11.47	5.16						
																					102.80	103.20	0.40
											106.25	107.15	0.90	23.17	20.85								
							117.55	118.50	0.95	12.80	12.16												
							118.50	119.20	0.70	33.10	23.17												
							197.90	198.60	0.70	58.67	41.07												
L8-82E-020	614902	913103	-186	300	171	-23	54.70	55.20	0.50	19.73	9.87												
							155.80	156.00	0.20	3.05	0.61												
		·	UNE	ERGROU	ND RESC	OURCE I	PRILLING – I	LEVEL 9	<b>.</b>														
L9-23E-001	614258	913073	-244	150	165	0	55.60	56.25	0.65	19.50	12.67												
L9-23E-002	614257	913072	-244	150	185	0	40.75	41.75	1.00	5.80	5.80												
							55.05	55.80	0.75	6.07	4.55												

#### Notes:

- 1. Composited intercepts' 'weighted average grades' calculated by using the following parameters:
  - (i) no upper gold grade cut-off applied;
  - (ii) lower cut-off grade of 3.0 g/t gold; and
  - (iii) only downhole widths ≥0.50 metres reported.
- 2. Intersection widths are downhole drill widths not true widths;
- Analysis is carried out by Philsaga Mining Corporation's laboratory; Inter-laboratory check assays are carried out with an independent accredited commercial laboratory (Intertek Philippines, Manila) on a regular basis every quarter.
- 4. Grid coordinates are rounded and based on the Co-O Mine Grid. RL is elevation, rounded in metres relative to Mine Datum.

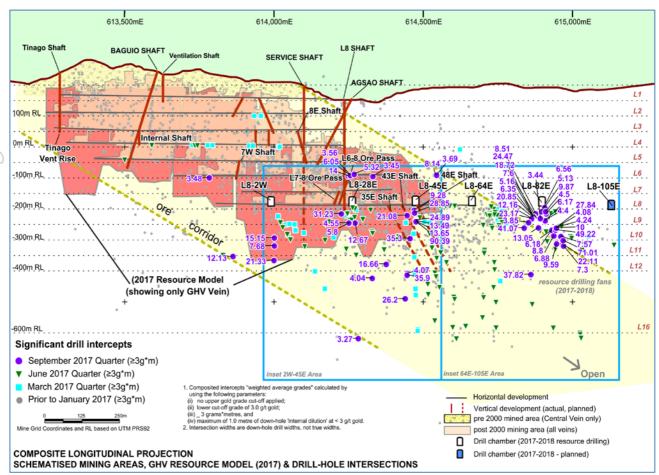


Figure 4. Co-O Mine Longitudinal Projection showing composited mining depletion, vertical development, Ore Reserves limits, and significant drill intercept locations (including previously reported). Note that the ore reserve limits are updated with the 2017 Resource Model.

Figures 4a and 4b show a more detailed location of the signifianct results. The numbers represent grade\*metres (far right column on table II). The September quarter's drilling continues to return very high grade assay results on narrower veins. Figure 4a shows the results of the infill drilling predomentantly on the main GH vein. Figure 4b shows the intercepts on the DPV and JV to the north-east. Note, the close spacing of results reflects there are multiple veins and the drill station is close to the structures.



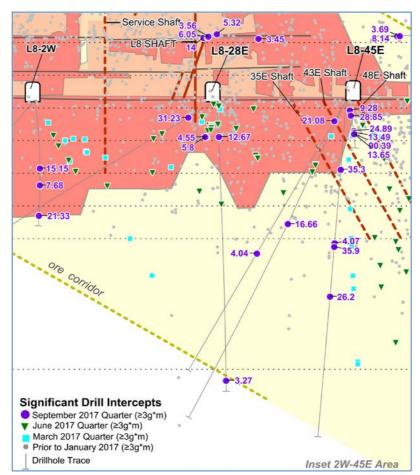


Figure 4a: Significant Drill Intercepts.

