



# QUARTERLY ACTIVITIES REPORT

## PERIOD ENDED

### 30 September 2018

#### Snapshot of Medusa:

- Un-hedged, high grade gold producer focused on growth in the Philippines and Asia Pacific
- No long-term debt

#### Board of Directors:

**Andrew Teo**  
(Chairperson and Interim CEO)

**Raul Villanueva**  
(Executive Director)

**Roy Daniel**  
(Non-Executive Director)

#### Executive Management:

**Raul Villanueva**  
(President, Philippine subsidiaries)

**David McGowan**  
(Chief Operating Officer)

**Peter Alphonso**  
(Chief Financial Officer/Company Secretary)

**James Llorca**  
(General Manager, Geology & Resources)

**Patrick Chang**  
(Corporate Development Officer)

#### Capital Structure:

Ordinary shares: 207,794,301  
Unlisted options: 6,030,000

#### Listing:

ASX (Code: MML)



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#### OVERVIEW:

##### Co-O MINE PRODUCTION

- **Production:** 24,177 ounces at average head grade of 5.97 g/t gold (Jun 2018 qtr: 22,835 ounces at average head grade of 5.74 g/t)
- **Cash Costs:** US\$549 per ounce (Jun 2018 qtr: US\$595 per ounce)
- **All-In Sustaining Costs ("AISC"):** US\$1,126 per ounce (Jun 2018 qtr: US\$1,278 per ounce)
- **Mill Performance:** Gold recovery averaged 94.5% (Jun 2018 qtr: 94.5%)
- **Mine Development:** Total advance was 7,898 metres of horizontal and vertical development (Jun 2018 qtr: 7,566 metres)
- **Mine Infrastructure Projects:**
  - E15 Service Shaft - installation of the lower shaft steel work complete and practical completion on track for Oct 2018.
  - Development of internal hoisting winzes - E43 completed to level 10 and E48 winze completed to level 10. E35 winze continued development past level 10 and commenced development of level 10 plat. Development of this winze will continue to level 12.

##### Co-O MINE EXPLORATION

###### Underground resource drilling

Total drilling for the quarter was 10,471 metres, a 2% decrease from last quarter. Key areas targeted were as follows:

- Reserve drilling at levels 5,6 and 7 totalled 3,158 metres from 25 holes.
- Resource definition drilling at level 8 totalled 7,312 metres from 15 holes.
- High-grade results from the resource drilling completed include 0.70 metres @ 425.27 g/t gold, 3.55 metres @ 60.28 g/t gold, 1.50 metres @ 14.88 g/t gold and 0.20 metres @ 210.40 g/t gold.

##### REGIONAL & NEAR MINE EXPLORATION

- **Near Mine Exploration (MinEx):** Reconnaissance activities within the mine environs identified two promising drill targets, the Royal Crowne Vein and Durian. Royal Crowne Vein lies 1.5km north of the Co-O mine and initial results of current scout drilling campaign confirm gold mineralisation. Complete assay results are still pending receipt from the laboratory.
- **Epithermal Gold and Porphyry Cu-Au projects (Qld, Australia):** Activity this quarter included working with landholders to progress the required agreements to access the land for drilling. The MML-Ellenkey Gold JV has also engaged with native title holders to prepare for clearance of the initial drill programs at both Mt Clark West (copper porphyry prospect) and Hill 212 (epithermal gold prospect).

##### CORPORATE & FINANCIALS

- Total cash and cash equivalent of gold on metal account at the end of the quarter was approximately US\$11.8 million (June 2018 Qtr: US\$15.1 million), after working capital movements, VAT, tax and interest charges.
- FY19 guidance of between 90,000 to 100,000 ounces and AISC of between US\$1,050 to US\$1,150 per ounce provided during the quarter.
- Non-Executive Director, Mr Peter Hepburn-Brown sadly passed away.

