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ANNOUNCEMENT

28 September 2016

ANNUAL MINERAL RESOURCES AND ORE RESERVES UPDATE STATEMENT

(ASX: MML)

Medusa Mining Limited ("Medusa" or the "Company"), through its Philippines affiliate, Philsaga Mining Corporation ("Philsaga"), advises that it has completed the annual review and update to its Mineral Resource and Ore Reserve estimates for the year ending 30 June 2016.

MINERAL RESOURCES

Co-O Mine

Total Indicated and Inferred Mineral Resources for the Co-O Mine are now estimated at 2.77 million tonnes at a grade of 10.8 g/t gold for a total 0.96 million ounces contained gold, compared to the 30 June 2015 estimate of 3.50 million tonnes at a grade of 10.2 g/t gold for a total 1.15 million ounces contained gold (Table I).

The changes in the Co-O Mine's Mineral Resources (a net reduction of 188,000 ounces) are primarily due to mining depletion of 115,500 ounces (108,578 ounces recovered), and the following adjustments:

- revision of recoverability of remnant stope areas of the mine due to restricted access and discontinuities;
- insufficient new drilling, as a result of delays to developing the new drilling chambers on Level 8, to define further resources to compensate for the mining depletion;
- addition of FY2016 underground drilling results and mining development resulting in revised vein interpretations,
- and the addition of a proportion of internal waste to interpreted wireframes, to reflect the discontinuous nature of some veins, resulting in some material dropping in grade to below cut-off.

Despite the mining depletion of 115,500 ounces in FY2016, the total ounces in the Indicated Resource category has been reduced by only 9%, albeit at a lower grade, and the amount of ounces in the Inferred Resource category has been reduced by 24%, but at an increased grade of 24%. This is primarily a result of conversion from Inferred to Indicated by infill drilling and development, rather than extensional resource drilling. The overall grade of the total combined Indicated Resource and Inferred Resource has increased by 6%.



Bananghilig Deposit

The Company recently completed an exhaustive two year review of the Bananghilig B1 ("Bananghilig) gold deposit. This review included detailed underground mapping, re-logging of some 70,000 metres of diamond core, database validation and QAQC studies. This has resulted in an updated mineral resource estimate in accordance with the guidelines of JORC 2012.

The total Indicated and Inferred Mineral Resources for the Bananghilig Gold Deposit, at a block cut-off grade of 0.75 g/t gold for Indicated (open-pit material), and 3.0 g/t gold for Inferred (underground material), has been estimated at 7.78 million tonnes at a grade of 1.73 g/t gold (435,00 ounces contained gold)

The reduction in Bananghilig's total Mineral Resources is primarily due to the application of the JORC 2012 criteria, where:

- the Indicated Resource component is restricted to mineralisation located within a Whittle optimised pit shell at a nominal gold price of US\$1,500 per ounce, and
- the Inferred Resource component is restricted to mineralisation located outside of the Whittle pit shell, to a maximum depth of about 100 metres below the pit shell walls and base. A block cut-off grade of 3.0 g/t gold has been applied for reporting, due to the Inferred component being probably only accessible from underground rather than open pit mining methods, to comply with JORC 2012 guidelines.

It should be noted that the application of the same Whittle pit shell to the 30 June 2013 JORC 2004 resource estimate model resulted in a similar result to that reported above. Therefore, the apparent reduction of the total Mineral Resources is attributed mainly to the mineralisation that is outside the Whittle pit shell, and cannot be classified as a Mineral Resource under JORC 2012. This unclassified mineralisation is still present but fails to meet the nominated cut-off grade of 3.0 g/t gold.

Saugon Deposit

The Saugon Inferred Mineral Resource (81,500 tonnes at a grade of 5.97 g/t gold for a total of 15,700 ounces contained gold) has remained unchanged from 2013. This information was prepared and first disclosed under JORC 2004. It has not been updated since to comply with the JORC 2012 on the basis that the information has not materially changed since it was last reported.

ORE RESERVES

Co-O Mine

A detailed review of all Co-O Mine and milling production data, including mining and metallurgical performances to determine appropriate physical mining parameters, cut-off grades and dilutions has been completed for this latest update to the Mineral Resource and Ore Reserve statement (Table I).

The Co-O Mine Probable Ore Reserves are now estimated at 1.67 million tonnes at a grade of 6.99 g/t gold for a total 376,000 ounces contained gold, compared to the 30 June 2015 estimate of 1.81 million tonnes at a grade of 7.33 g/t gold for a total 427,000 ounces contained gold.

A comparison between the current Ore Reserves and that stated for 30 June 2015 shows a net decrease in Probable Ore Reserves of 12% or 51,000 ounces contained gold.

The changes in the Co-O Mine Ore Reserves are primarily due to: mining depletion; modified vein interpretations through increased geological knowledge of the different vein sets obtained by further underground mapping and drilling; revision of mine-ability of remnant ore in some stopes, and a restriction of recoverable pillars mostly to the three major veins in the mine (i.e. GHV, Jereme & Central veins), with some high grade pillars from minor veins. The Co-O Ore Reserves are reported using a gold price of US\$1,250 per ounce.

Table I. G	roup Total Minera	I Resources and Or	e Reserves estimates a	at 30 June 2016
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Deposit	Category	Tonnes ⁴	Grade ⁴ (g/t gold)	Gold ⁴ (ounces)
MINERAL RESOURCES 1,2				
Co-O Resources ¹	Indicated	1,564,000	10.90	548,000
(JORC 2012)	Inferred	1,203,000	10.68	413,000
Total Co-O Resources	Indicated & Inferred	2,767,000	10.80	961,000
Bananghilig Resources ³	Indicated	7,580,000	1.66	406,000
(JORC 2012)	Inferred	200,000	4.42	29,000
Total Bananghilig Resources	Indicated & Inferred	7,780,000	1.73	435,000
Saugon Resources ³	Indicated	47,500	7.00	10,700
(JORC 2004)	Inferred	34,000	4.60	5,000
Total Saugon Resources	Indicated & Inferred	81,500	6.00	15,700
TOTAL	Indicated	9,191,500	3.26	964,700
TOTAL	Inferred	1,437,000	9.67	447,000
TOTAL RESOURCES	Indicated & Inferred	10,628,500	4.13	1,411,700
ORE RESERVES 2				
Co-O Reserves ²	Probable	1,670,000	6.99	376,000
(JORC 2012)				
TOTAL RESERVES	Probable	1,670,000	6.99	376,000

Notes:

Mineral Resources are inclusive of Ore Reserves.

Co-O and Bananghilig Mineral Resources and Co-O Ore Reserves estimated under guideline of JORC 2012. Saugon Mineral Resources were previously prepared and first disclosed under the JORC 2004, and have not been updated to comply with JORC

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 apparent discrepancies in totals 4

Mineral Resources:

<u>Co-O</u>:

a minimum lower block cut-off of 3.2 gram*metres/tonne accumulation, which incorporates minimum mining widths of 1.25m or 1.5m (depending on vein attitude) above cut-off grade, in its derivation;

various high cut gold grades, up to 300 g/t gold, have been applied to different veins, and

a gold price of US\$1,500 per ounce has been applied

Bananghilig:

- Indicted Resource: a lower block cut-off of 0.75 g/t gold has been applied to mineralisation within a US\$1,500/oz Whittle pit shell, reflective of open pit mining costs.
- Inferred Resource: a lower block cut-off of 3.0 g/t gold has been applied to mineralisation outside of the US\$1,500/oz Whittle pit shell, to a maximum depth of 100 metres below the pit shell walls and base, reflective of underground mining costs.
- a high cut of 40 g/t gold has been applied to all mineralisation.
- Allowance for artisanal mining depletion of 18,300 oz gold applied within the Whittle pit shell
- a gold price of US\$1,500 per ounce has been applied

- Saugon:
- a lower cut-off of 2.0 g/t gold has been applied a gold price of US\$1,500 per ounce has been applied

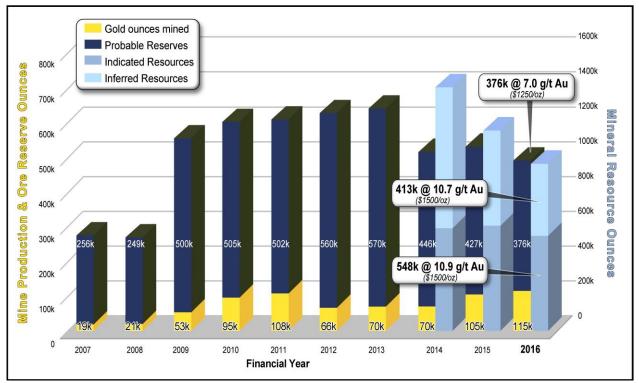
Ore Reserves:

Ore Reserves are a subset of Mineral Resources

<u>Co-O:</u>

- 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 than, the minimum mining width, an extra 0.25 metres dilution was added to the hanging wall, a further 10% dilution has been allowed for slabbing in mining of low angle stopes under draw, shape dilution of 7% of extra tonnage at 2 g/t gold applied, to reflect pinch and swell of veins, and faulting,

- an allocation for extra development 'on-vein' at a grade of 2 g/t gold has been applied.
- an allocation for extra development 'off-vein' at a grade of 1 g/t gold has been applied.
- 85% mining recovery for stopes <10 g/t gold,
- 90% mining recovery for stopes ≥10 g/t gold,
- 80% average recovery factor for pillars in empty stopes are included in reserve, for the three major veins, at the grade of their respective stopes, to reflect improved current pillar robbing mining practice, together with high grade pillars for minor veins.
- stopes containing <500 tonnes were removed to account for ore loss, a cut-off grade of 4.4 g/t gold has been applied to all stopes, a gold price of US\$1,250 per ounce has been applied.



Graph 1: Production, Ore Reserves and Mineral Resources status since 2007, demonstrating the Co-O Mine's history of increasing resources and replacing mine depletion.