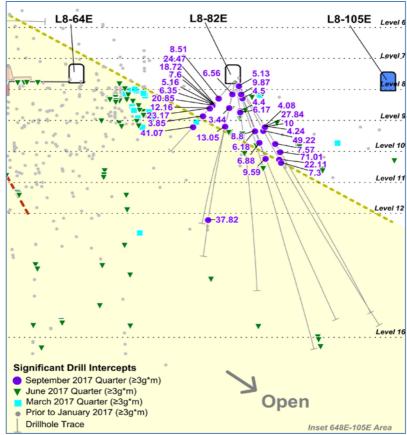


Figure 4b: Significant Drill Intercepts.

## Co-O SURFACE EXPLORATION

## **Near Mine Exploration (MinEX)**

The location of the Company's projects covered during this qurter are shown in Figure 5 below.

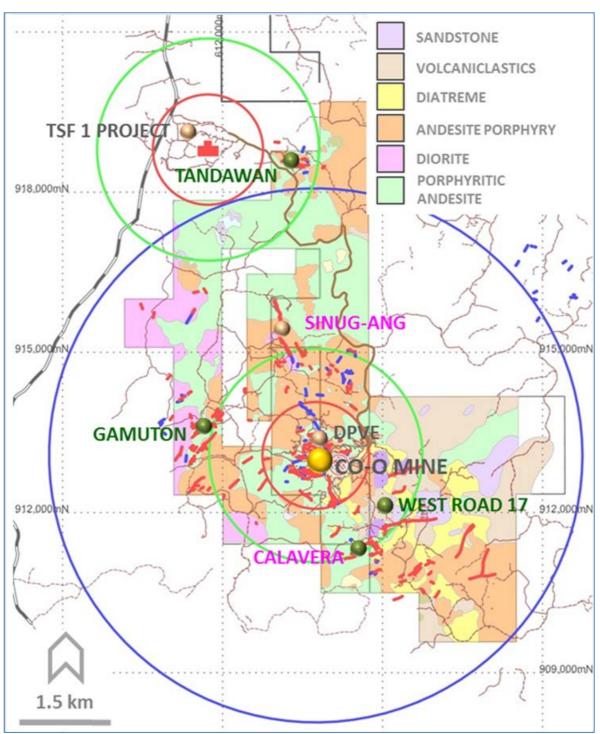


Figure 5. Location of the Sinug-ang and Calavera Prospects in relation to Co-O Mine and other prospects within the Co-O Mine District.

## **Proposed Co-O Scout Drilling Program**

Two proposed scout drilling program are being considered for implementation for this fiscal year - the 3-holes 1,500 metres Sinug-ang and the 3-holes 800 metres Calavera Scout Drilling Programs (*Figure 5*). Active implementation of these drilling programs is at present hampered by access issues, and negotiations are currently on-going with surface owners and the local community to amicably resolve this issue.

## **Reconnaissance Exploration Program**

Received notice from the Mines and Geosciences Bureau on the approval of our request for the renewal of MPSA 299 dated 21 July 2017. A fast track reconnaissance geologic mapping is being implemented within MPSA Parcel 2 to validate the technical and financial merits of incising this portion of the tenement prior to consolidating of MPSA 299 with our Co-O Mine tenement – MPSA 262 (*Figure 6*).

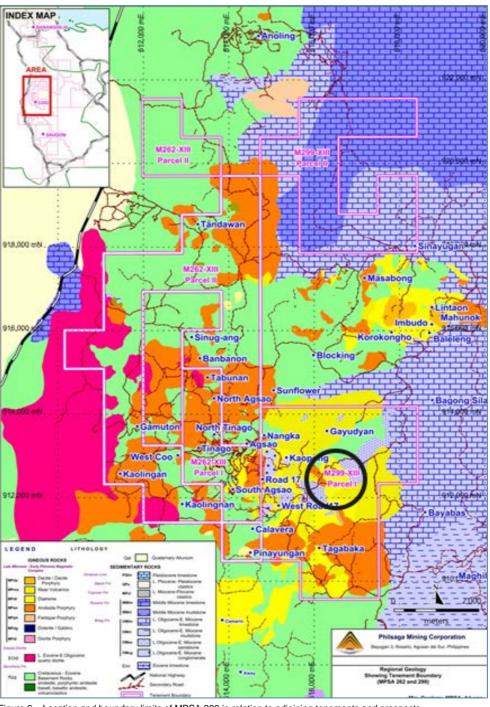


Figure 6. Location and boundary limits of MPSA 299 in relation to adjoining tenements and prospects.

