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ANNOUNCEMENT

31st January 2020

ESTABLISHMENT OF DECLINE TO PROVIDE LONG-TERM INFRASTRUCTURE SOLUTION AT THE Co-O MINE

(ASX: MML)

- **Comprehensive study completed on future infrastructure options at the Co-O Mine to access the orebody below the limitations of existing shaft infrastructure;**
- **Study concludes that the establishment of a decline is the best option to access ore below Level 12, extend the life of mine and enhance operational and exploration flexibility at the Co-O Mine;**
- **Current Ore Reserve of 350,000 ounces extends to Level 12 with high-grade mineralisation intersected in drilling below Level 16 and remaining open at depth, constrained only by the limits of drilling;**
- **Decline construction expected to take 36 months with gold production to continue at previously planned levels throughout the construction period;**
- **Estimated capital cost of US$48 million, the majority of which could be funded from existing cash reserves of US$25 million and future operational cash flow;**
- **Final stages of planning and engagement with underground mining contractors in progress with the project expected to commence in the current H1 2020.**

Medusa Mining Limited ("Medusa" or the "Company") through its Philippines affiliate, Philsaga Mining Corporation, is pleased to report the outcomes of a comprehensive study into the long-term infrastructure solution at the Co-O Mine (the "Study"). The key objective of the Study was to underpin the long-term future of the mine by facilitating the best means of extracting gold-bearing ore from Level 12 and below, as well as providing a platform for more effective in-mine and near-mine exploration.

The Study concluded that the establishment of a decline from surface was the best option for the Co-O Mine and the Board of Medusa has approved construction of a decline which is expected to commence in H1 CY2020. Developing a decline is expected to have numerous benefits, including providing enhanced access to deeper levels of the mine, more optimal positions for in-mine and near-mine exploration, greater operational flexibility, safety benefits and removing hoisting as the bottleneck on ore production.

The decline is budgeted to cost US$48 million and is estimated to have a construction period of 36 months to reach the deepest level of operations at that time on Level 14. The Company believes the bulk of the construction expenditure can be internally funded from existing cash of US$25 million (as at 31 December 2019) and future operational cash flow. However, as a contingency, Medusa is also examining external funding options, including the establishment of a debt facility in the future to support construction.

Medusa intends to appoint an internationally recognised underground mining contractor to complete the work following a competitive tender process. Discussions with a number of parties are in progress and will be concluded shortly.

Commenting on the outcomes of the Study, Medusa's CEO David McGowan said:

"*Following months of technical work, we are pleased to present the preferred long-term infrastructure solution at the Co-O Mine. In just over ten years, the mine has produced almost one million ounces and we believe this investment will ensure a positive long-term future for the operation.*

Whilst historically Co-O has relied almost exclusively on shafts for access and hoisting, we believe the introduction of a modern decline will provide significant benefits. In addition to the improved safety, efficiency and operational flexibility we expect, a key benefit of the decline is the enhanced positions it will provide for in-mine and near-mine exploration.

Our mill utilisation rate is only around 60%, meaning future exploration success can support a higher mill throughput rate and potentially higher gold production.

We believe this decision is the next exciting chapter for the Co-O operation and our local stakeholders".

Study Background

Ore and waste material from the Co-O Mine are currently hoisted to surface through existing mine infrastructure, including the L8, Baguio, Agsao and internal shafts.

These assets, however, can only effectively facilitate mining to Level 12 (~600m below surface) which is the limit of the current Ore Reserve. Whilst this is sufficient to underpin the current production profile in the coming years, further infrastructure is required for accessing deeper levels of the Co-O Mine in an efficient and cost-effective manner.

Since first production in 2008, the Co-O Mine has produced almost one million ounces. Currently, Levels 7, 8, 9, 10 and 11 each have a gold endowment of 100,000 to 200,000 ounces.

The Company believes there is strong potential for this trend to continue at Level 12 and below through ongoing exploration. The limited resource drilling completed below Level 12 is the main contributor for this area of the mine not currently having a higher established gold endowment.

Mineralisation at the Co-O Mine is steeply dipping and hosted in narrow veins which are difficult and expensive to drill from underground without optimally located drilling platforms which a decline will bring.