Notes:

FY2007 to FY2013 - Ore Reserve ounces are classified under JORC 2004 guidelines;

FY2014 to FY2016 - Mineral Resource and Ore Reserve ounces are classified under JORC 2012 guidelines; and

FY2016 reserves estimated using gold price of \$1,250 per ounce (FY2015 reserves at \$1,150 per ounce)

Boyd Timler, Chief Executive Officer of Medusa, commented:

The Co-O resources and reserves for 30 June 2016 show a reduction from the previous year as displayed on Graph 1, and detailed further in Table II. The drop in the reserves and resources is a reflection of mining depletion (mined ounces in FY15-16 period) and the amount of resource definition drilling that was completed in this period, which is purely a timing issue as to when the definition drilling could commence from the Level 8 drilling stations.

The Co-O FY15-16 mine plan included a major exploration development drive on Level 8 to establish a number of critically located drilling stations to efficiently complete the resource definition drilling below Level 8. The drilling will explore the down dip potential of the open-ended Co-O ore body. Drilling from Level 8 is more efficient and cost effective than continuing with longer drill holes from surface. Figure 2, below, depicts this development work on the eastern side of Level 8 as drill stations; L8-64E, L8-85E, L8-105E and L8-125E. Due to hoisting constraints and competing priorities with the L8 Production Shaft, the L8-64E station was completed in April 2016, not by December 2015 as planned. For the June 2016 quarter two diamond drills were put into this drill station, but could not meet the originally planned meterage before the 30 June 2016 cut-off date. Drill station L8-85E was completed in September 2016, thus allowing for the resource drilling in FY16-17 period. Based on the amount of drilling and the quality of results anticipated, an interim resource calculation will be considered if a material improvement in resources is estimated before the next full-year recalculation.

The Bananghilig deposit shows a significant reduction of approximately 62% contained ounces based on the re-estimation to JORC 2012 requirements, applying a constraining Whittle pit shell and application of a 3 g/t cutoff grade for material beneath the pit shell. At this time Medusa Mining will re-evaluate the status of this project.

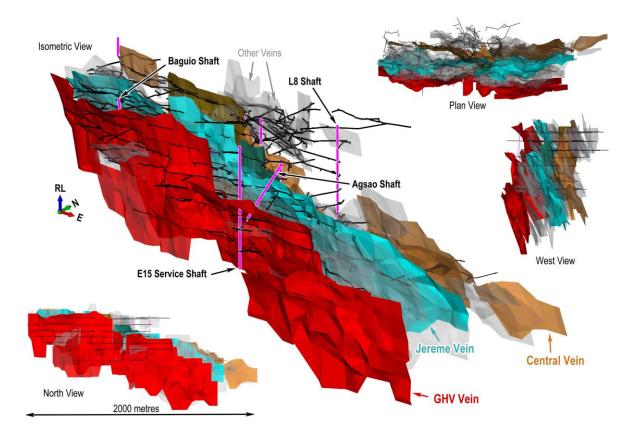


Figure 1: Perspective view of the Co-O Mine's 2016 resource model, major veins and underground development

Mineral Resource and Ore Reserve Assumptions

Mineral Resources are reported inclusive of Ore Reserves, and includes all exploration and resource definition drilling information and mining production data up to 30 June 2016, and has been depleted for mining to 30 June 2016. Other adjustments have been made to interpretations and modelling, to reflect ongoing mining information received up to 31 August 2016, if considered significant.

Gold price assumptions used to estimate Mineral Resources and Ore Reserves are:

- Mineral Resources: US\$1,500 per ounce gold
- Ore Reserves: US\$1,250 per ounce gold

JORC 2012 Requirements

This annual statement of Mineral Resources and Ore Reserves has been prepared in accordance with the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012) for the Co-O Mine and Bananghilig deposit only.

The Mineral Resources for the Saugon deposit was first prepared and disclosed under the 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2004) and has not been updated to JORC 2012 on the basis that the information has not materially changed since it was last reported.

The Company's Mineral Resources and Ore Reserves summaries are tabulated in Table I.

Material Information for the individual projects, including a Material Information Summary pursuant to ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria in accordance with JORC 2012 requirements, is included below and in Appendix A to this announcement.

DISCUSSION

CO-O MINERAL RESOURCES

Figure 1 is a perspective view of the Co-O resource model showing the major veins (GHV, Jereme and Central Veins) and associated sub-parallel and link veins, and development as at 30 June 2016.

Underground Drilling

In FY2016, the focus of underground drilling and development was primarily to upgrade resources, which had previously been classified as Inferred, into the Indicated category. This drilling was carried out from Level 5 and Level 8 drilling chambers. As a result, the current Indicated Resource is only reduced by 51,000 ounces compared to the FY2015 Indicated Resource, despite the fact that 115,500 ounces of gold had been depleted by mining during FY2016.

The planned development of drilling chambers (L8-64E, L8-85E and L8-105E) to the east, on Level 8, was delayed as a result of mine infrastructure and production priorities, and as a consequence, there was limited drilling of the eastern and down plunge extensions to the deposit. Consequently, there has not been an overall increase in the total mineral resources.

Current development is focussing on establishing the planned drill chambers on Level 8, targeting additional strike extensions to the east and down plunge extensions of the current resource base down to Level 12 and then Level 16 (Figure 2).

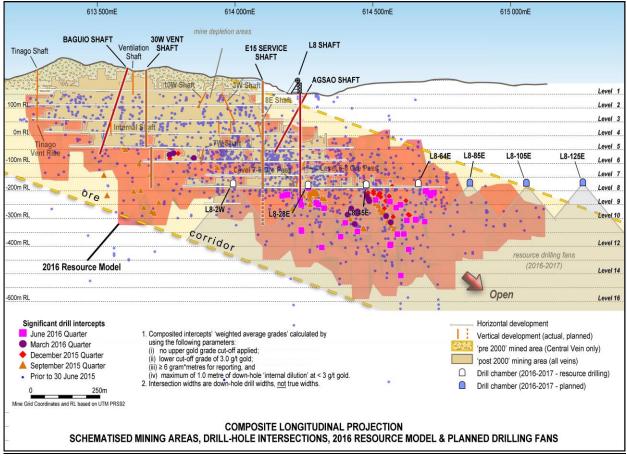


Figure 2: Co-O Mine Longitudinal Projection showing composited mining depletion, vertical development, significant drill intercept locations (as previously reported), and planned drilling chamber positions on Level 8.

Mineral Resource Estimation Methodology

The FY2016 Resource estimate was based on the geological interpretations carried out by Philsaga's geological staff under the direction of Mr Gary Powell, Manager Geology and Resources. The resource estimates were carried out by Carras Mining Pty Ltd ("Carras"), using the same 2015 methodologies developed jointly by Philsaga and Carras.

The estimation method was identical to the procedure used for the FY2015 resource estimation and the differences between the FY2015 and the FY2016 resources are attributed mainly to additional information from drilling, grade control, mine depletion, and an increase in the geological understanding of the Co-O veins system, including the use of vein relationships and textures to better define mineralisation continuity.

Resource Vein Modelling

A 3D wireframe model of the vein system and the mine depletions were based on all available information as at 30 June 2016 (Figure 1). A bulk density value of 2.62 was assigned to mineralisation and 2.4 assigned to waste material, for the purposes of mineral resource and ore reserve estimations.

Carras has applied a 2D longitudinal modelling approach (as used in all previous estimates) based on an accumulation variable incorporating mineralised vein horizontal width and intercept grade. Each sample within a mineralised vein was assigned a unique code. This coding was used to control compositing. Mineralised vein grades were composited across the entire coded interval resulting in a single intercept composite.

Block estimates were based on interpolation into 25mE x 25mRL cells. Block discretisation points, required for block kriging were set to 5 x 5 points in the longitudinal plane.

Variography was used to analyse the spatial continuity of the horizontal width and accumulation variables within the mineralised veins and to determine appropriate estimation inputs to the interpolation process. The accumulation variables were interpolated into blocks using Ordinary Kriging. Various high-grade gold limits (high grade top cuts) were applied to individual veins prior to the calculation of the accumulation variable. A further top cut was applied to the accumulation variable during modelling.

Mining depletions as of 30 June 2016 were stamped into the 3D block model using the 2D string outlines digitised from the Co-O Mine long sections, as provided by Philsaga's survey department and verified by mine engineering and mine geology departments.

Mineral Resources Classification

The Co-O Mineral Resources have been estimated and reported in accordance with the guidelines of the JORC 2012.

The criteria used for resource classification (unchanged from FY2015 resource estimates) include:

- geological continuity and vein volume;
- data quality;
- data spacing and mining information;
- modelling technique;
- · estimation properties including search strategy, number of informing composites, and
- vein textures and the behaviour of veins in upper levels, together with the plunge projection of 'ore shoots' have been used to classify a small amount (~3%) of the resource on some intermediate levels.

In addition to the above, the following economic parameters were considered when assessing the requirement for reasonable prospects for economic extraction:

- gold price of US\$1,500 per ounce, and
- minimum diluted grade x horizontal width (accumulation) of 3.2 gram•metres/tonne, which incorporates a
 minimum mining width above cut-off grade.

The Indicated Resource boundary was drawn to encompass those blocks with higher estimation qualities, typically within areas defined by drill hole data closer than 50 metres x 50 metres and usually approaching 25 metres x 25 metres and/or with the inclusion of underground mine development where geological and volume continuity is well established.

Inferred Resource areas reflect identified veins where there is no mining information and with limited drill hole data.

There were no Measured Resources defined.

The final reporting of the mineral resource is undiluted above a 3.2 gram metres/tonne block cut-off, which incorporates a minimum mining width above cut-off grade.

Variography, search criteria and high grade cutting methodologies were as per those used for FY2015.