## PRODUCTION GUIDANCE (full year 2017-18):

The September quarter results of 24,896 ounces with AISC's of US\$973 per ounce is better than expected. The FY17-18 guidance remains at 80,000 to 90,000 ounces of gold produced at All-In-Sustaining-Costs ("AISC") of between US\$1,080 to US\$1,200 per ounce of gold produced.

The production guidance is governed by the completion of the E15 Service Shaft by the March quarter of 2018, which we've seen a slight slippage. Once completed, the E15 will unconstrain the Level 8 Production shaft as all manpower and materials will be removed and Level 8 becomes a dedicated skipping shaft.

The production guidance assumes Co-O mine will be realizing efficiency improvement within the March quarter and allowing a reasonable transition period.

## **CORPORATE**

- On 25 May 2017 the Company announced that the Philippine President had declared Martial Law on the Mindanao island following rebel activities in Marawi City on the western side of the island.
  - To date the Martial Law is still in force, however there has not been any impact to the Company's activities.
- The Company advised the market on 22 August 2017, that Ciceron "Jun" Angeles had tendered his resignation as a Non-executive Director of Medusa, effective 31 October 2017.

#### **FINANCIALS**

As at 30 September 2017, the Company had total cash and cash equivalent in gold on metal account of approximately US\$16.8 million (30 June 2017: US\$11.5 million).

The Company sold 27,602 ounces of gold at an average price of US\$1,274 per ounce in the September 2017 quarter (June 2017 quarter: 22,296 ounces sold at an average price of US\$1,252 per ounce).

During the September 2017 quarter, the Company incurred;

- exploration expenditure (inclusive of underground exploration) of US\$1.3 million (June 2017 quarter: US\$3.3 million);
- US\$2.6 million on capital works (inclusive of new Service Shaft) and associated sustaining capital at the mine and mill (June 2017 quarter: US\$3.3 million);
- US\$5.5 million on continued mine development (June 2017 quarter: US\$6.7 million); and
- corporate overheads of US\$1.3 million (June 2017 quarter: US\$1.5 million).

In addition to the expenses highlighted above, which form part of AISC of US\$973 per ounce for the September 2017 quarter (Jun 2017 quarter: AISC of US\$1,180 per ounce), the Company also expended cash in the following areas during the quarter:

- net decrease in creditors/borrowings of approximately US\$5.9 million;
- decrease in warehouse inventory and stockpiles of around US\$2.0 million; and
- net movement of indirect value added tax (refundable in tax credits) of approximately US\$1.6 million.

## Reserves and Resources 30 April 2017

The 30 April 2017 Resource and Reserve Statement was released on 7<sup>th</sup> August 2017. Medusa is now better aligned with our financial year-end reporting requirements. From the 10 months of diamond drilling and mine development, Medusa has realized a resource grade improvement of almost 14% and an indicated resource to reserve conversion of 76%, very high for this gold deposit type and industry standards. Resources now include a maiden estimation for the TSF#1 tailing material.

Co-O mine resources now sit at 2.2 million tonnes, grading 12.29 g/t for 859,000 contained ounces of gold. Co-O mine reserves are now 1.64 million tonnes, grading 6.54 g/t for 345,000 contained ounces of gold.

The resource grade has increased due to the narrow very high grade nature of the drilling intersections reported in the previous quarterly releases. The main structures on and below Level 8 remains mostly open to the east and at depth.