# TENEMENT PROJECT OVERVIEW

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

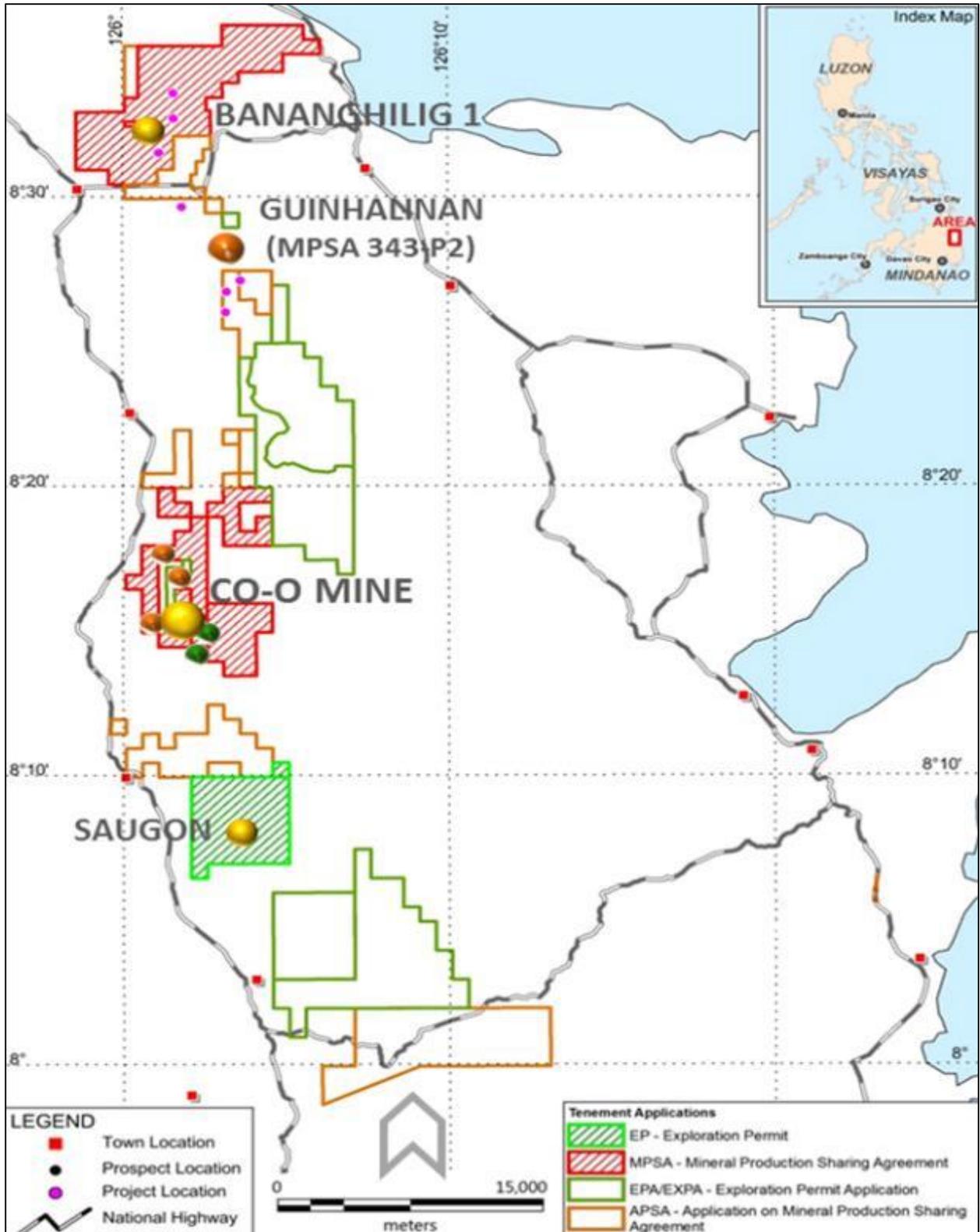


Figure 1: Location diagram showing the company's Tenements covering the Co-O mine and mill operations areas.

## Co-O MINE

### PRODUCTION

The production statistics for the Sep 2018 Quarter and comparatives for the previous four quarters are summarised in Table I below.

Table I. Gold production statistics

Description	Unit	Sep 2017 Quarter	Dec 2017 Quarter	Mar 2018 Quarter	Jun 2018 Quarter	Sep 2018 Quarter
Ore mined	WMT	143,317	129,624	134,707	142,752	145,761
Ore milled	DMT	121,616	124,916	118,495	129,962	133,209
Head grade	g/t	6.59	6.67	6.36	5.74	5.97
Recovery	%	94.6%	94.9%	94.8%	94.5%	94.5%
Gold produced	ounces	24,896	25,056	22,918	22,835	24,177
Gold sold	ounces	27,602	25,550	20,468	22,435	23,818
U/G development	metres	6,371	5,765	6,242	7,566	7,898
Cash costs (*)	US\$/ounce	\$565	\$523	\$568	\$595	\$549
All-In Sustaining Costs ("AISC")	US\$/ounce	\$973	\$1,025	\$1,073	\$1,278	\$1,126
Average gold price received	US\$/ounce	\$1,274	\$1,281	\$1,335	\$1,293	\$1,206
Cash & cash equivalent	US\$M	\$16.8M	\$16.7M	\$18.1M	\$15.1M	\$11.8M

**Note:**

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

The Company produced 24,177 ounces of gold for the quarter - a 6% improvement on the previous quarter - at an average head grade of 5.97 g/t gold from 133,209 tonnes of ore processed. Tonnes processed were restricted by mine ore hoisting.

Total ore mined for the quarter was up on the previous quarter following continued good utilisation of the L8 Shaft for hoisting. With ore reserves in the upper levels diminishing, the hoisting contribution from the Agsao Shaft, Baguio Shaft and Portals will reduce over time.

The mine completed a total of 7,898 metres of horizontal and vertical development. The high development will assist in identification of resources and give earlier access to ore blocks.

Horizontal development of 593 metres was achieved on the L10.

All-In Sustaining Costs ("AISC") for the quarter were US\$1,126 per ounce of gold - down 11.9% on the previous quarter - despite the inclusion of exceptional costs for E15 Service Shaft hardware, surface civil works for future infrastructure and additional development metres.

#### Production Shafts

Overall material hoisted was 148,915 DMT for ore and waste combined, continuing the improvement achieved last quarter.

- **Level 8 Shaft:**

Continued good utilisation of the shaft for hoisting, helped to maintain good hoisted tonnes through the L8 Shaft, offsetting the reduced haulage through the other shafts. Utilisation is expected to improve in the second half when the E15 Service Shaft becomes operational.