Comparison with Previous Resource Statement

The changes in the Co-O Mine's Mineral Resources (net reduction of 188,000 ounces) are primarily due to mining depletion of 115,500 ounces (108,578 ounces recovered), and the following adjustments:

- revision of recoverability of some remnant stope areas of the mine due to restricted access and discontinuities;
- insufficient new drilling, as a result of delays to developing the new drilling chambers on Level 8, to define • further resources to compensate for the mining depletion;
- addition of FY2016 underground drilling results and mining development resulting in revised vein • interpretations,
- and the addition of a proportion of internal waste to interpreted wireframes, to reflect the discontinuous nature of some veins, resulting in some material dropping in grade to below cut-off.

Despite the mining depletion of 115,500 ounces in FY2016, the total ounces in the Indicated Resource category has only been reduced by 9%, albeit at a lower grade, and the amount of ounces in the Inferred Resource category has been reduced by 24%, but at an increased grade of 24%. This is primarily a result of conversion from Inferred to Indicated by infill drilling and development, rather than extensional resource drilling. The overall grade of the total combined Indicated Resource and Inferred Resource has increased slightly by 6%.

Traditionally the Co-O Mine has mined material from outside of the Indicated Resource. This material comes from the Inferred Resource category, and from unclassified mineralised veins exposed through development, at a proportion of up to 25% of ore supply to the mill. No attempt has been made in the estimation of Indicated Resource or Ore Reserve to make an allowance for this activity.

Mineral Resource	30 June 2015		30	30 June 2016		Variance			
Category ¹	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)
Indicated ²	1,546,000	12.20	604,000	1,564,000	10.90	548,000	+1.2%	-10.7%	-9.3%
Inferred ²	1,958,000	8.60	545,000	1,203,000	10.68	413,000	-38.6%	+24.2%	-24.2%
Total	3,504,000	10.2	1,149,000	2,767,000	10.80	961,000	-20.0%	+5.9%	-16.4%

Table II:	Comparison summary of total undiluted Co-O Mineral Resource estimates for 30 June 2015 and 2016
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Notes: ¹ Mineral Resources are reported inclusive of Ore Reserves; ² Resources are reported to Level 14 (-500m RL).

Table III: Comparison summary of Co-O Mine's Ore Reserve estimate for 30 June 2015 and 2016

Ore Reserve	30 June 2015		ne 2015 30 June 2016		Variance				
Category	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)
Probable ¹	1,811,000	7.33	427,000	1,670,000	6.99	376,000	-7.8%	-4.6%	-11.9%
Total	1,811,000	7.33	427,000	1,670,000	6.99	376,000	-7.8%	-4.6%	-11.9%

¹ Ore Reserves are reported to Level 12 (-400m RL). Notes:

Co-O ORE RESERVES

Carras Mining Pty Ltd ("Carras") of Perth, Western Australia, was contracted to undertake the Co-O Mine Ore Reserves estimate for FY2016. Carras was assisted by Philsaga's long-term planning engineers and senior underground mine geologists.

The Ore Reserves estimate for the Co-O Mine comprises a Probable Ore Reserve of 1.67 million tonnes at an average grade of 7.0 g/t gold for a total of 376,000 ounces contained gold (Table III)

The reported Ore Reserves is based on the Mineral Resources model interpreted by Philsaga's geological department under the supervision of Mr Gary Powell, Manager Geology & Resources. This model was updated in parts to reflect more current observations made in the mine, where they are relevant to the Ore Reserve study. A Bulk Density value of 2.62 was used for mineral resource estimations and 2.4 for the waste material.

Cut-off Grades

Cut-off grades used for the Ore Reserve Estimate were derived after making cost allowances for mining and hoisting, surface haulage, milling, administration, royalties, development, and an additional development factor for mining outside of Reserves, and a cost for underground drilling.

The following gold price and cut-off grades were applied:

- Gold price of US\$1,250 per ounce gold;
- 2.0 g/t gold for development 'on-vein';
- 1.0 g/t gold for development 'off-vein'; and
- 4.4 g/t gold for all stopes.

For upper levels, where haulage is minimal and major development has already been completed, slightly lower cut-off grades were used, consistent with the lower mining and haulage costs. Mining of lower grade material on upper levels (1, 2 and 3) is to be continued as a mining policy, so that these levels may be rapidly depleted and closed down. This will assist in reducing the costs associated with the mine services required for these levels. The costs used to arrive at block cut-off grades are based on actual validated mine costs for FY2016, plus a 5% increase to allow for slippage.

Mining Factors & Assumptions

The Resource was converted to Reserve, utilising Co-O operations mine design as a basis, following the application of minimum mining widths ("MMW"), dilution and block cut-off grades to panels of size 30m x 50m high, based on the Carras resource block model. Costs were then applied to determine those panels within the Indicated category, which are economic. If economic, they were included in the Probable Reserve. A small component (<5%) of lower grade Inferred material was included to reflect actual mining practice.

Mining at Co-O utilises both Shrink and Slot stope mining. These methods have been used at the mine since 1989 and are well understood.

The MMW and mining dilution factors used are:

- MMW of 1.25 metres is applied to those panels with a dip ≥ 50 degrees;
- MMW of 1.50 metres is applied to those panels with a dip < 50 degrees;
- where the panel width was equal to, or greater than the MMW, an additional 0.25 metres dilution was then added to the Hanging Wall;
- an additional dilution of 10% was allowed for the mining of the low angle stopes under draw;
- shape dilution of 7% of extra tonnage at 2 g/t gold applied, to reflect pinch and swell of veins, and faulting;
- an allocation applied for extra development 'on-vein' at a grade of 2 g/t gold;
- an allocation applied for extra development 'off-vein' at a grade of 1 g/t gold;
- for stopes < 10 g/t gold an 85% mining recovery was used;
- for stopes \geq 10 g/t gold a 90% mining recovery was used;
- 80% (average) recovery factor for pillars in empty stopes are included in reserve, for the three major veins (GHV, Jereme and Central Veins), at the grade of their respective stopes, to reflect improved current selective mining practice, together with high grade pillars for minor veins; and
- stopes containing less than 500 tonnes, were removed to account for ore loss.

Inferred Resources and low grade Indicated Resources (<5%), are only utilised in the Ore Reserve estimation when those panels need to be developed in order to access higher grade Indicated Resources (which must be able to carry all costs). This includes a small element of development beyond the Indicated Resource as an exploration component.

Underground level development is continuous with all other required infrastructure either in place, under construction, or planned. The E15 Service Shaft is currently being developed for hoisting men and materials from Level 10 to surface. It is scheduled for completion by end of June 2017 in which case underground hoisting capacity should increase by 20%. The upgrading of the ventilation and de-watering systems are ongoing and are anticipated to be completed by January 2017 at the latest. Winzing will enable access to Levels 9 to 12 and it is anticipated that further reserves will be added as a result of planned drilling, which commenced 01 July 2016. It is anticipated that these improvements should reduce the All-In-Sustaining-Costs ("AISC") to approximately US\$800 per ounce once E15 Shaft is complete.

There are no Proven Ore Reserves defined.

A metallurgical recovery of 94% has been used for cut-off grade determination, based on current milling recovery.

Comparison with Previous Reserve Statement

A comparison between the current Ore Reserves and that stated at 30 June 2015 shows a decrease in Probable Reserve ounces of 11.9% or 51,000 ounces (Table III). The reasons for the difference are explained in the previous section on Co-O Mineral Resources.

Traditionally the Co-O Mine has mined material from outside of the Indicated Resource. This material comes from the Inferred Resource category, and from unclassified mineralised veins exposed through development, at a proportion of up to 25% of ore supply to the mill. No attempt has been made in the estimation of Indicated Resource or Ore Reserve to make an allowance for this activity.

BANANGHILIG GOLD DEPOSIT

Mineral Resources

On 8 August 2013, a total combined Indicated and Inferred Resources of 24.52 million tonnes was reported containing 1,136,000 ounces at a grade of 1.44 g/t gold, including an Indicated Resource of 766,000 ounces at 1.48 g/t gold, using a 0.8 g/t gold lower cut-off applied to the resource estimate. This information was prepared and first disclosed under the JORC 2004.

The Company has recently completed an exhaustive two year review of the Bananghilig deposit. This included, but was not limited to, detailed underground mapping, re-logging of some 70,000 metres of diamond core, database validation and QAQC studies. This has resulted in an updated mineral resource estimate in accordance with the guidelines of JORC 2012.

The total Indicated and Inferred Mineral Resources for the Bananghilig Gold Deposit has been estimated at 7.78 million tonnes at a grade of 1.73 g/t gold for a total 435,000 ounces contained gold, using a lower cut-off grade of 0.75 gpt gold (Indicated) within a Whittle pit shell, and 3.0 gpt gold (Inferred) outside of the pit shell.

Mineral Resource Estimation Methodology

Following a two year review of the Bananghilig mineralisation, it was determined that the most appropriate method to be used is Indicator Kriging. The Philsaga geology department, under the direction of Mr Gary Powell (Manager Geology and Resources) and in conjunction with Mr Ciceron (Jun) Angeles (Non-executive Director), produced a comprehensive set of sections and level plans, which were used for the purposes of Indicator Kriging. This interpretation resulted in the definition of 18 domains with varying orientations to reflect the result of underground mapping and various other geological observations.

Resource Vein Modelling

A comprehensive program of underground mapping of the artisanal workings was completed in 2016. This work has enabled the breakdown of the deposit into 6 major domains within which there are 12 structural domains (Figure 3).