Table III. Group Total Mineral Resources and Ore Reserves estimates at 30 April 2017

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 <sup>1</sup> (JORC 2012)	Indicated	1,172,000	12.11	456,000
	Inferred	1,003,000	12.50	403,000
Total Co-O Resources	Indicated & Inferred	2,175,000	12.29	859,000
Bananghilig Resources <sup>2</sup> (JORC 012)	Indicated	7,580,000	1.66	406,000
	Inferred	200,000	4.42	29,000
Total Bananghilig Resources	Indicated & Inferred	7,780,000	1.73	435,000
Saugon Resources <sup>3</sup> (JORC 2012)	Indicated	47,500	7.00	10,700
	Inferred	34,000	4.60	5,000
Total Saugon Resources	Indicated & Inferred	81,500	6.00	15,700
TSF#1 Tailings Resources (JORC 2012)	Indicated	510,000	1.72	28,200
Total TSF#1 Tailings Resources	Indicated	510,000	1.72	28,200
TOTAL RESOURCES	Indicated	9,309,500	3.01	900,700
TOTAL RESOURCES	Inferred	1,237,000	10.98	437,000
TOTAL RESOURCES	Indicated & Inferred	10,546,500	3.94	1,337,700
ORE RESERVES <sup>2</sup>				
Co-O Reserves <sup>2</sup> (JORC 2012)	Probable	1,640,000	6.54	345,000
TOTAL RESERVES	Probable	1,640,000	6.54	345,000

Figure 7 summarised Co-O Mine's 10 year production history, showing that current reserves are greater than those at time of first production ands history shows that the original reserves have been replaced four-fold.

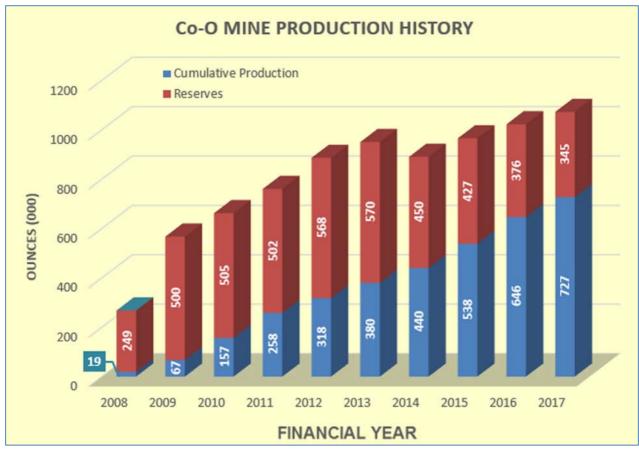


Figure 7. Co-O Mine Produciton history and Reserve history.

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

#### **Medusa Mining Limited**

Information in this report relating to **Exploration Results** has been directed and reviewed by Mr James P Llorca, and is based on information compiled by Philsaga Mining Corporation's technical personnel. Mr Llorca is a Fellow of the Australian Institute of Geoscientists (AIG), also a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Chartered Professional in Geology of the AusIMM.

Mr Llorca is Manager of Geology and Resources, and is a full-time employee of Medusa Mining Ltd, and has sufficient experience which is relevant to the styles of mineralisation and type of deposits under consideration and to the activities for 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 Llorca consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **DISCLAIMER**

This report contains certain forward-looking statements. The words 'anticipate', 'believe', 'expect', 'project', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan' and other similar expressions are intended to identify forward-looking statements. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Medusa, and its officers, employees, agents and associates, that may cause actual results to differ materially from those expressed or implied in such statements.

Actual results, performance or outcomes may differ materially from any projections and forward-looking statements and the assumptions on which those assumptions are based.

You should not place undue reliance on forward-looking statements and neither Medusa nor any of its directors, employees, servants or agents assume any obligation to update such information.