The potential for resource upside is demonstrated by the Company's current geological understanding and limited deeper drilling programs. Some of the better drilling results in gram metre below Level 12 are presented in Figure 1.

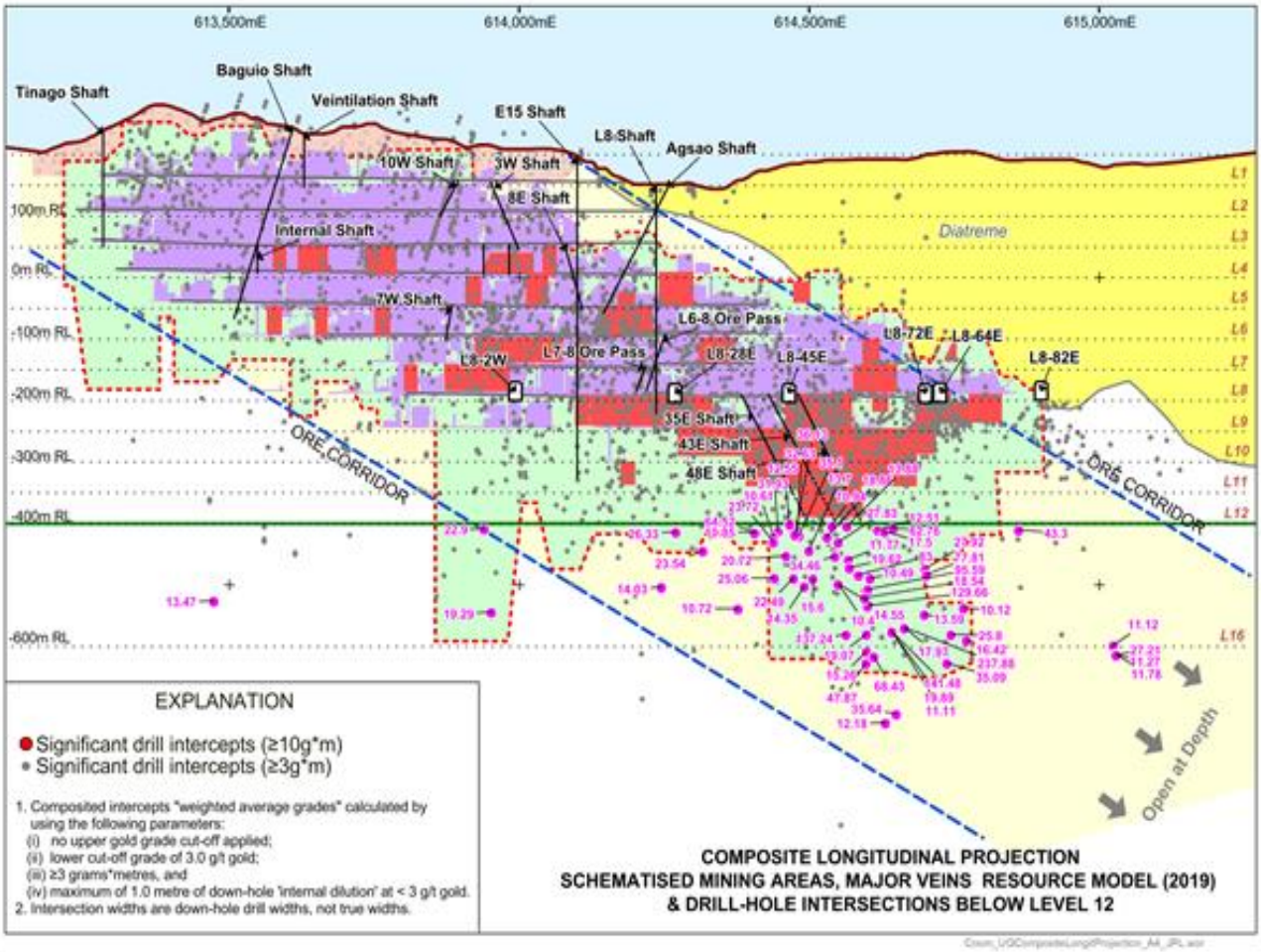

Figure 1: Co-O Mine Longitudinal Projection showing significant drill intercept locations below L12.