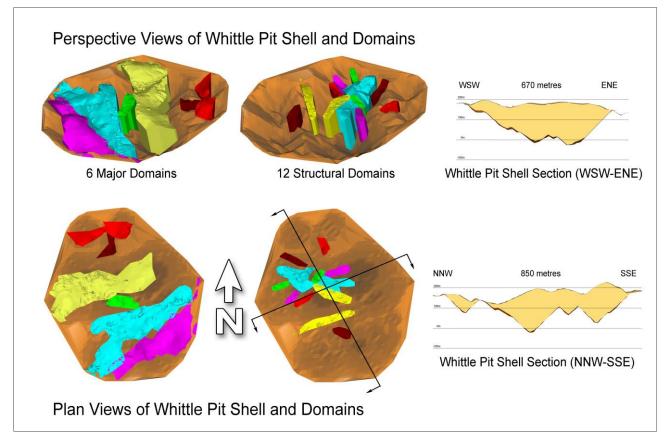


Figure 3: Bananghilig Resource model domains and Whittle Pit Shell in Plan and Perspective Views, and Orthogonal Sections through the deepest parts of the pit shell.

The orientation of the 6 major domains is predominantly in a NE-SW orientation with steep dips to the NW. The 12 structural domains within the 6 major domains have varying orientations and dips. Drill hole orientation (azimuth 130°, dip -60°) is considered to be the most appropriate orientation to intersect the mineralisation and associated structures

Gold estimation of material was carried out using Indicator Kriging within the 6 major domains and also within the 12 structural domains.

The following procedure was used to model the Bananghilig deposit:

- a wireframe model of the 18 domains was produced;
- a high grade cut of 40 g/t gold was used;
- bulk densities were based on approximately 4,400 drill core measurements;
- 2.9 metre down-hole composites were produced, which are deemed to be the equivalent of a 2.5 metre vertical bench;
- the data were declustered (GSLIB methodology);
- variography was carried out within each domain;
- the variogram parameters were used to determine the domain edges and to produce expanded (soft boundary) sets of data;
- indicator variography was carried out within each expanded set. 13 indicator thresholds were used;
- variograms were fitted and indicator distributions were produced using Surpac;
- post-processing of the indicator distributions was carried out as defined in GSLIB;
- change of support was implemented using the log-normal short cut procedure with a triangular tail;

- the data in each distribution were smoothed to prevent small amounts of high grade in the tails becoming significant at the higher cut-off grades;
- a 3-dimentional block model of panel size 20 metres x 20 metres x 5 metres was used with an assumed SMU size of 5 metres x 5 metres x 5 metres;
- an allowance was made for artisanal mining depletion of 18,300 ounces of gold, using separate independent methods as checks;
- a Whittle pit shell was produced using a gold price of US\$1,500 per ounce;
- the Indicated material was constrained by the Whittle pit shell using a cut-off grade of 0.75 g/t gold for SMUs within large panels; and
- the Inferred material was restricted to mineralisation located outside of the Whittle pit shell, to a maximum depth of about 100 metres below the pit shell walls and base. A block (SMU) cut-off grade of 3.0 g/t gold has been applied for reporting. This is due to the Inferred component being probably only accessible from underground rather than open pit mining methods, as per JORC 2012 guidelines.

Over a two year period, Mr Powell and Dr Carras undertook numerous and frequent site visits to the project, and worked with Philsaga exploration geologists to prepare the data and geological interpretations suitable for use in mineral resource estimation. The detailed modelling was carried out by Carras under Mr G. Powell and Dr S. Carras.

A second method of estimation was carried out by Carras, using the technique of Uniform Conditioning, which was essentially the method used by Cube Consulting Ltd ("Cube") for the JORC 2004 resource estimate of 30 June 2013. The Cube FY2013 results produced by Uniform Conditioning, when constrained within the same Whittle pit shell used by Carras, produced almost an equivalent result for the Indicated material being reported by Carras under JORC 2012.

The major difference from the Cube results is in the Inferred category where Carras have used a much higher cut-off grade (3.0 g/t gold).

Mineral Resources Estimation

The Bananghilig Mineral Resource has been estimated and reported in accordance with the guidelines of JORC 2012.

The criteria used for resource classification include:

- drill density (approximately 30 metres x 30 metres grid spacing within the Whittle Pit shell);
- data quality; and
- small-scale underground artisanal mining information obtained by Philsaga exploration personnel.

The Indicated Resource component is restricted to a Whittle pit shell at a nominal gold price of US\$1,500 per ounce using a block cut-off grade of 0.75 g/t gold, and the Inferred Category is restricted to mineralisation located outside of the Whittle pit shell, to a maximum depth of about 100 metres below the pit shell walls and base. A block cut-off grade of 3.0 g/t gold has been applied for reporting of the Inferred category, due to the Inferred component being probably only accessible from underground rather than open pit mining methods, as required by JORC 2012.

Comparison with Previous Resource Statement

The reduction in the Bananghilig total Mineral Resources (Table IV) is primarily due to the application of the JORC 2012 criteria, where:

- the Indicated Resource category is restricted to a Whittle pit shell at a nominal gold price of US\$1,500 per ounce, and
- the Inferred Resource category has been restricted to mineralisation located outside of the Whittle pit shell, to a maximum depth of about 100 metres below the pit shell walls and base. A block cut-off grade of 3.0 g/t gold has been applied for reporting. This is due to the Inferred component being accessed by underground rather than open pit methods, as per JORC 2012 guidelines.

It should be noted that the application of the same Whittle pit shell to the previous JORC 2004 resource estimate resulted in a similar result. Therefore, the apparent reduction of the total Mineral Resources is attributed mainly to the amount of mineralisation that cannot be classified under JORC 2012. The unclassified mineralisation is still present but cannot be reported under JORC 2012.

Mineral Resource	30	30 June 2015		30	30 June 2016			Variance		
Category	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)	
Indicated	16,060,000	1.48	766,000	7,580,000	1.66	406,000	-52.8%	+12.2%	-47.0%	
Inferred	8,460,000	1.36	370,000	200,000	4.42	29,000	-97.6%	-225.0%	-92.2%	
Total	24,520,000	1.44	1,136,000	7,780,000	1.73	435,000	-68.3%	+20.1%	-61.7%	

Table IV: Comparison summary of total undiluted Bananghilig Mineral Resource estimates at 30 June 2015 & 2016

SAUGON GOLD DEPOSIT

Mineral Resources

Cube Consulting Pty Ltd completed a resource estimate for the FHV (refer March 2013 Quarterly Report). A lower cut-off of 2 g/t gold was used for reporting, resulting in an Indicated Resource of 47,000 tonnes at 6.99 g/t gold containing 10,700 ounces and an Inferred Resource of 34,000 tonnes at 4.55 g/t gold containing 5,000 ounces. This information was prepared and first disclosed under the JORC 2004. It has not been updated since to comply with the JORC 2012 on the basis that the information has not materially changed since it was last reported.

MINERAL RESOURCES AND ORE RESERVES GOVERNANCE STATEMENT

In accordance with ASX Listing Rule 5.21.5, governance of Medusa's Mineral Resources and Ore Reserves development and management activities is a key responsibility of the Executive Management of the Company.

Independent geological and mine engineering consultants to Medusa oversee reviews and technical evaluations of the estimates and evaluate these with reference to actual physicals, costs and performance measures. The evaluation process also draws upon internal skill sets in operational and project management, ore processing and commercial/financial areas of the business.

Mr Gary Powell (in consultation with nominated industry consultants) is responsible for monitoring the planning, prioritisation and progress of exploratory and resource definition drilling programs across the Company and the estimation and reporting of resources and reserves. These definition activities are conducted within a framework of quality assurance and quality control protocols covering aspects including drill hole siting, sample collection, sample preparation and analysis as well as sample and data security.

A four level compliance process guides the control and assurance activities, viz:

- provision of internal policies, standards, procedures and guidelines.
- Mineral resources and Ore Reserves reporting based on well-founded geological and mining assumptions and compliance with external standards such as the Australasian Joint Ore Reserves Committee ("JORC") Codes.
- external review of process conformance and compliance.
- internal assessment of compliance and data veracity.

The Executive Management aims to promote the maximum conversion of identified mineralisation into JORC 2012 compliant Mineral Resources and Ore Reserves.

Medusa reports its Mineral Resources and Ore Reserves on an annual basis, in accordance with ASX Listing Rule 5.21 and clause 14 of Appendix 5A (the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, or the "JORC code", 2004 Edition and the 2012 Edition). Mineral Resources are quoted inclusive of Ore Reserves.

Competent Persons named by Medusa are members of the Australasian Institute of Mining and Metallurgy and/or the Australian Institute of Geoscientists, and qualify as Competent Persons as defined in the JORC 2012.

For further information please contact:

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JORC COMPLIANCE - CONSENT OF COMPETENT PERSONS

Medusa Mining Limited

Information in this report relating to **Exploration Results** and all geological work on **Co-O Mineral Resources** and **Bananghilig Mineral Resources** has been directed and reviewed by Mr Gary Powell, and is based on information compiled by Philsaga Mining Corporation's Co-O mine-site and exploration technical personnel. Mr Powell is a member of The Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Powell is Manager – 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 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

Information in this report relating to **Co-O Mineral Resources**, **Co-O Ore Reserves** and **Bananghilig Mineral Resources** is based on information compiled by Dr Spero Carras of Carras Mining Pty Ltd, who worked at the Co-O mine-site with Philsaga geologists and engineers. Philsaga's mine planning engineers also worked at Carras' Perth office. Dr Carras is a Fellow of the Australasian Institute of Mining & Metallurgy and has more than 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.

During 2016, Dr Carras was retained by Medusa Mining Ltd to assist in defining the requirements of Co-O underground infrastructure and its implementation.

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 Edition – Table 1 report

Section 1. Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	 Diamond (DD) core and stope face channel samples are the two main sample types. 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: Stope face channel samples are taken over stope widths of 1.5 to 3m, for both waste and mineralised material. 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 >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.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole 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). 	 For underground drilling, larger rigs (i.e. LM-55 and Diamec U6, U6DH), collar holes using HQ/HQ3 drill bits (core Ø 61mm/63mm) until ground conditions require casing off, then reduce to NQ/NQ3 drill bits (core Ø 45mm/47mm). For the smaller portable rigs, drill holes are collared using TT46 drill bits (core Ø 35mm) or LTK60 drill bits (core Ø 44mm). For surface holes, drillholes are collared using PQ3 drill bits (core Ø 83mm) until competent bedrock. The holes are then completed using either HQ3 or NQ3 drill bits depending on ground conditions. Drill core orientation is measured using the Ezy-Mark™ front-end core orientation tool.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measure taken to maximize sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have 	 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. 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.