# APPENDIX A: Co-O Mine – JORC Code 2012 – Table 1 Report

## Section 1. Sampling Techniques and Data

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

	(Criteria in this section apply to all succeeding sections.)					
Criteria	JORC Code explanation	Commentary				
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handled XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization 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 1m samples from which 3kg was pulverized 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.</li> </ul>	<ul> <li>Diamond (DD) core and stope face channel samples are the two main sample types.</li> <li>Diamond (DD) core samples: Half core samples for DD core sizes LTK60, NQ and HQ, and whole core samples for DD core sizes TT46. Stope and Development samples: 1.5 to 3m stope face channel samples are submitted for analytical analysis.</li> <li>DD drilling is carried out to industry standard to obtain drill core samples, which are split longitudinally in half along the core axis using a diamond saw, except for TT46 core. Half core or whole core samples are then taken at 1m intervals or at lithological boundary contacts (if &gt;20cm), whichever is least. The sample is crushed with a 1kg split taken for pulverization to obtain four (4) 250g pulp samples. A 30g charge is taken from one of the 250g pulp packets for fire assay gold analysis. The remaining pulp samples are retained in a secure storage for future reference.</li> </ul>				
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	<ul> <li>For underground drilling, larger rigs including LM-55 and Diamec U6, collar holes using HQ/HQ3 drill bits (core diameter 61mm/63mm) until ground conditions require casing off, then reduce to NQ/NQ3 drill bits (core diameter 45mm/47mm). For the smaller portable rigs, drill holes are collared using TT46 drill bits (core diameter 35mm) or LTK60 drill bits (core diameter 44mm).</li> <li>For surface holes, drillholes are collared using PQ3 drill bits (core diameter 83mm) until competent bedrock. The holes are then completed using either HQ3 or NQ3 drill bits depending on ground conditions.</li> <li>Drill core orientation is measured using the Ezy-Mark™</li> </ul>				
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measure taken to maximize sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>For each core run, total core length is measured with the recovery calculated against drilled length. Recovery averaged better than 95%, which is considered acceptable by industry standards.</li> <li>Sample recovery is maximised by monitoring and adjusting drilling parameters (e.g. mud mix, drill bit series, rotation speed). Core sample integrity is maintained using triple tube coring system.</li> <li>No known relationship has been observed to date between sample recovery and grade. Core recovery is high being &gt;95%. No sampling bias has been observed.</li> </ul>				
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Core samples have been logged geologically and geotechnically to a level of sufficient detail to support appropriate mineral resource estimation, mining and metallurgical studies. Lithology, mineralisation, alteration, oxidation, sulphide mineralogy, RQD, fracture density, core recovery are recorded by geologists, then entered into a digital database and validated.  Qualitative logging is carried out on all drill core. More detailed quantitative logging is carried out for all zones of interest, such as in mineralised zones. Since July 2010, all drill core has been photographed. The drill core obtained prior to July 2010 has a limited photographic record.				