As part of the Study, Medusa considered and analysed a range of infrastructure options in addition to the installation of a decline, including:

- A new shaft from surface;
- Large Internal shaft;
- Extending the existing L8 shaft; and
- Increased smaller internal winzes.

Each of these alternatives was less preferred to the decline option for a range of reasons, generally relating to higher cost, excessive operational disruption or lower future flexibility and productivity.

BENEFITS OF A DECLINE

The **key benefit** derived from the development of a decline at the Co-O Mine is improved hoisting from below Level 8 and access to areas below Level 12 (~600m below surface).

Other benefits expected include:

- **Long-term, self-sustaining infrastructure**

  The advantage of a decline over additional shaft capacity is the ease of extending the infrastructure to greater depth. Shafts become ineffective once mining extends vertically further from the bottom of the shaft and it is a major project to extend the shaft. A decline can be extended vertically with ease and with no material impact to existing production.

  Constructing the proposed decline should replace the need for developing more hoisting and service shafts at the Co-O mine in the foreseeable future.

- **Exploration optionality in-mine and near mine**

  The decline offers greater flexibility for positioning drilling platforms both within and outside the existing mine. The current design will see the decline initially trending north, thereby allowing the potential excavation of a drilling platform to test the presence of mineralisation to the north of Co-O (Figure 2). This would decrease cost for deep drilling and minimise surface access restrictions and challenges.

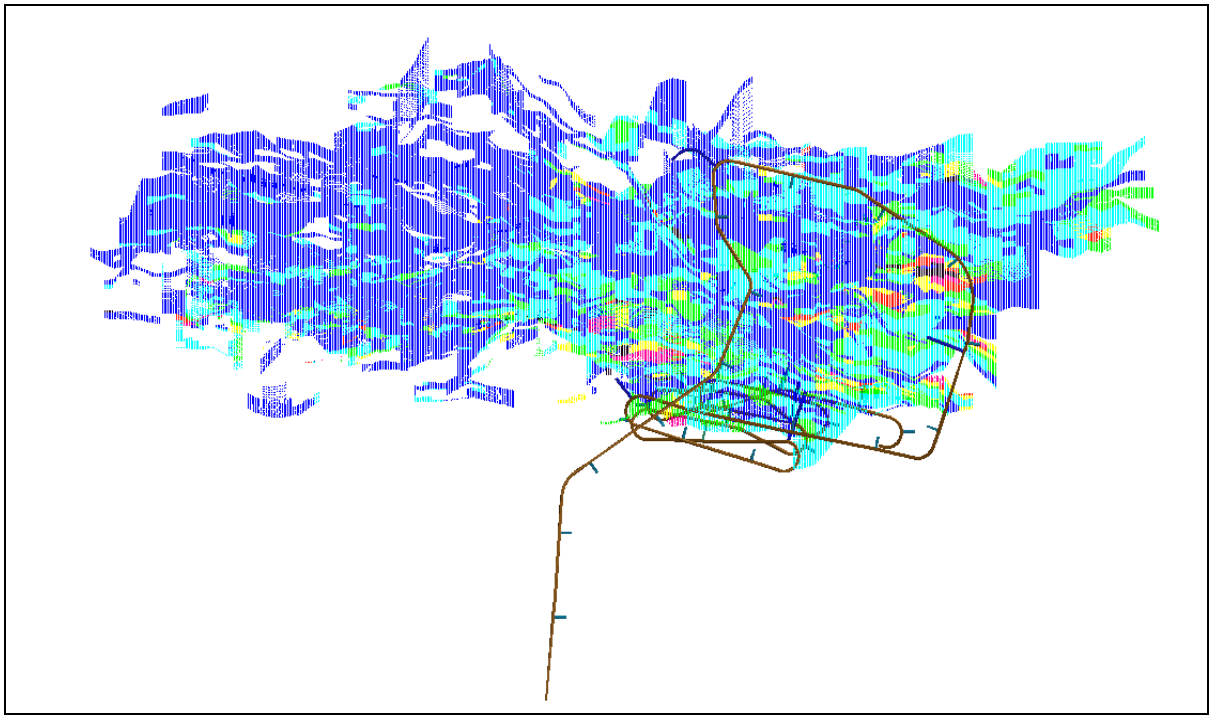

Figure 2: Plan view of the proposed decline, against Resource model

Currently, excavation of drill drives competes with ore extraction in the sense that waste material excavated will need to be hoisted to the surface by the L8 shaft, thereby impacting gold production. The construction of a decline will ease this limitation through the decline's additional haulage capacity. This benefit should facilitate quicker deployment of drill drives when the decline becomes functional.