Criteria	JORC Code explanation	Commentary
	occurred due to preferential loss/gain of fine/coarse material.	 No known relationship has been observed to date between sample recovery and grade. Core recovery is high being >95%. No sampling bias has been observed.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 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.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or call core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 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. No non-core drill hole sampling has been carried out for the purposes of this report. Development and stope samples are taken as rock chips by channel sampling of the mining face according to geological boundaries. The sample preparation techniques are to industry standard. 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. 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. Core sample submission sizes vary between 2-5kg depending on core size, sampling interval, and recovery. The assay sample sizes are considered to be appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of 	 All drill core and stope face 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 < 5g/t, and FA30-GRAV for Au grades > 5g/t. Both sample preparation and analytical procedures are of industry standards applicable to gold deposits.

Criteria	JORC Code explanation	Commentary
	accuracy (ie lack of bias) and precision have been established.	 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 >25 to <35 grams, are re-assayed after adjustment of the flux. 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.
		 The QAQC assessment showed that the CRMs inserted for each batch of samples, generally had accuracy within the acceptable tolerance levels. Duplicate assays generally returned assays within ±20% MPRD for FY2016. Replicate assays of CRMs, showed good precision within < 10% at 95% confidence level, which is within acceptable limits for gold analysis. Intermittent analytical biases were shown but were well within the accepted tolerance limits.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	 Visual inspections to validate mineralisation with assay results has occurred on a regular basis. Independent and alternative company personnel on a regular basis verify significant mineralised intersections.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 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.
		• 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.
Location of data points	 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. Specification of the grid system used. 	• 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.
	 Quality and adequacy of topographic control. 	A local mine grid system is used which has been adapted from the Philippine Reference System of 1992 (PRS92).
		 Topographic and underground survey control is maintained using located SCS, which are located relative to the national network of

Criteria	JORC Code explanation	Commentary
		geodetic control points within 10km of the project area. The Company's SCS were audited by independent licensed surveyors (Land Surveys of Perth, Western Australia) in April 2015 and they found no gross errors with the survey data. Land Surveys have since provided independent services to assist mine survey to establish and maintain SCS to a high standard, as the mine deepens. Accuracy is considered to be appropriate for the purposes of mine control.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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 Whether sample compositing has been applied. 	 Prior to 2015, surface exploration drillholes were located initially on a 50m and 100m grid spacing, and for resource definition drilling the sectional spacing is at least 50m with 25m sectional spacing for underground holes. Since 2015, resource drilling is conducted wholly from underground with minimum intercept spacing for the major veins of 40m x 40m for Indicated and 80m x 80m for Inferred categories. Sufficient drilling and underground face sampling has been completed to support Mineral Resource and Ore Reserve estimation procedures. Sample compositing has not been applied to exploration data for the purposes of reporting.
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 assesses and reported if material. 	 Mineralisation is hosted within narrow, typically <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 north. Surface drillholes were 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. Due to the nature of this style of mineralisation
		• Due to the hattle 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 recognised and accounted for in the interpretation.
Sample security	The measures taken to ensure sample security.	• Drilling is supervised by Philsaga mine 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.	Up to Aug 2015, Dr Rudy Obial from R.C. Obial & Associates routinely undertook site visit reviews and provided consulting advice

Criteria	JORC Code explanation	Commentary
		for the onsite laboratory upgrades and QA/QC. These regular reviews formed part of the continual improvement for the site laboratory.
		• Since August 2015, the Philsaga laboratory was visited several times by Mr G Powell and Dr S Carras. As of 2016, the Company conducts its own QAQC using the Acquire database management software. This work is carried out on site by Philsaga GIS personnel trained and experienced in QAQC protocols.
		• 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.
		 Sampling techniques and database management is to industry standard.

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	 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. 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. 	 The Co-O mine is operated under Mineral Production Sharing Agreements ("MPSA") MPSAs 262-2008-XIII and 299-2009-XIII, which covers a total of 4,739 hectares. 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.
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.

Criteria	JORC Code explanation	Commentary
Drill hole Information	 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: Easting and northing of the drill hole collar Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar Dip and azimuth of the hole Down hole length and interception depth Hole length 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 Person should clearly explain why this is the case. 	 Detailed information in relation to the drill holes forming the basis of this Mineral Resource estimate is not included in this report on the basis that the data set is too large and the information has been previously publically reported. The information is not material in the context of this report and its exclusion does not detract from the understanding of this report. For the sake of completeness, the following background information is provided in relation to the drill holes. Easting, northing and RL of the drillhole collars are in both the local mine grid, PRS92 and UTM WGS84 Zone 51 coordinates. 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 <-1° west of True North. Down hole length is the distance from the surface to the end of the hole, as measured along the drill trace. Intersection width is the downhole distance of a mineralised intersection as measured along the drill trace.
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 No top cutting of assays is done for the reporting of exploration results. Short lengths of high-grade assays are included within composited intercepts. Metal equivalent values are not reported.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 The majority of drilling is oriented approximately orthogonal to the known orientation of mineralization. However, the intersection length is measured down the hole trace and may not be the true width. 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 north. 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. All drill results are downhole intervals due to the variable orientation of the mineralisation.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts 	A longitudinal section is included showing significant assay results locations (Figure 2).

Criteria	JORC Code explanation	Commentary
	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.	Tabulated intercepts are not included as they have been previously reported.
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 DD drillholes that form the basis of the Mineral Resource estimate. Less significant intercepts have not been reported since the drilling is carried out 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	 The nature and scale of planned further work (eg tests for lateral extensions of depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling area, provided this information is not commercially sensitive. 	 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.

Section 3. Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used 	 The data entry form has an underlying validation system in the form of lookup codes. Data transfer of drillhole records and all other related records are done electronically. The data is managed through a relational database management system (RDBMS) based on Access. The data repository has an underlying data model consisting of inter-related tables with defined data structure to ensure restrictive referential integrity. The database has defined validation codes aligned to its relationship to the tables with ordered referential keys to trap errors during data entry and data import. PMC GIS staff perform daily backups of the database. Only nominated staff are given access permission to do data maintenance. During 2016, the database was transferred, and is now stored and maintained in a large scale database format using a database tool called acQuire Geoscientific Information Management Suite (GIMS). The acQuire GIMS is widely used in the mining industry worldwide. All records necessary to produce graphical QAQC plots for reporting were extracted from acQuire database to ascertain integrity of data processing and accuracy of data analyses. All geological logs are collated on paper and reviewed by the end user before electronic data entry. All entered records are imported into the master database with error detection mechanisms in place. The records will not be copied to database until errors are corrected. Validation checks on the database were completed prior to exploratory data analysis for resource estimation. The drilling data was found to be well structured and no obvious material discrepancies were detected in the collar, survey, assay or geology data.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits undertaken indicate why this is the case. 	 Mr Powell, (Medusa's Manager – Geology and Resources), has been actively involved with the Co-O mine technical operations during the FY2016, with regular site visits usually for periods of up to 1-3 weeks at a time. Dr Carras of Carras Mining Pty Ltd ("Carras") has undertaken site visits consistently since 2010 with the last site visit completed in August 2016. Each site visit was approximately 7 to 14 days in duration focusing on the mineralisation interpretation with the site geologists, reviewing the recent drilling results and the underground mining and infrastructure activities.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. 	• The geological confidence is moderate to high in areas where drilling, mining and development are currently active. This is especially the case for data above Level 8. The geological confidence is moderate to low in the eastern- most and deeper areas (below Level 10) that are defined by relatively wide spaced drilling.

Criteria	JORC Code explanation	Commentary
	 The use of geology in guiding and controlling Mineral Resource estimation The factors affecting continuity both of grade and geology. 	 Mineralised wireframes were constructed using a combination of: drillhole logging; assay grade data; geological mapping, and face sampling from mine development. The final geological interpretation was supervised by Mr Powell in consultation with the PMC geological group and audited by Carras Mining Pty Ltd.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The overall Co-O project area comprises numerous anastomosing veins generally orientated east-west with steep and flat dipping inter-connected veins within a 0.5km x 2.0km area (Figures 1 and 2). Mineralisation extends from surface to approximately 850m below surface. The depth limit to mineralisation is not yet defined, with current limits being a function of geological plunge and lack of drilling.
Estimation and modeling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimate, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 A 2D modelling approach using Ordinary Kriging was used to estimate accumulation and horizontal width. The final gold grades were derived using back calculation involving accumulation and horizontal width. Intercept composites were used. Gold grades had top-cuts applied to various veins, based on their respective natural assay population breaks, typically between the 95th - 99th percentile. Further cutting was also applied to the accumulation. A top cut as high as 300 g/t Au was used for the very high grade GHV vein. Lower top cuts were used for other veins. Estimation was constrained within 3D interpretation wireframes. Estimates were based on a minimum number of composites being 3 and the maximum number of composites being 12. The search ellipse varied from 50 to 100m, with the average being 75m. GEOVIA Surpac™ mining software was used for the estimation. No by-product recoveries were considered. No deleterious elements are known. 2D block sizes were 25m along strike, 25m down dip. This block size was adopted to account for exploration drilling data typically spaced on 25m and 50m sections and stope face samples which were taken every 1.5 to 3m. A 5m by 5m discretisation was used. No assumptions of selective mining units were made, as the current underground mining method is based on vein geometry and shrink stoping. Only gold was modelled and no correlation between other elements was investigated. Mineralised domains acted as hard boundaries to control the mineral resource estimates. A soft boundary was applied as a halo around the presence of clustered stope face sample data. Visual comparisons were also made between the accumulation variable from the input composites and the estimated accumulation block values. A similar visual comparison was made for the input composite gold grade and the back-calculated block grade.