	Criteria	JORC Code explanation	Commentary
	Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether Quarter, half or call core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Except for TT46 drill core, all drill core is sawn longitudinally in half along the core axis using a diamond saw to predetermined intervals for sampling. Cutting is carried out using a diamond saw with the core resting in a specifically designed cradle to ensure straight and accurate cutting.</li> <li>No non-core drill hole sampling has been carried out for the purposes of this report.</li> <li>Development and stope samples are taken as rock chips by channel sampling of the mining face according to geological boundaries.</li> <li>The sample preparation techniques are to industry standard.</li> <li>The sample preparation procedure employed follows volume and grain size reduction protocols (-200 mesh) to ensure that a representative aliquot sample is taken for analysis. Grain-size checks for crushing and pulverizing are undertaken routinely.</li> <li>For PQ/PQ3, HQ/HQ3, NQ/NQ3 and LTK60 core, the remaining half core is retained for reference. The TT46 drill core is whole core sampled.</li> <li>Core sample submission sizes vary between 2-5kg depending on core size, sampling interval, and recovery. The assay sample sizes are considered to</li> </ul>
n ieuosied ioj	Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>All raw samples from the mine are submitted to Philsaga Mining Corporation's (PMC) Assay Laboratory, located at the mill site. Samples are prepared and assayed in the laboratory. Gold is assayed by the fire assay method, an industry standard commonly employed for gold deposits. It is a total-extraction method and of ore-grade category. Two assay variants are used based on gold content: the FA30-AAS for Au grades &lt; 5g/t, and FA30-GRAV for Au grades &gt; 5g/t. Both sample preparation and analytical procedures are of industry standards applicable to gold deposits.</li> <li>A QAQC system has been put in place in the PMC Assay Laboratory since 2006. It has been maintained and continually improved up to the present. The quality control system essentially, utilises certified reference materials (CRMs) for accuracy determination at a frequency of 1:60 to 1:25. For precision, duplicate assays are undertaken at 1:20 to 1:10 frequency. Blanks are determined at 1:50 or 1 per batch. Samples assayed with lead button weights outside the accepted range of &gt;25 to &lt;35 grams, are re-assayed after adjustment of the flux.</li> <li>Inter-laboratory check assays with an independent accredited commercial laboratory (Intertek Philippines, Manila) are undertaken at a frequency of 1 per Quarter. Compatibility of assay methods with the external laboratory is ensured to minimize variances due to method differences.</li> <li>The QAQC assessment showed that the great number of the mine samples assayed had accuracy within the acceptable tolerance of 2 z-score, and 10% Absolute Relative Difference (ARD). Precisions from duplicate assays generally showed ± 10 -20% MPRD for 2013 onwards. For replicate assays, the precision at 95% confidence level, is within &lt; 10 % which is within acceptable limits for gold. Intermittent analytical biases were shown but were well within the accepted tolerance limits.</li> </ul>
	Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	Visual inspections to validate mineralisation with assay results have occurred on a regular basis. Independent and alternative company personnel on a regular basis verify significant mineralised intersections.

Criteria	JORC Code explanation	Commentary
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All drilling is diamond drilling and no twinning of holes has been undertaken. The majority of drilling is proximal to mine development and intersections are continually being validated by the advancing mine workings.</li> <li>Geological logging of drill core and drilling statistics are hand written and transferred to a digital database. Original logs are filed and stored in a secure office. Laboratory results are received as hardcopy and in digital form. Hardcopies are kept onsite. Digital data is imported into dedicated mining software programs and validated. The digital database is backed up on a regular basis with copies kept onsite.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> </ul>	Suitably qualified surveyors and/or experienced personnel, using total station survey equipment locate all drillhole collars. Coordinates are located with respect to Survey Control Stations (SCS) established within the project area and underground.      A local mine grid system is used which has been
	Quality and adequacy of topographic control.	<ul> <li>adapted from the Philippine Reference System of 1992 (PRS92).</li> <li>Topographic and underground survey control is maintained using located SCS, which are located relative to the national network of geodetic control points within 10km of the project area. The Company's SCS have been recently audited by independent licensed surveyors (Land Surveys of Perth, Western Australia) in April 2015 and they found no gross errors with the survey data. Accuracy is considered to be appropriate for the purposes of mine control.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Surface exploration drillholes were located initially on a 50m and 100m grid spacing. For resource definition drilling the sectional spacing is at least 50m with 25m sectional spacing for underground holes.</li> <li>Sufficient drilling and underground face sampling has been completed to support Mineral Resource and Ore Reserve estimation procedures.</li> <li>Sample compositing has not been applied to exploration data.</li> </ul>
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 mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Mineralisation is hosted within narrow, typically &lt;2m wide quartz veins. Orientations of the veins are typically E-W, with variations from NE-SW to NW-SE, with dips varying from flat-lying to steep dipping to the NW-NE quadrant. Surface drillholes are generally drilled towards the S and vary in dip (-45° to -60°). Underground drill holes are orientated in various directions and dips, depending on rig access to intersect the various mineralised veins at different locations within the mining area.</li> <li>Due to the nature of this style of mineralisation and the limited underground access for drilling, drilling may not always intersect the mineralisation or structures at an optimum angle, however this is not considered to be material. A good understanding of the deposit geometry has been developed through mining such that it is considered that any sampling bias is</li> </ul>
Sample security	The measures taken to ensure sample security.	Drilling is supervised by company geologists and exploration personnel. All samples are retrieved from the drill site at the first opportunity and taken to a secure compound where the core is geologically logged, photographed and sampled. Samples are collected in tagged plastic bags, and stored in a lockable room prior to transportation to the laboratory. The samples are transported using company vehicles and accompanied by company personnel to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Dr Rudy Obial from R.C. Obial & Associates routinely undertakes site visit reviews and provides