- **Agsao Inclined Shaft:**

Utilisation and material hoisted increased from the previous quarter, with more production areas exposed by increased development on the upper levels. Over time the utilisation of the Agsao shaft is expected to reduce as the number production areas available on the upper levels reduces.

- **Baguio Inclined Shaft:**

Material hoisted was in line with the previous quarter. Utilisation of the Baguio shaft will reduce over time as the number production areas available on the upper levels falls.

- **Portals:**

Material hoisted is in line with the previous quarter. Over time hoisting from the Portals is expected to reduce as the number production areas available on level 2 reduces.

- **L8 Winzes:**

The 29E and 12E Winzes continued to hoist ore and waste from levels 9 and 10 to level 8.

43E Winze is now operational allowing hoisting of development material from level 10 and production ore from level 9 to level 8.

The 48E Winze has reached Level 10 and being fitted out for hoisting operations from level 10. It is currently used for hoisting of some development material from levels 10 and 9

The 35E Winze has reached 126 metres, platform is being developed on level 10. Development of this winze will continue to levels 11 and 12.

For the Sep 2018 quarter, horizontal development on level 10 increased to 593 metres.

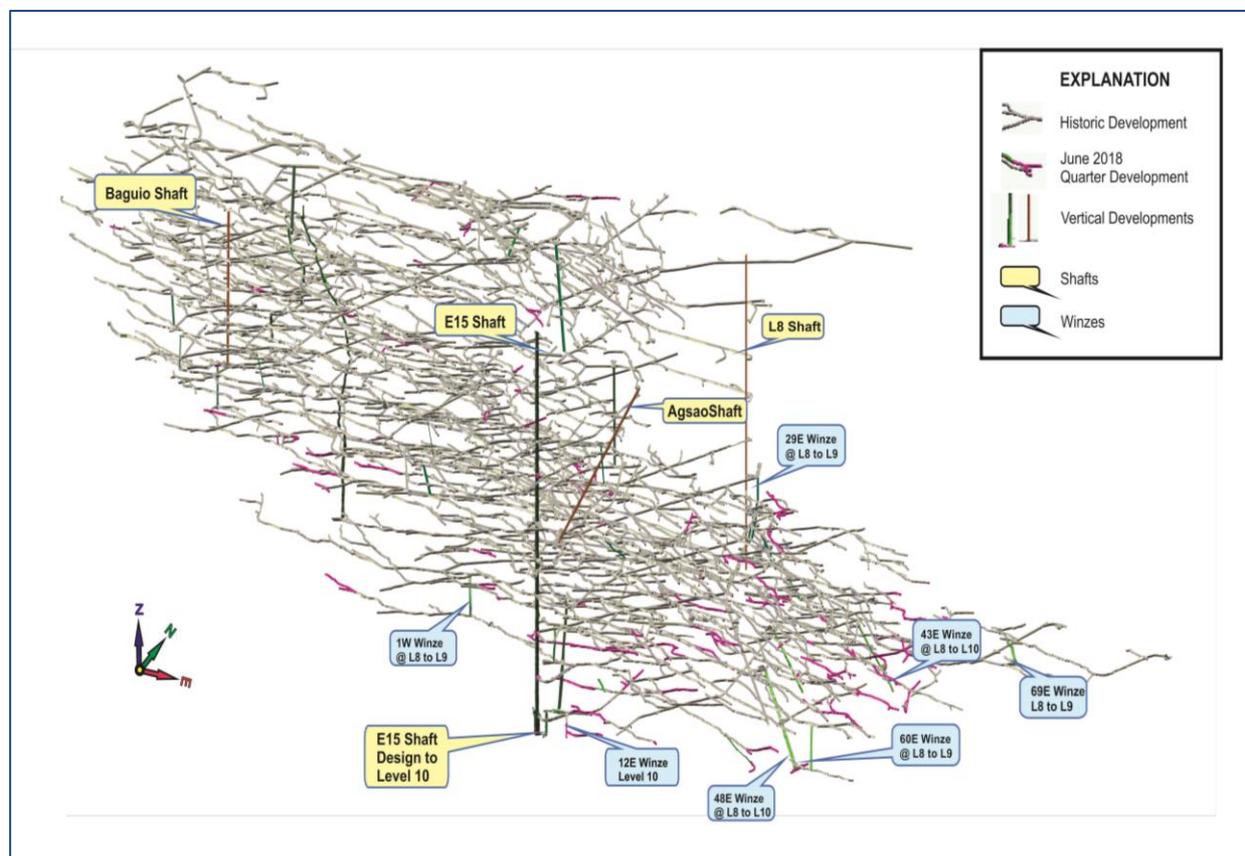


Figure 2: 3D Isometric view of Co-O mine showing all historic mine development, plus the September 2018 Quarters horizontal development in Pink, also showing the primary vertical development in Brown and Green. E15 is shown here at Level 10, with design to Level 10 sump (+16 metres).

### E15 Service Shaft

E15 Service Shaft excavations have been completed and installation of the shaft hardware is well underway. Practical completion expected to be achieved in the second half of Oct 2018.

Milestones achieved during the Sep 2018 quarter were:

- Installation of lower shaft steel work;
- Installation of compressed air lines, electrical cable, fibre optic cable and shaft communication infrastructure to each level; and
- Commencement of reconfiguration of the headframe for operational duties.