Criteria	JORC Code explanation	Commentary
		• The 2D block model data was then imported into a 3D block model, using cell sizes of 0.25mN x 3.125mE x 3.125mRL. A volumetric check was made on veins and checked against the 3D block model.
		 Block model validation was undertaken using the comparison of model data to intercept composite drillhole data.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture content. 	 Moisture was not considered in the density assignment and all tonnage estimates are based on dry tonnes.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	 A block cut-off grade of 3.2 gram*metres/tonne Au for mineral resource reporting was used.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 The Co-O project area is currently an active underground mine. Narrow vein mining techniques using hand held equipment allows mining to be achieved to a minimum width of 1.25m. No external mining dilution was applied to the mineral resource model.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 All ore associated with the mineral resource is currently treated in PMC's owned and operated Carbon-in-Leach (CIL) plant located approximately 6.7km NNW of the Co-O mine.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	 The Co-O project is an operating gold mine with all of the appropriate regulatory permits to allow underground mining, haulage and processing of ore material, and storage of tailings.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determines, the method used, whether 	 A program of over 1,000 specific gravity measurements was completed on vein samples from drill core and rock, prior to June 2010, with

Criteria	JORC Code explanation	Commentary
	 wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 an additional 61 density determinations undertaken during June 2012. Measurements were completed using weight in air/weight in water methodology on lengths of cut core. The June 2012 density measurements confirmed the use of 2.62 g/cm³ as being appropriate for all vein mineralisation, with all background material assigned a density of 2.45 g/cm³.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The criteria used for resource classification include: geological continuity and vein volume, vein texture, data quality and spacing, mining information on all Levels, grade extrapolation and modelling technique. In addition the following economic parameters were considered as a requirement for reasonable prospects for economic extraction: gold price of USD1,500, and grade x width of 3.2 gram*metres/tonne Au. As a result, there are areas within the interpreted mineralisation model, which do not satisfy these requirements and are therefore not included within the reported mineral resource. No Measured Resources have been estimated due to the short scale variability in volume and grade plus the moderate risks identified in the data quality, data spatial location and mined volume definition. The Co-O Mine is currently embarking on a program to capture all development data accurately and this should enable the reporting of a Measured component in the future. The Indicated Resource boundary was defined by blocks with higher estimation confidence, typically within areas defined by drillhole data closer than 50m x 50m and usually approaching 25m x 25m and/or coincident with the underground mine development where geological and volume continuity is well established. Areas of Inferred Resource reflect identified veins where there is no mining information with limited drillhole data. For Central Vein a component of extrapolation from higher up Levels was used. The Mineral Resource estimate appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 Block models were validated by visual and statistical comparison of drillhole assays, block grades and vein textures. A major geological study was carried out in 2015 and 2016, on drill core and block grades to validate these to the vein textures observed in drill core and underground face mapping. Over the past 3 years, the site geologists have developed a good understanding of epithermal vein textures and their relationships to gold grades.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy /confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate and the production data, where available. 	 The relative accuracy of the Mineral Resource estimation in the Co-O project area of PMC is reflected in the resource classification in accordance with the guidelines set out in the JORC Code 2012. The mineral resources constitute a global resource estimate. An accurate 'resource to mine and mill' reconciliation is difficult to quantify given the numerous working faces at any one time; mining outside of resources, and the mixing of stoping and development ore during mining and hoisting. However small local reconciliation studies, which have continued in FY2016 (where appropriate data are available), suggests a reasonable reconciliation exists between the resource and mine claimed grade with generally more tonnage at a lower grade for the same contained metal. This is reflective of extra development which is occurring both 'on-vein' and 'off-vein'. The current estimate makes allowances for this in the reported reserve where a component of off-vein development is now included. In particular, the GHV vein and its link veins, continue to consistently provide very high mined grades (>10 g/t Au), as shown in the reconciliation process.

Section 4. Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	 The reported Reserve is based on the Resource model interpretation produced by Philsaga Mining Corporation (June 2016) and modelled by Carras Mining Pty Ltd using the same methodology as that used by Philsaga in 2015. This model has also been updated and modified in parts to reflect current observations in the mine, where they are relevant to the Ore Reserve study. Mineral Resources are reported inclusive of Reserves.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 The Competent Person, Dr. Spero Carras, has been a continuous visitor to the Co-O mine-site for the past 6 years. He has worked in conjunction with the mine staff at site and has a very thorough knowledge of the mining practices. He was also been actively involved in the geological studies carried out during the last 3 years, evaluating the Co-O mine's vein textures and other characteristics associated with the various vein sets. He has worked continuously on evaluation and resource/reserve estimation of narrow vein, underground gold deposits and mines, for more than thirty years. In January 2016, Dr Carras was requested to advise on the infrastructure requirements to enable development of the mine to Level 12.

Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources 	• The Ore Reserve and mine design to extract the Reserve, were established for an operating mine that has been developing and stoping the Co-O vein system for more than ten years by means on narrow vein mining practices.
	to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 Following definition of a Mineral Resource with diamond core drilling intercepts below or adjacent to the existing workings and physical definition of the vein system, narrow vein mining practices require level development along the vein system with nominal 50m high vertical rises at 30m horizontal intervals to define the vein in three dimensions and the Reserve as stope panels. The mine plan applies physical dimensions to the stope panels that are technically viable, as they are derived from drill hole intercepts, actual exposure of the veins and proven stoping practice, appropriate dilution allowances that reflect actual conditions, and cut-off grades that reflect actual costs incurred for same mining practices. The mine plan has been developed to better than Pre-Feasibility Study level of work. Since this is an operating mine extracting extensions of an already defined mineralised vein system, there are no further material Modifying Factors required.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	 The cut-off grades used are 2.0g/t for development ore, 1g/t for development off vein and 4.4g/t for all stopes. For Levels 1, 2 and 3 where haulage is very minimal, slightly lower cut-off grades are used, consistent with the lower haulage costs. This practice is also being adopted to allow closure of these upper levels a soon as possible to optimise and focus mine services to lower levels. The costs used to arrive at cut-off grades are based on actual validated mine costs, as achieved to date. Cut-off grade estimates include mining, haulage
		and hoisting, surface haulage, milling, administration, royalty, development and an extra development factor for mining outside of Reserves as well as the cost of all underground drilling.
		 When development passes through lower grade stopes to reach higher grade stopes, the lower grade stopes are included in the Reserve estimate, providing the costs of development and stoping are covered by the grade of the higher grade stopes.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral	• The Resource was converted to Reserve by using detailed design provided by the Co-O min operations, as the basis.
	 Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. 	 Minimum mining widths (MMW), dilution and cut off grades applied to panels of size 30m x 50m high based on the block model. Costs were ther applied to determine those panels in the Indicated category, which were economic. If economic, they were included in the Probable Reserve. A small proportion of panels below cut off grade were included in the Reserve (<5%), to reflect practical mining. Mining at Co-O utilises both Shrink and Slot

Criteria JORC Code explanation	Commentary
 Criteria JORC Code explanation The assumptions made regarding geotechnical parameters (eq pit slopes, stope sizes, etc), grade control and preproduction drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	 stope mining. These methods have been used at the mine since 1989 and are well understood. At the lowermost levels, winzing on ore and narrow vein development is, and always has

Criteria	JORC Code explanation	Commentary
		it is anticipated that further Reserves will be added as a result of planned drilling, which commenced July 1, 2016. These improvements should reduce the All In Sustaining Cost (AISC) to approximately US\$800 per ounce once E15 is complete.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well- tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 Material is trucked to the Co-O mill, which is a conventional CIL plant with gravity circuit. It is a well-tested technology. The metallurgical recovery is placed at 94%, which is the current recovery being experienced There are no deleterious elements.
Environmen- tal	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 The Co-O mine is an operating narrow-vein underground gold mine. The Co-O processing plant is a conventional CIL plant. The Co-O mining and processing operations have been operating since 1989, with several upgrades to the mine and processing plant since then. All Philippine national and local government regulatory permits are valid and subsisting for the current operations. Where possible, waste rock is retained underground and used to backfill mined-out stopes, or when hauled to the surface, used for road-works, retaining walls, landfill, etc.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	 Co-O is an operating underground mine and processing plant and has the necessary infrastructure in place for its continued operation. The Ore Reserve estimate requires some additional infrastructure and allowances have been made for this when preparing the estimate
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. 	 The projected capital costs are based on actual costs, quotes and factored costs from engineering consultants and existing mining operations. The operating costs are based on actual data from FY2016 and the projected budget costs of FY2017. There are no deleterious elements. An exchange rate of 46 Philippine Pesos to US\$1.00 has been used. Transportation costs are fixed under contract and includes road maintenance.