Criteria	JORC Code explanation	Commentary
		independent consulting advice for the onsite laboratory upgrades and QA/QC. These regular reviews form part of the continual improvement for the site laboratory.
		• In August 2015, Dr Obial reported on an independent review of available QA/QC data and concluded that the accuracy of the gold determinations were predominantly within the tolerance limits for both PMC laboratory and the independent checking laboratory. The precision of assay is better for the independent laboratory and as such, where diamond drilling assays exist for both laboratories, results from the independent laboratory have been used, in preference to PMC assays, for Mineral Resource estimation.
		<ul> <li>Sampling techniques and database management is to industry standard.</li> </ul>

# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The Co-O mine tenement is operated under a Mineral Production Sharing Agreement ("MPSA") MPSA No. 262-2008-XIII, which covers 2,538.8 hectares.</li> <li>Aside from the prescribed gross royalties payable to the Philippine government (2%) and the Indigenous People (1%), no other royalties are payable on production from any mining activities within the MPSA.</li> </ul>
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	The Co-O mine was originally developed in 1989 by Banahaw Mining and Development Corporation ("BMDC"), a wholly owned subsidiary of Musselbrook Energy and Mines Pty Ltd. The operation closed in 1991 and was placed on 'care and maintenance' until its purchase by PMC in 2000. PMC recommissioned the Co-O mine and began small-scale mining operations.  Medusa Mining Ltd ("MML") listed on the ASX in December 2003, and in December 2006, completed the acquisition of all of PMC's interests in the Co-O mine and other assets including the mill and numerous tenements and joint ventures. MML, through PMC, has since been actively exploring the Co-O tenements.
Geology	Deposit type, geological setting and style mineralisation.	The Co-O deposit is an intermediate sulphidation, epithermal gold (+Ag ±Cu±Pb±Zn) vein system. The deposit is located in the Eastern Mindanao volcano-plutonic belt of the Philippines.
Drill hole Information	<ul> <li>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:</li> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not distract form the understanding of the report, the Competent erson should clearly explain why this is the case.</li> </ul>	<ul> <li>Easting, northing and RL of the drillhole collars are located in both the local mine grid, PRS92 and UTM WGS84 Zone 51 coordinates.</li> <li>Dip is the inclination of the hole from the horizontal. For example, a vertically down drilled hole from the surface is -90°. Azimuth is reported in magnetic degrees, as the direction toward which the hole is drilled. Magnetic North &lt;-1° west of True North.</li> <li>Down hole length is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of a mineralised intersection as measured along the drill trace.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade result, the procedure used for aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No top cutting of assays was done for the reporting of exploration results.</li> <li>Short lengths of high-grade (≥ 300 g/t Au) assays included within composited intercepts are also individually reported.</li> <li>Metal equivalent values are not reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Wherever possible, drilling is oriented approximately orthogonal to the known orientation of mineralization. However due to access limitations, drillholes are often orientated at varying angles up to 30° from orthogonal. Intersection length is measured down the hole and may not be the true width.</li> <li>The orientation of the veins is typically E-W, with variations from NE-SW to NW-SE with dips varying from flat-lying to steep to the NW-NE quadrant. Surface drillholes are generally orientated towards the S and vary in dip (-45° to -60°). Underground drill holes are orientated in various directions and dips, depending on rig access to intersect the various mineralised veins at different locations within the mining area.</li> <li>All drill results are downhole intervals due to the variable orientation of the mineralisation.</li> </ul>
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 limited to a plan view of drill hole collar locations and appropriate sectional views.	A longitudinal section is included in this announcement showing significant assay results locations (Figure 3). Tabulated significant intercepts are included in this announcement in Table III.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Significant intercepts have previously been reported for all drillholes that form the basis of Mineral Resource estimates. Less significant intercepts have not been reported since the drilling is carried within the mine environs.
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.	No other substantive exploration data has been acquired or considered meaningful and material to this announcement.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions of depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling area, provided this information is not commercially sensitive.</li> </ul>	Mineralisation is still open to the east, and at depth. Underground exploration and development drilling will continue to test for extensions along strike and at depth to the Co-O vein system.