## Processing Plant

The process plant throughput was 133,209 tonnes at a grade of 5.97 g/t gold, both improved compared to previous quarter (Jun 2018 qtr: 129,962 tonnes at 5.74 g/t gold). The processing plant throughput remains limited by the mine hoisting production. The process plant continued with good recoveries to 94.5% for the quarter (Jun 2018 quarter: 94.5%).

## HEALTH, SAFETY & ENVIRONMENT

There were no environmental issues reported for the quarter.

The LTIFR for the 12 months ending Sep 2018 was 1.96 (incidents per million-man hours).

Work has continued to improve the training and safety management system with the expectation of reducing the severity and number of incidents over time.

## Co-O MINE GEOLOGY

### Co-O Mine Drilling

A total of 10,471 metres was drilled in the Sep 2018 quarter, down by approximately 2% from the previous quarter due to operational issues. Drilling focussed on levels 5,6,7 and 8. Resource drilling on level 8 downward totalled 7,313 metres, while reserve definition drilling from levels 5,6 and 7 aggregated 3,158 metres.

The underground drilling campaign from Level 8 targeting resource definition between levels 8 to 15 (Figure 4) continued to return good results over the quarter. This program is targeting an increase and upgrade to the current mineral resource through depth and strike extensions of the mineralised vein system between levels 8 to 15 (-200m to -550m RL).

Significant results obtained during the quarter are reported in Table II and relative positions shown in longitudinal section in Figures 4 and 5.

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

Hole Number	East	North	RL	Depth (metres)	Azim (°)	Dip (°)	From (metres)	To (metres)	Width (metres)	Gold (g/t)	Accumulations (gm*m)
<b>UNDERGROUND RESOURCE DRILLING - LEVEL 5</b>											
L5-51E-003	614482	912815	-42	200	8	01	102.10	103.10	1.00	3.45	3.45
<b>UNDERGROUND RESOURCE DRILLING - LEVEL 6</b>											
L6-30E-002	614313	912981	-93	120.1	152	-1	91.10	91.80	0.70	39.93	27.95
							92.25	93.05	0.80	44.43	35.54
							93.50	94.15	0.65	9.47	6.16
L6-67E-002	614644	912786	-88	150.1	211	2	0.20	0.45	0.25	37.24	9.31
							8.65	9.60	0.95	18.57	17.64
<b>UNDERGROUND RESOURCE DRILLING - LEVEL 7</b>											
L7-17W-002	613815	912931	-	140	327	0	0.00	1.00	1.00	15.83	15.83
L7-19W-001	613773	912852	-	150.1	199	-1	93.15	96.70	3.55	60.28	213.99
							Including		0.45	33.20	14.94
									1.00	62.43	62.43
									1.10	115.03	126.53
L7-19W-003	613773	912852	-	150.2	220	-1	116.80	117.55	0.75	8.91	6.68
<b>UNDERGROUND RESOURCE DRILLING - LEVEL 8</b>											
L8-2W-033	613992	913099	-	550.4	206	-47	349.30	350.00	0.70	7.00	4.90
							407.55	407.80	0.25	19.87	4.97
							453.15	454.20	1.05	3.54	3.72
L8-2W-034	613992	913099	-	550.6	196	-46	300.25	301.25	1.00	24.80	24.80
							351.75	352.75	1.00	3.65	3.65
L8-2W-035	613993	913099	-	551.1	188	-50	383.30	383.50	0.20	26.48	5.30
L8-45E-053	614466	913037	-	551.1	168	-39	132.25	132.85	0.60	39.73	23.84
							338.95	339.20	0.25	23.23	5.81
							468.60	469.30	0.70	425.27	297.69
L8-45E-054	614465	913037	-	551.1	181	-41	122.30	123.05	0.75	12.00	9.00
							181.60	182.10	0.50	20.18	10.09
							183.60	184.60	1.00	10.60	10.60
							197.80	198.45	0.65	6.03	3.92
							307.80	308.65	0.85	4.65	3.95
							401.10	401.90	0.80	24.60	19.68
							422.70	423.30	0.60	7.67	4.60
L8-45E-055	614465	913037	-	551.1	195	-44	36.50	37.55	1.05	8.87	9.31
							157.80	159.30	1.50	14.88	22.32
							Including		1.00	18.43	18.43
									0.50	7.77	3.88
							203.45	204.45	1.00	4.27	4.27
							236.40	236.80	0.40	40.82	16.33
							237.80	239.10	1.30	15.14	19.68
							Including		0.30	42.52	12.76
									1.00	6.93	6.93
							278.75	279.10	0.35	8.77	3.07
							317.70	318.70	1.00	7.97	7.97
							320.75	320.95	0.20	16.30	3.26
							321.35	321.75	0.40	26.73	10.69
							L8-72E-001	614699	912850	-	550.1
Including		1.00	15.87	15.87							
		0.35	79.83	27.94							
132.75	133.10	0.35	13.86	4.85							
146.10	146.75	0.65	8.38	5.45							
160.05	160.35	0.30	40.97	12.29							
264.35	265.35	1.00	11.97	11.97							
L8-72E-002	614699	912850	-	550.1	338	-21	54.60	54.80	0.20	210.40	42.08
							143.45	144.40	0.95	3.58	3.40
L8-72E-003	614699	912850	-	551.1	345	-14	47.45	47.75	0.30	17.91	5.37
							48.25	48.45	0.20	16.59	3.32
							60.10	60.85	0.75	4.77	3.58
							139.25	139.50	0.25	14.03	3.51
L8-72E-004	614700	912843	-	550.1	178	-28	24.90	25.10	0.20	16.52	3.30