Criteria	JORC Code explanation	Commentary
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Historical data has been used for treatment and refining charges. A royalty of 3% of revenue has been applied.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts. 	 A gold price of US\$1,250 has been used, consistent with the short-term price.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	All product sold at market prices.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 All costs are based on historical costs. An analysis was carried out in respect of decreased grade, decreased recovery, decreased gold price and increased costs and the results indicate that the project remains profitable at an acceptable NPV value. The Co-O Mine has a large amount of development in lower grade areas, and should the gold price increase, some low grade stopes can be brought into production. There has been no inclusion of this material into Reserves.
Social	 The status of agreements with key stakeholders and matters leading to social licence to operate. 	• There are agreements in place with landowners of lands on which some infrastructure are sited. There are community and compensation agreements in place with landowners at Co-O minesite and Co-O plant, including the indigenous people, for the purposes of current and future operations.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre- 	 None of the identified risk areas mentioned below are believed to have a material impact on the Co-O project and/or the estimation of the Ore Reserves. Naturally occurring risks in the Co-O region include seismic events, flooding, land-slides. Naturally occurring risks are not believed to be significant, and therefore not considered to be material. The Co-O operations have not been materially affected by naturally occurring events since its beginnings in 1989. The Co-O operations are currently compliant with all legal and regulatory requirements, and there is no reason to believe any further required government permits, licenses or statutory

Criteria	JORC Code explanation	Commentary
	Feasibility or Feasibility study. Highlight and discuss the materiality of any	approvals will not be granted.
	unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• Executive Order 79 is not considered to have a material effect on the Co-O operations since it is already operating under an approved Mineral Production Sharing Agreement with the Philippine national government.
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	 Ore Reserve categories are based on the Resource classification in the Resource model and have been updated with current mine knowledge. During FY2015 and FY2016, extensive geological studies were carried out, focussing on vein textures and other characteristics. Observations from underground development can now be directly correlated with drill-hole information. A weighting system has been developed to help in determining the level of confidence to be given to the drill-hole intersections and in particular recognising the very high-grade vein sets such as the GHV vein. The Reserve result reflects the Resource as produced by Philsaga's geological interpretation (reported in accordance with JORC 2012). However, it is the Competent Person's experience that these types of multiple narrow vein orebodies invariably result in more ore than is reported in the Reserve as a result of underground development uncovering veins which may either be from the Inferred category or undiscovered. Typically this results in more ounces than is stated by the Ore Reserve based on current drilling and development. It is not possible to allow for this in the Reserve estimate. Every effort has been made to account for current underground knowledge and mining practice, by the application of various factors used in the conversion process. No Proven Ore Reserve has been derived from Measured Resources.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• There have been no other external audits carried out on the Ore Reserve estimates.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions of 	 Vein gold orebodies represent the most difficult family of orebodies for which to state a relative local accuracy of Reserves. However, it is the Competent Person's opinion, that the ounces stated in the Reserve are achievable at the global level. Co-O mineralisation is a very large gold system and as such there is the potential for additional veins within the global estimate. Furthermore, veins which cross-cut the orebody, such as the Don Pedro vein, have been understated by the current drilling orientation and therefore can only be defined by development, hence the allocation of cost for over-development and extra-development in the mine. Due to a significant amount of mining occurring outside of Reserve, accurate reconciliation has only been possible for some local areas of the mine. However, the GHV vein has performed consistently with exceptional high-grade stopes (> 10 g/t broken ore), justifying the application of the very high cutting factors used.

Criteria	JORC Code explanation	Commentary
	 any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 Co-O is an operating mine and there are no perceived modifying factors that would have a material impact on the global Ore Reserve viability. Mine performance has been considered and factored into the Ore Reserve parameters used in this study.

APPENDIX B

Bananghilig Gold Deposit – JORC Code, 2012 Edition – Table 1 report

Section 1. Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (egg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (egg submarine nodules) may warrant disclosure of detailed information. 	 Diamond drill core samples obtained by wireline diamond drilling techniques using triple tube as per industry standard practice. Sample Intervals (minimum 20cm) determined by lithological boundaries or at one (1) metre down-hole intervals, whichever is least. No other types of samples were obtained for the purposes of this report. At the end of each core run, the drill core is aligned as best as possible and recovered length measured. Core blocks are annotated with hole number, depth, core run length, and core length recovered. Down-hole depths are validated against measured length of drill rods down-hole. Drill hole deviation measured using electronic single-shot survey tools such as the REFLEX EZ-Shot[®]. Diamond drilling carried out to industry standard to obtain drill core samples, from which the core is split in half along the core axis using a diamond saw. Half core samples are then taken at 1 metre intervals or at lithological boundary contacts (if >20cm), whichever is least, crushed from which a 1kg split is pulverised to obtain four (4) x 250 g pulp samples. One pulp sample is used to produce a 50 g charge for classical fire assay gold analysis. The remaining pulp samples are retained in secure storage for future reference. Since Dec 2011, for samples which assay >0.2 g/t Au, the pulps are resubmitted for silver and base metal analysis by mixed acid digest with ICP finish. Silver and base metal assays are not used for resource estimation work.
Drilling techniques	Drill type (air core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (air 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).	 Diamond Coring – Holes collared using PQ3 (core Ø 83mm) to competent bedrock (typically <50m), then predominantly HQ3 (core Ø 61mm) until ground conditions require casing off, then NQ3 (core Ø 47mm). All holes completed to target depths. Core orientation trial carried out during September 2013 quarter, with limited success, using the Ezy-Mark™ front-end core orientation tool. Prior to September 2013, no core orientation carried out due to the soft and very broken nature of the core.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 For each core run, total core length is measured, and then recovery calculated against drilled length. Recovery averaged 95%, which is considered acceptable by industry standards. Sample recovery is maximised by monitoring and adjusting drilling parameters. (e.g. mud mix, drill bit series, rotation) Core sample integrity maintained as best as practical using triple tube system. No known relationship has been observed to date between sample recovery and grade. Core recovery is high at >95%. No sampling bias has been observed to date.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Core samples have been logged geologically and geotechnically to a level of sufficient detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Lithology, mineralisation, alteration, oxidation, sulphide mineralogy, RQD, fracture density, core recovery are recorded by geologists, 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 mineralised zones. Since July 2010, all drill core is photographed. Drill core obtained prior to July 2010 have no photographic record. All drill core is logged.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Drill core is half sawn only for those intervals predetermined for sampling. Cutting is carried out using high-speed circular diamond saw blade on a cutting machine, with the core resting in a specifically designed cradle to ensure straight and accurate cutting. No non-core sampling carried out for the purposes of this report. The nature, quality and appropriateness of the sample preparation techniques are to industry standard practice. For all sample submissions to Intertek Philippines laboratory: Certified Reference Material samples (0.2–12 ppm Au) and Blank Material samples (<0.005ppm Au) are each inserted into every batch of drill core sample submissions at ratio of 1:18. Duplicates are not inserted, as it is deemed impractical for drill core. Core samples are obtained by cutting core along the core axis into two halves. Oriented core is cut using the 'bottom of hole' markings. Drill core are not resampled. Remaining half core is retained should resample be required in the future. Core sample sizes vary typically between 2-5kg depending on core size, sampling interval, and to a lesser extent recovery. Samples sizes are considered to be appropriate with respect to the nature and tenor of mineralisation.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (egg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All core samples obtained since July 2010 were submitted to Intertek Philippines, an independent ISO17025 accredited laboratory. Gold analysis is by classical fire assay technique using 50g charge and AAS finish. Since Dec 2011, for samples, which assay >0.2ppm Au, duplicate pulps are resubmitted for Ag, Cu, Pb, Zn analysis by mixed acid digest with ICP finish. All sample preparation and analysis techniques are appropriate for this style of mineralisation. The quality of sample preparation and analysis is of international standard. The Company used no geophysical or other analytical tools for the purposes of this report. Intertek Philippines is an independent commercial laboratory, which employs industry standard QA/QC procedures during sample preparation and analysis using internal standards, blanks and duplicates. Data from their QA/QC is made available and reviewed. Occasional batches of crushed core sample rejects and/or duplicate pulps are selected for re-submission for gold analysis. Independent and alternative company personnel on a regular basis verify significant intersections. All drilling is by diamond coring. Drill holes are not twinned. Logging of drill core and drilling statistics are hand written and encoded into 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 off-site. Digital data is imported into dedicated mining software programs and validated. Digital database is backed up on regular basis, with copies kept off site. There is no adjustment to assay data.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Suitably qualified surveyors and/or experienced personnel, using total station survey equipment locate all drill hole collars. Coordinates are located with respect to Survey Control Stations established within the project area. UTM PRS92 (Philippine Reference System of 1992). Topographic control is maintained using located Survey Control Stations (SCS), which are located relative to the national network of geodetic control points within 10km of the project area. The company's Survey Control Stations was audited by independent licensed surveyors in August 2011, and a second review conducted in the first half of 2016. Accuracy is appropriate for Mineral Resource estimation.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Exploration drill holes are located on 30 metre grid spacing, and spaced generally 30m apart on grid, within the Whittle pit shell, and the same or greater spacings outside of the Whittle pit shell Drill core sampling is carried out on maximum of one (1) metre down-hole intervals Sufficient drilling has been completed to establish the drill hole density required to attain the degree of geological and grade continuity appropriate for Mineral Resource estimation procedure(s) and classifications applied. Sample compositing has not been applied to the drill data for assay reporting purposes.
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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Mineralisation is hosted predominantly by an andesitic diatreme breccia complex with narrow hydrothermal breccia zones encompassed by more broad zones of hydrothermal 'crackle breccia' zones. The orientation of the higher-grade zones is predominantly in a NE-SW (040°-220°) orientation with dips varying from sub-vertical to moderate dips to the NW. Drill-hole orientation (azimuth 130°, dip -60°), although not optimal for all domains of the deposit, is considered to be the most appropriate orientation to intersect the mineralisation and associated structures. A comprehensive program of underground mapping of the artisanal workings was completed in 2016. This work has enabled the breakdown of the deposit into 6 major domains within which there are 12 structural domains, and to develop a relatively robust 3D model for the mineralization. The orientation of the drilling is not optimal for each domain, however it is considered that there is no systematic bias for the majority of the domains. Due to the nature of this style of deposit, there are rare instances where drilling has not intersected mineralisation or structures at an optimum angle, however this is not considered to be material.
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 then 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. 	 Audits have been conducted by independent consultants on sampling techniques, laboratory procedures, and database management on an intermittent basis. Alternative company personnel carry out regular reviews of sampling techniques. Results of the audits confirm that the laboratories and protocols are industry standard and results within acceptable tolerance limits. Sampling techniques and database management is of industry standard.