- **Operational robustness**

  A decline provides high levels of flexibility and operational robustness compared to a shaft.

  Furthermore, declines are more prevalently adopted by modern underground operations. As such, there is also a wider contracting community for the construction and servicing of declines compared to shafts.

  An internationally experienced underground mining contractor would be utilised for the work which should facilitate improved certainty in terms of project delivery timing, quality and costs.

- **Potential for production upside**

  The operation is currently limited by the capacity of the hoisting system. The Co-O processing facility has operated at or below 60% capacity for an extended period. By utilising this spare existing capacity, greater production and lower unit costs can potentially be achieved. The decline has been designed to allow increased production by the addition of more trucks should exploration be successful at identifying new mining areas.

- **Health and safety**

  The decline will also serve as part of the ventilation system for the mine and therefore improve mine ventilation, especially at the deeper levels of Co-O. The Company expects this change to improve working conditions leading to improved health and safety on site should also deliver improved productivity.

CAPITAL COSTS

The capital cost of excavations and underground development is estimated to be US$48.6 million spent over three years. In addition, there is estimated to be a further US$11 million for associated infrastructure and mobile equipment required. Figure 3 shows the magnitude of expected project expenditure for each quarter and Figure 4 shows the expected cumulative project expenditure over time.

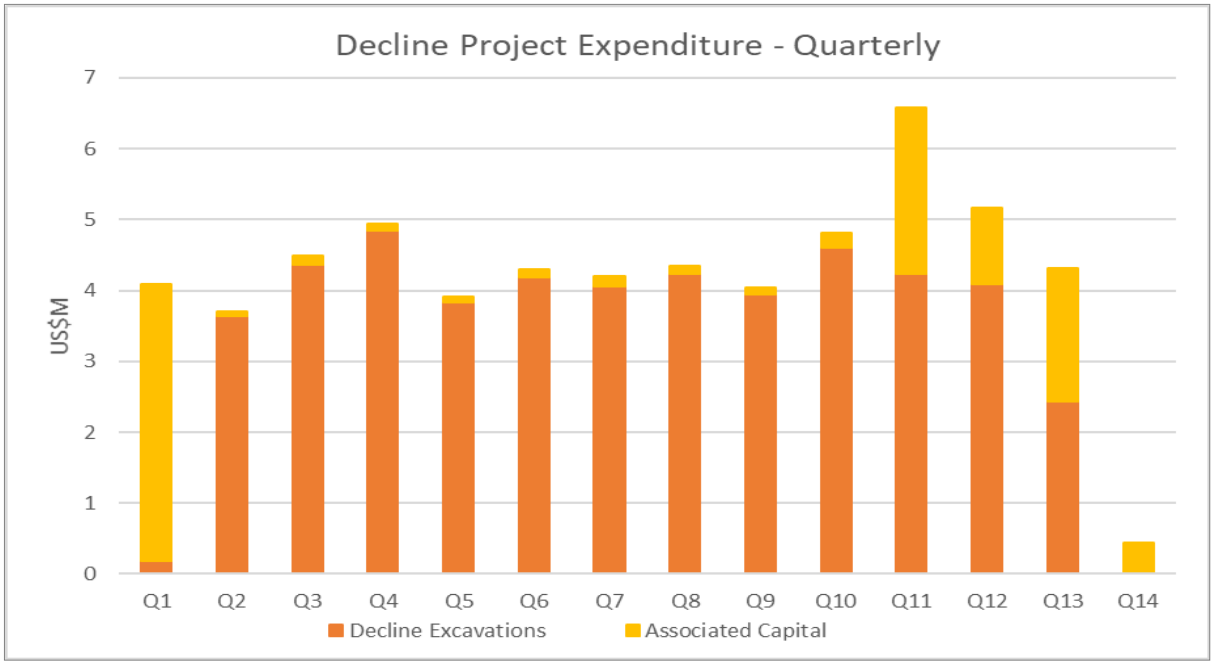

Figure 3: Project expenditure each quarter

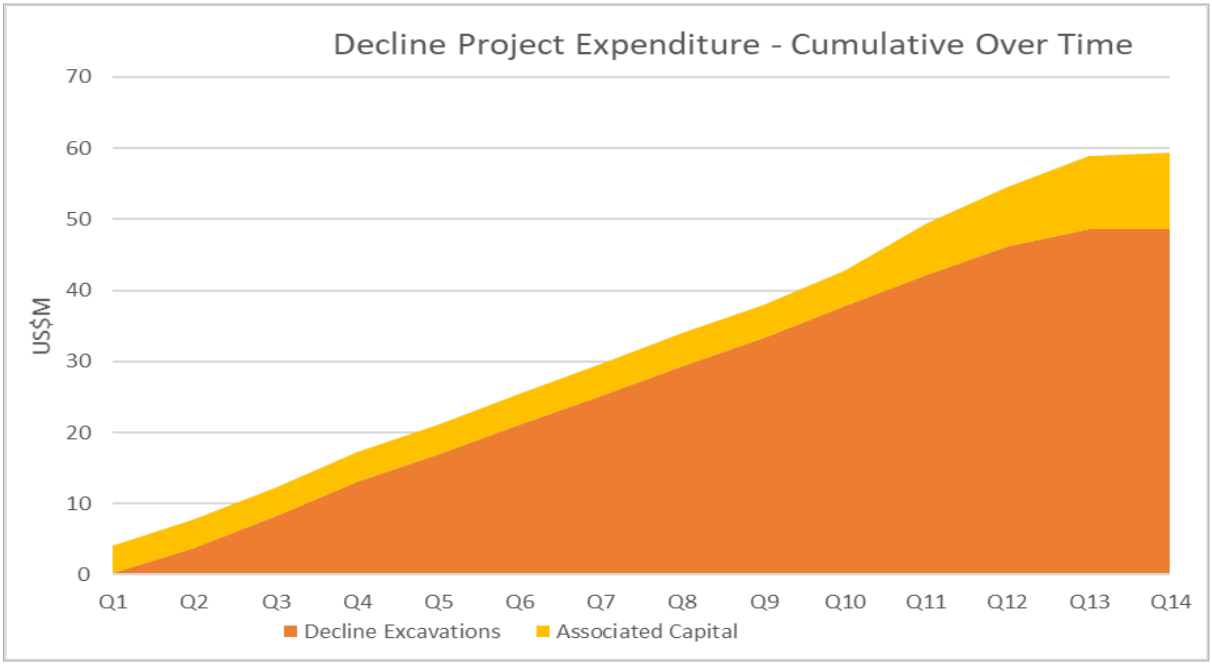

Figure 4: Cumulative project expenditure over time

DECLINE TECHNICAL PARAMETERS

The decline is designed to be 5.3 metres wide and 5.3 metres high with arched backs and a gradient of 1:7.

The decline is planned to initially be developed below Level 14 to a depth of 730 metres below the surface (Figure 5). Connections to the existing mine will be established at levels 4, 6 and 8 for ventilation and levels 9, 10, 11, 12, 13 and 14 to service those levels. The decline will also be connected to levels 9, 10, 11, 12, 13 and 14 by ore passes.