Hole Number	East	North	RL	Depth (metres)	Azim (°)	Dip (°)	From (metres)	To (metres)	Width (metres)	Gold (g/t)	Accumulations (gm*m)
L8-72E-005	614700	912850	---	551.1	348	-20	49.20	50.40	1.20	29.40	35.28
							Including		0.20	140.07	28.01
									1.00	7.27	7.27
							208.10	208.70	0.60	18.20	10.92

**Notes:**

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

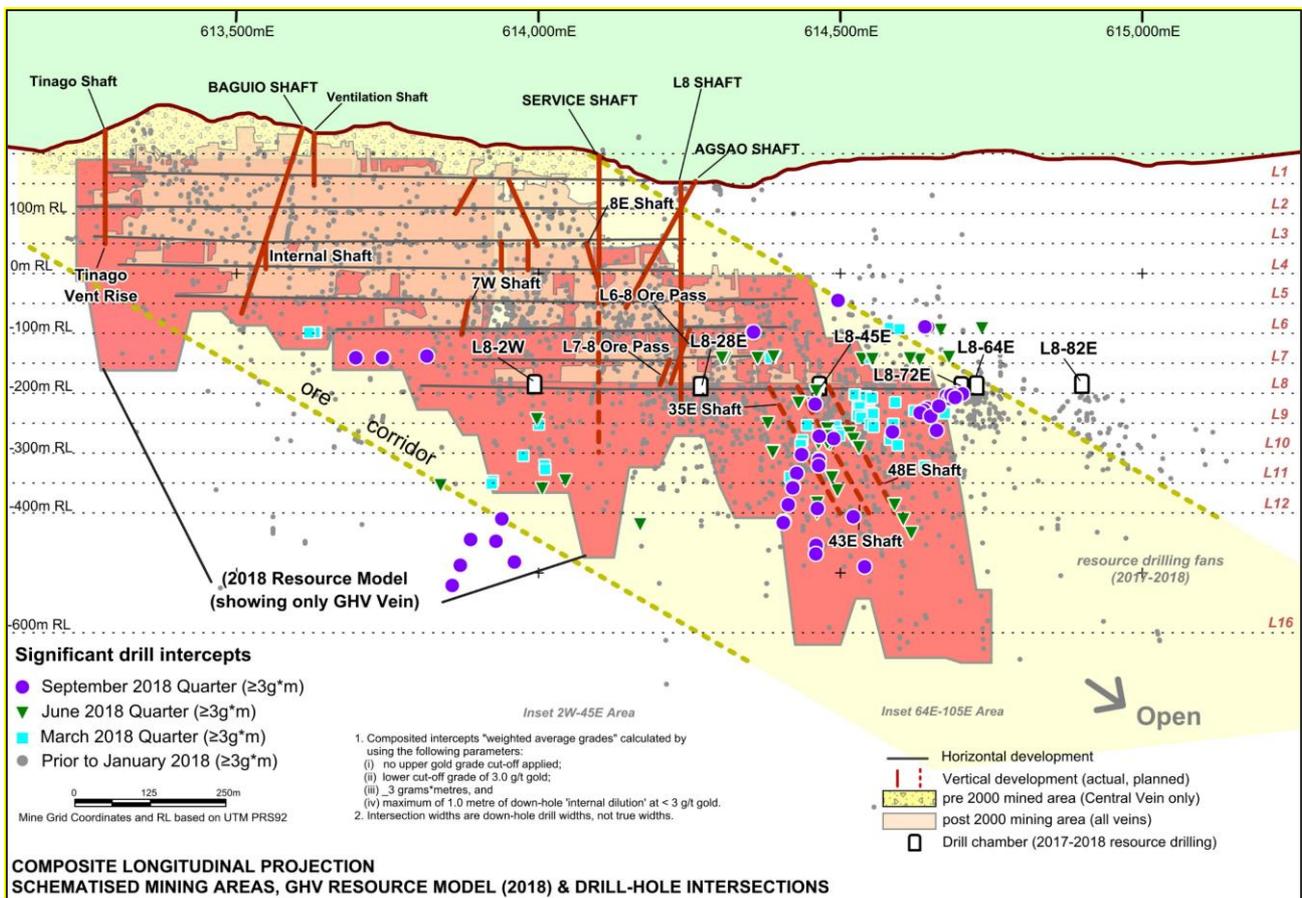


Figure 3: Co-O Mine Longitudinal Projection showing composited mining depletion, vertical development, Ore Reserves limits, and significant drill intercept locations (including previously reported). Note that the ore reserve limits are updated with the 2018 Resource Model.

Figures 4 show a more detailed location of the significant results. The numbers represent grade\*metres (far right column on Table II). Drilling in the Sep 2018 quarter continues to return high-grade assay results of narrower veins. It is also worth noting that new significant intercepts were drilled below level 12 past the projected ore corridor (i.e. at position 2W).

Note, the close spacing of results reflects there are multiple veins and the drill station is close to the structures (Figure 4).