# APPENDIX B: TENEMENT SCHEDULE (as at 30 September 2017)

	Name	Tenement ID Registered		Company's Interest <sup>1</sup> at		Royalty <sup>2</sup>	Area (hectares) at	
	Tenement 15		Holder	30 June 2017	30 Sep 2017	recyalty	30 Sep 2017	30 June 2016
	Co-O Mine	MPSA 262-2008-XIII	PMC	100%	100%	-	2,539	2,539
		MPSA 299-2009-XIII	PMC	100%	100%	-	2,200	2,200
_	Co-O	APSA 00012-XIII	BMMRC	100%	100%	-	340	340
		APSA 00088-XIII	Phsamed	100%	100%	-	4,742	4,742
		APSA 00098-XIII	Philcord	100%	100%	1% NPI	507	507
		APSA 00099-XIII	Philcord	100%	100%	1% NPI	592	592
	Saugon	EP 017-XIII	PMC	100%	100%	-	3,132	3,132
		EPA 00066-XIII	PMC	100%	100%	-	6,769	6,769
		EPA 00069-XIII <sup>3</sup>	Phsamed	100%	100%	-	2,519	2,519
	)	EPA 00087-XIII <sup>3</sup>	PMC	100%	100%	-	87	87
	Tambis	MPSA 344-2010-XIII	Philex	100%	100%	7% NSR	6,208	6,208
9	Apical	APSA 00028-XIII	Apmedoro	Earning 7	0% (JV)	-	1, 235	1,235
	Corplex	APSA 00054-XIII	Corplex	100%	100%	3% NSR	2,118	2,118
06		APSA 00056-XIII	Corplex	100%	100%		162	162
(U/)	)	APSA 00077-XIII	Corplex	100%	100%	4% GSR	810	810
		EPA 00186-XIII	Corplex	100%	100%	3% NSR	7,111	7,111
	Sinug-ang	EPA 00114-XIII	Salcedo / PMC	100%	100%	-	190	190

#### NOTES:

- 1. The tenement schedule highlighted have been relinquished.
- 2. Royalties payable to registered holders, aside from the prescribed royalties' payable to the Philippine government and the Indigenous People.
- 3. Awaiting for approval and confirmation by MGB of area reduction.

## **ABBREVIATIONS:**

#### **Tenement Types**

MPSA Granted Mineral Production Sharing Agreement APSA Application for Mineral Production Sharing Agreement EP Granted Exploration Permit EPA Application for Exploration Permit

### Registered Holders

PMC Philsaga Mining Corporation

BMMRC Base Metals Mineral & Resources Corporation Philex Philex Gold Philippines Incorporated
Phsamed Phsamed Mining Corporation Das-Agan Das-Agan Mining Corporation
Philcord Mindanao Philcord Mining Corporation Apmedoro APMEDORO Mining Corporation

Corplex Corplex Resources Incorporated Salcedo Neptali P. Salcedo

Royalty

NPI Net Profit Interest GSR Gross Smelter Royalty

NSR Net Smelter Royalty