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	 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. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Bananghilig Gold Deposit is operated under a Mining Agreement with Philex Gold Philippines Inc. ("Philex") over Mineral Production Sharing Agreement ("MPSA") 344-2010-XIII, which covers 6,262 hectares. Aside from the prescribed royalties payable to the Philippine government and the Indigenous People ("IP"), a royalty of 7% NSR is payable to Philex on precious and base metal production from any mining activities within the MPSA. The tenement is a granted mining and production sharing agreement with the Philippine government. The tenement is a granted mining and production sharing agreement with the Philippines, will have no immediate impact on the Bananghilig Project as the Company can continue to explore, conduct feasibility studies and planning. New legislation on mining taxes and royalties is yet to be finalised for consideration by Congress.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 1973-77 Soriano Exploration, a division of Atlas Consolidated and Mining Development Corporation conducted first exploration. 38 diamond drill holes (4,871m). No hardcopy data is available. Digital data was obtained from Philex. No drill hole collars were able to be verified in the field. 1995-97 Philex carried out diamond drilling (79 drill holes, 12,173m) and RC drilling (227 drill holes, 12,629m). No hardcopy data is available. Digital data was obtained from Philex. No drill core or RC samples are available for verification purposes. The position of five (5) diamond drill hole collars were verified in the field, with a satisfactory degree of accuracy in position. No RC drill hole collars have been located in the field.
Geology	Deposit type, geological setting and style of mineralisation.	 Bananghilig is an andesitic diatreme breccia hosted, intermediate sulphidation epithermal gold (+Ag ±Cu±Pb±Zn) deposit. The deposit is located in the Eastern Mindanao Volcano-plutonic belt of the Philippines.
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Summaries of significant drill hole data, including location, orientation, and significant assays have been previously reported and are contained within each quarterly report, during the period of the 2010-2014 drilling campaigns. No drill hole information has been excluded from these previous reports, that would detract from the understanding of this report.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (egg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Exploration Results have not been included in this Annual Update. All historical exploration results (2010-2014) have been reported in Company quarterly reports to the ASX. Metal equivalent values were not reported.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (egg 'down hole length, true width not known'). 	 The orientation of the 6 major domains is predominantly in a NE-SW orientation with steep dips to the NW. The 12 structural domains within the 6 major domains have varying orientations and dips. Drill hole orientation (azimuth 130°, dip -60°) is considered to be the most appropriate orientation to intersect the mineralisation and associated structures. Intersection widths are down hole drill widths not true widths.
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 be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to previous quarterly reports for the period 2010 to 2014.
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.	Refer to previous quarterly reports for the period 2010 to 2014.
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.	 Geotechnical studies were completed on diamond drill core in 2014, to determine pit wall stability parameters. To date, approximately 4,400 bulk density determinations have been completed by Philsaga exploration personnel using the Paraffin wax - water immersion method, and some check determinations using direct measurement technique.
Further work	 The nature and scale of planned further work (egg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	There is no planned further work at the date of this report.

Section 3. Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	The data entry form has an underlying validation system in the form of lookup codes. Data transfer of drillhole records and all other related records are done electronically. The data is managed through a relational database management system (RDBMS) based on Access. The data repository has an underlying data model consisting of inter-related tables with defined data structure to ensure restrictive referential integrity. The database has defined validation codes aligned to its relationship to the tables with ordered referential keys to trap errors during data entry and data import. PMC GIS staff perform daily backups of the database. Only nominated staff are given access permission to do data maintenance.
		 During 2016, the database was transferred, and is now stored and maintained in a large scale database format using a database tool called acQuire Geoscientific Information Management Suite (GIMS). The acQuire GIMS is widely used in the mining industry worldwide. All records necessary to produce graphical QAQC plots for reporting were extracted from acQuire database to ascertain integrity of data processing and accuracy of data analyses.
		 A comprehensive database validation program was completed during 2016 on approximately 50% of the drill database. Original assay certificates were cross- referenced to the digital database. No significant errors were encountered.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• The Competent Persons Mr G. Powell and Dr. S. Carras have both been involved with Bananghilig since 2010. This includes numerous site visits of approximately 7 to 14 days in duration, focusing on the drilling programs, logging and mineralisation interpretations with the site geologists. Extensive time has also been spent with the Philsaga field crews whose major emphasis has been locating and mapping the artisanal underground workings.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 As a result of underground mapping carried out by Philsaga field crew, it was possible to define 6 major domains within which there are 12 structural domains (i.e. domains where the major vein mineralisation orientations could be determined) some of which are more indicative of a stockwork system with varying vein orientations. (See Figure 3) A program of detailed re-logging of drill core was carried out to identify the major zones of mineralisation based on the characteristics of the +/- quartz+/-carbonate+/-sulphide veinlets. Section and level plan interpretations were carried out to define the major zones of mineralisation. The structural information obtained by the underground field crews was merged with the section and level plans to form a 3D geological/structural domain model. Underground mapping has shown that while the
Dimensio		orientation of structures can be determined in a gross sense, grade behavior locally is very difficult to predict. This has resulted in a decision to use Indicator Kriging as the most appropriate method for grade interpolation.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below	The Mineral Resources are mostly contained within the Whittle pit shell with dimensions of 860 metres x 670 metres with the base of the pit shell at -25m RL

Criteria	JORC Code explanation	Commentary
	surface to the upper and lower limits of the Mineral Resource.	and the highest point of the surface topography elsewhere within the pit shell is 230m RL. The deepest point in the pit shell is about 200 metres below surface. (See Figure 3.)
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extrame grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Gold estimation of material was carried out using Indicator Kriging within 12 structural domains, which broadly mirrored the orientation of the predominant vein sets within those domains, and also within 6 major domains. The following procedure was used to model the deposit: A wireframe model of the 6 major and 12 structural domains was produced; A high grade cut of 40 g/t gold was used; Bulk densities were based on approximately 4,400 drill core measurements; 2.9 metre down-hole composites were produced, which are the equivalent of a 2.5 metre vertical bench; the data were declustered (GSLIB methodology); Variography was carried out within each domain; The variogram parameters were used to determine the domain edges and to produce expanded (soft boundary) sets of data; Indicator Variography was carried out within each expanded set. 13 indicator thresholds were used; Variograms were fitted and indicator distributions were produced using Surpac; Post-processing of the indicator distributions was carried out as defined in GSLIB; Change of support was implemented using the log-normal short cut procedure with a triangular tail to minimise the impact of isolated high grade; The data in each distribution were smoothed to prevent small amounts of (non mineable) high grade in the tails becoming significant at the higher cut-off grades; A 3-dimentional block model of panel size 20m x 20m x 5m was used with an assumed SMU size of 5m x 5m; Search Ellipsoids Each domain had its own search ellipsoid based on vein geometry and variography. These reflected geological strike, dip and down hole width of vein structures. Discretisation of 4N x 4E x 2RL was used.

Criteria	JORC Code explanation	Commentary
		and base. A block (SMU) cut-off grade of 3.0 g/t Au has been applied for reporting. This is due to the Inferred component being probably only accessible from underground rather than open pit methods, as per JORC 2012 guidelines.
		The detailed modelling was carried out by Carras Mining Pty Ltd (Perth, Western Australia) under Mr G. Powell and Dr S. Carras.
		• A second method of estimation was carried out by Carras Mining Pty Ltd, using the technique of Uniform Conditioning, which had been used by Cube Consulting Ltd for the FY2013 JORC 2004 resource estimate. The results produced by Uniform Conditioning, when constrained within the same Whittle pit shell, produced almost an equivalent result (in ounces) for the Indicated material within the pit.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	 Tonnages are reported on a dry basis. Moisture content was measured during the process of measuring bulk densities.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	• The Indicated material was constrained by the Whittle pit shell using a cut-off grade of 0.75 g/t gold for SMUs within large panels. This cut-off grade was based on a gold price of US\$1500/oz, milling cost of \$26/tonne, recovery of about 80% and a nominal component for haulage.
		• The Inferred material was restricted to mineralisation located outside of the Whittle pit shell, to a maximum depth of about 100 metres below the pit shell walls and base. A block (SMU) cut-off grade of 3.0 g/t Au has been applied for reporting. This is due to the Inferred component being probably only accessible from underground rather than open pit methods, as per JORC 2012 guidelines.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	 Selective open pit mining methods have been assumed, using a SMU of 5m x 5m x 5m. It is possible that the deposit could be mined more selectively, however no studies have been carried out.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Preliminary metallurgical testwork has been carried out, and while the recovery varies within the defined pit shell, an overall recovery of approximately 80% has been used in the Whittle optimisation.
Environmen-tal factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for 	 Preliminary investigations have been made to determine locations of waste storage and other infrastructure requirements for an open pit mining operation. Potential social and environment impacts

Criteria	JORC Code explanation	Commentary
	eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	are yet to be considered, in particular the presence of the local communities and the diversion or damming of the Bananghilig River. It is currently likely that these impacts will be similar to other open pit gold mining operations operating within the Philippines.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 More than 4,000 bulk density determinations were completed on diamond drill core obtained during 2010-2013. The method used is the paraffin wax coating – water immersion method. This method adequately accounts for void spaces, moisture and differences between various rock and alteration types. Moisture content is also obtained, Determinations were made on mineralised and non-mineralised core. Averages were derived for each rock and alteration type and assigned to each panel based on its major rock type.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Within the US\$1,500/oz Whittle pit shell, the drilling density is approximately 30m x 30m spacing, and mineralisation has been classified as Indicated using a 0.75g/t gold cut-off grade. Beneath and outside of the pit shell, the drill spacing increases, and for this reason, the mineralisation is classified as Inferred. Use of a 3g/t gold cut-off grade is to reflect the assumption that the mineralisation would probably only be mineable using underground mining methods. Other information used in the assessment of the resource is considered reasonable for the resource to be placed in the Indicated and Inferred categories as reported. The result does accurately reflect the Competent Persons' views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 There have been no other independent audits or reviews made of the current Mineral Resource estimate. When the current resource estimate is compared to the JORC 2004 resource estimate produced by Cube Consulting in 2013, for the same pit shell, the results are very similar (contained gold).
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which 	Overall the Mineral Resource estimate is globally probably accurate, however when considering local areas, large difference may occur.

Criteria	JORC Code explanation	Commentary
	should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	