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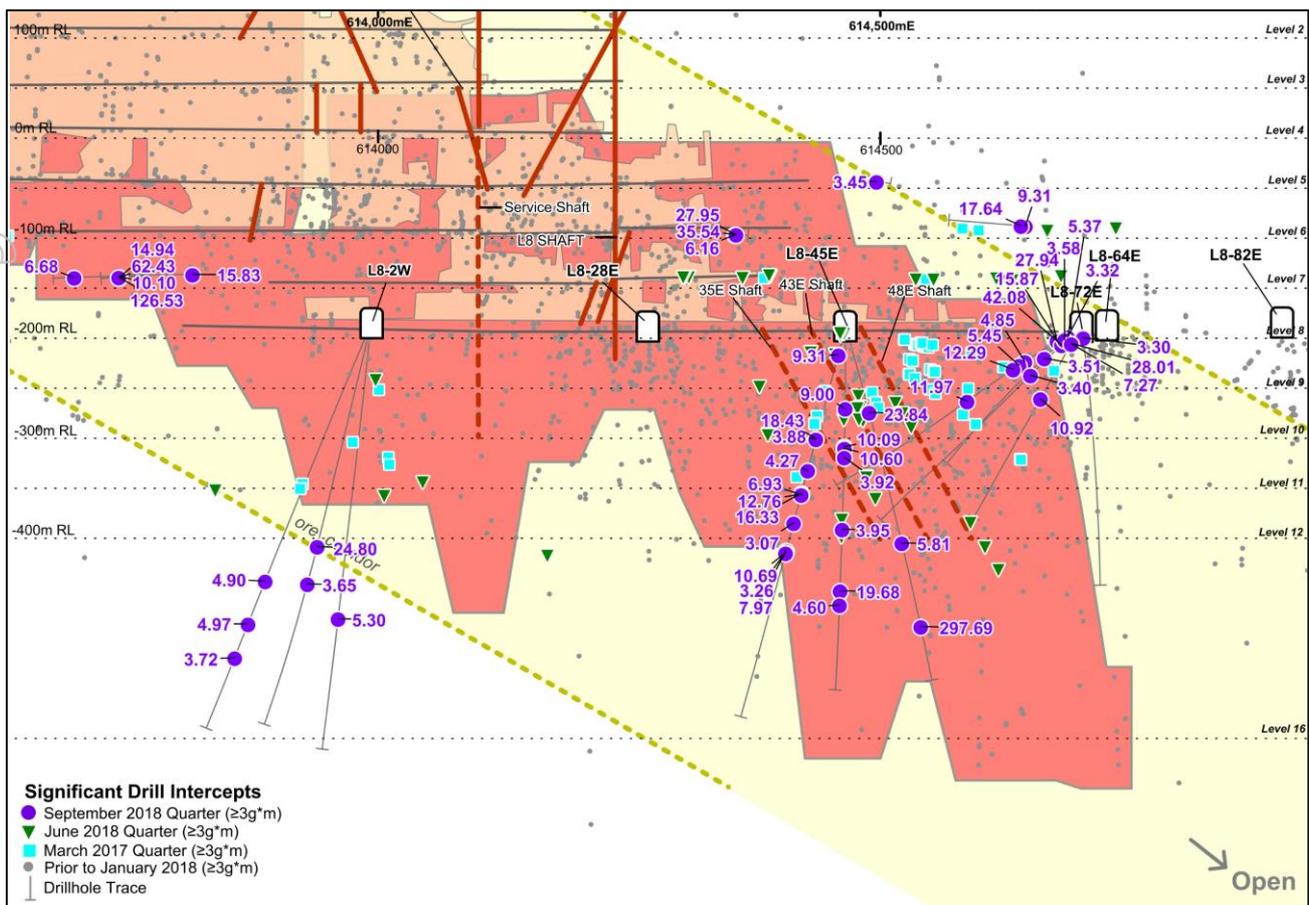


Figure 4: Significant drill intercepts for the Sep 2018 Quarter.