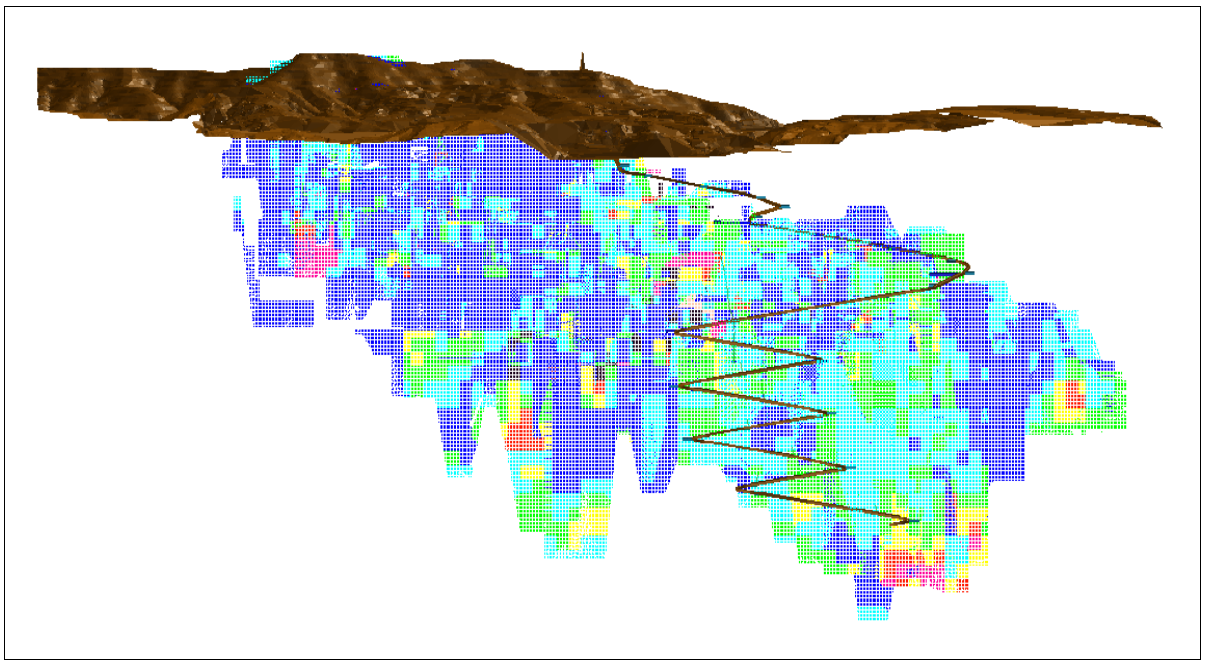

Figure 5: Long section view of proposed decline, against current Resource model

FUNDING

Factoring the current buoyant gold price, the Company's unhedged production profile and existing Balance Sheet, Medusa believes the bulk of the construction expenditure can be internally funded from existing cash of US$25 million (as at 31 December 2019) and future operational cash flow.

However, as a contingency, the Company is also examining external funding options, including the establishment of a debt facility in the future. Given the expenditure profile of constructing the decline and the existing cash balance of the Company, external funding is unlikely to be required in the near term.

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Forward Looking Statement

This announcement contains a number of forward-looking statements, including the statements relating to anticipated production tonnages, grades and future drilling results. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, whilst considered reasonable by Medusa, may be subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.
Except to the extent required by applicable law, Medusa disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and other similar expressions identify forward-looking statements.

All forward-looking statements made in this announcement are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Medusa does not warrant the accuracy, currency or completeness of the information with respect to forward-looking statements contained in this announcement, nor the future performance of Medusa.

The anticipated production includes portions of inferred mineral resources and exploration target. It should be remembered;

- There is a low level of confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target will be realised.
- The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration on these levels to determine sufficient mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target will be realised.

JORC CODE 2012 COMPLIANCE - CONSENT OF COMPETENT PERSONS

Information in this report relating to Exploration Results is based on, and fairly represents, information and supporting documentation reviewed by Mr James Llorca and compiled by Philsaga Mining Corporation's Co-O mine site technical personnel. Mr James Llorca is a member of The Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Llorca is an full-time employee of Medusa Mining Ltd and has sufficient experience, which is relevant to the style of mineralisation and type of deposits under consideration, and to the activity which they are undertaking, to qualify as a "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Llorca consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Information in this report relating to Ore Reserves is based on, and fairly represents, information and supporting documentation compiled by Dr Spero Carras of Carras Mining Pty Ltd. Dr Carras is a Fellow of the Australasian Institute of Mining & Metallurgy and has 30 years of experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Carras consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.