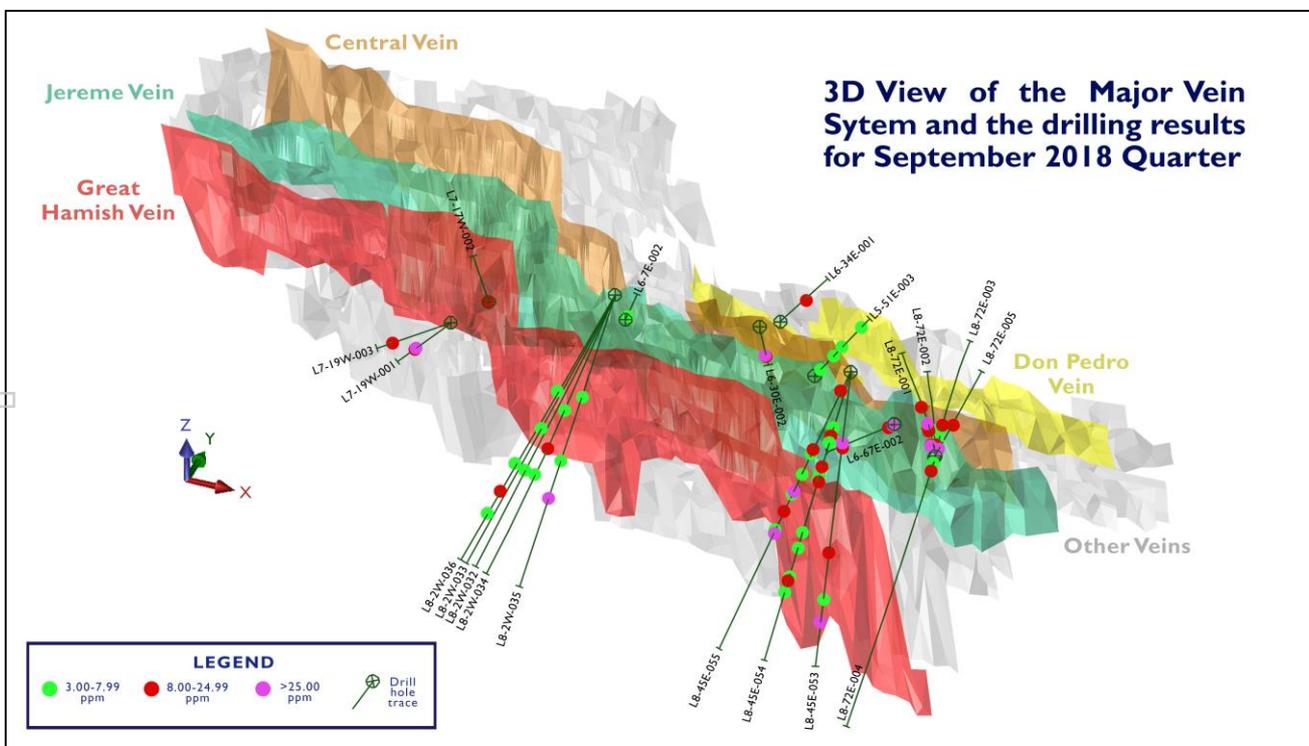


Figure 5: 3D View of the Co-O Vein System and significant drill intercepts for the Sep 2018 Quarter.

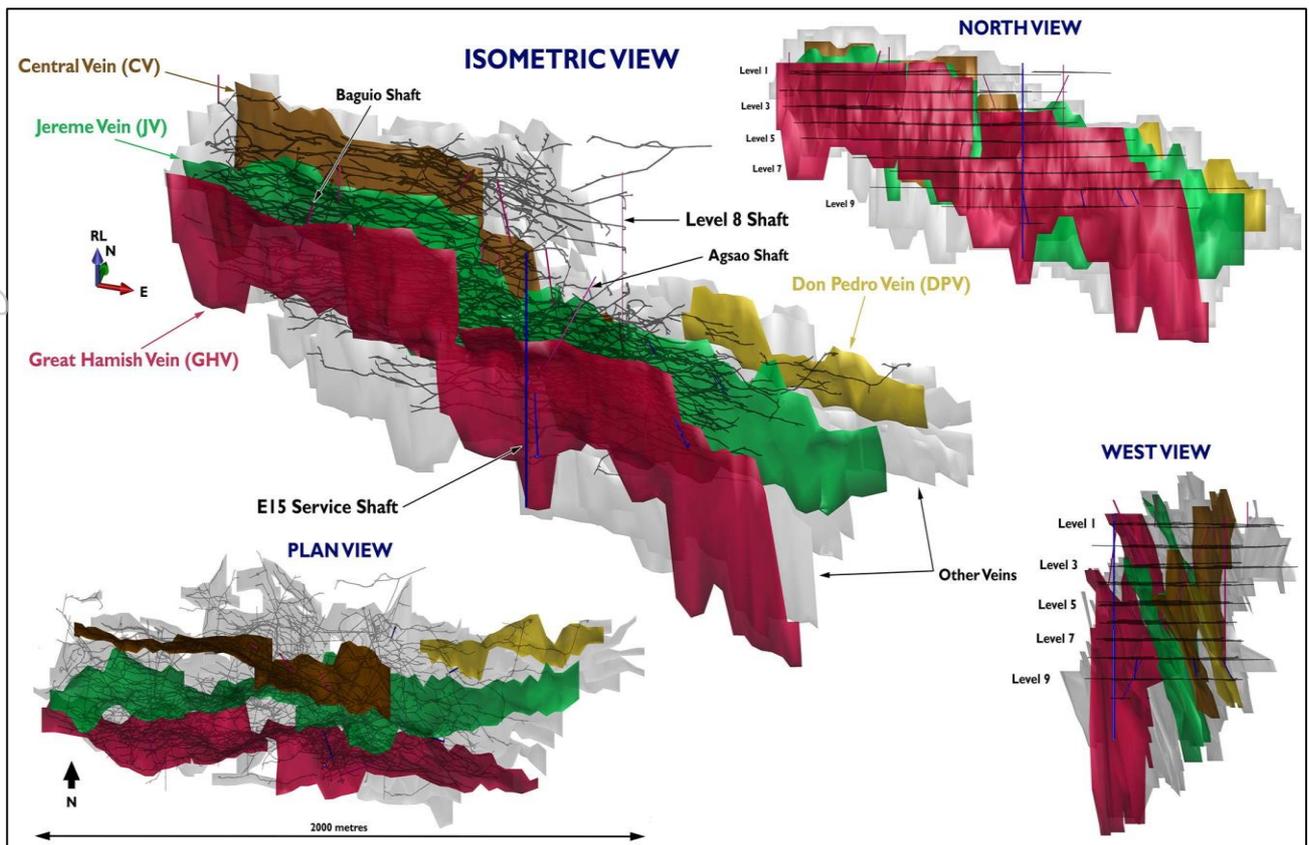


Figure 6: 3D Isometric vein with plan, section long-section views of; GHW & GHVHW, JV & DPV.

Following the upcoming commissioning of the E15 Shaft and unconstrained access to levels 9 and 10, the Company intends to establish newer, better located drilling stations for continued expansion of the Co-O resources at depth.

As in-fill drilling below level 9 and step-out drilling down-dip to the east continues, it is expected resources on the Great Hamish, Jereme and Don Predro Veins will continue.

## Co-O SURFACE EXPLORATION

### Near Mine Surface Exploration (MinEx)

Ongoing data mining and review identified two potential drillable prospects located within 3km of the Co-O Mine. These prospects are located within the approved tenement designated as MPSA 262 Parcel 2, and are referred to as the Royal Crowne Vein and Durian prospects (Figure 8).

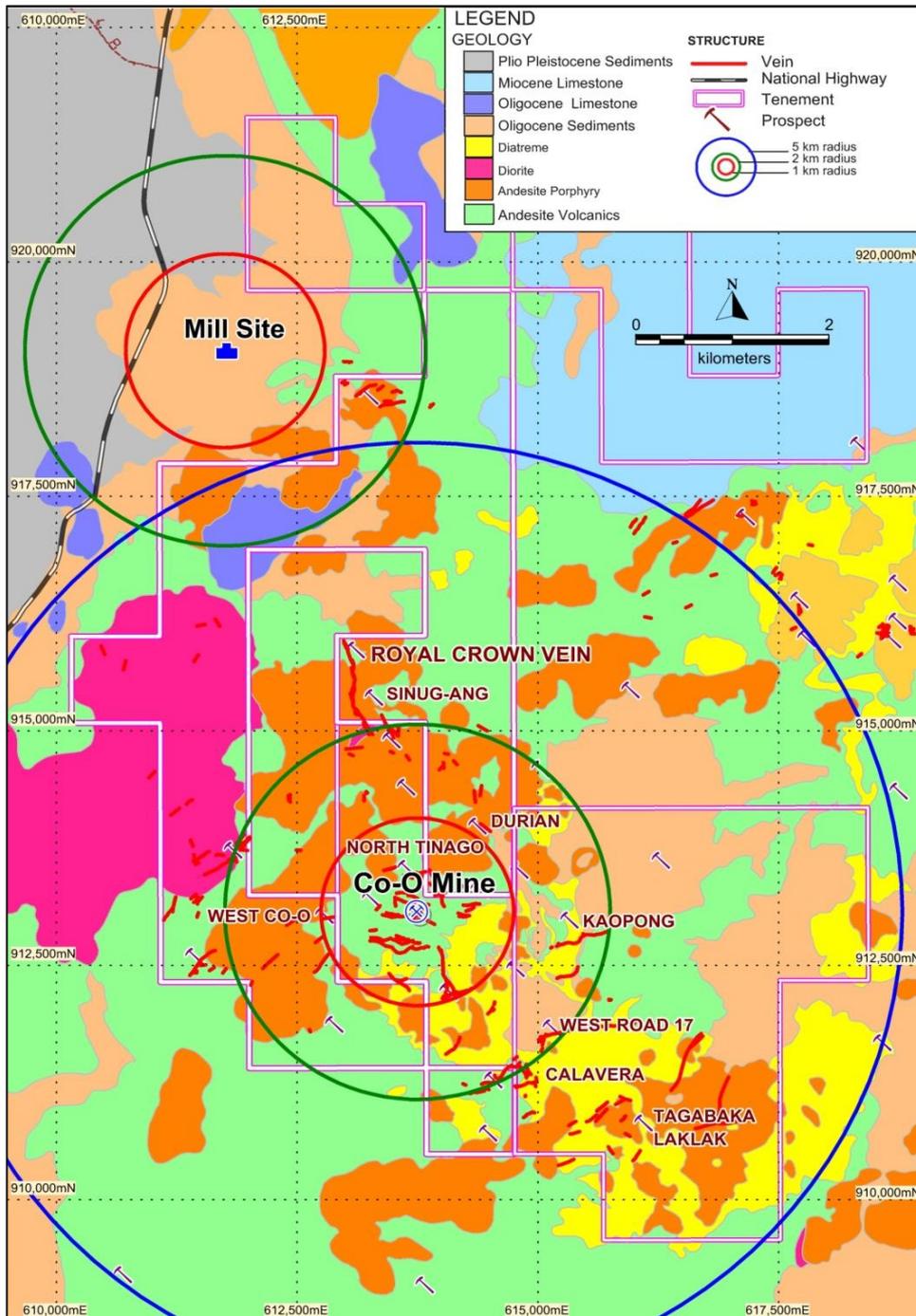


Figure 7: Updated geologic map of the the Co-O Mine District showing the location of Durian Prospect in relation to Co-O Mine and other prospects within.

## Royal Crowne Vein Prospect

The Royal Crowne Vein Prospect corresponds to a 200+ metre projected vein segment along the northern portion of the 1,500 metre long Sinug-ang vein system that has not been fully tested by drilling.

A two-phase, 22-hole drilling program for 6,020 metres commenced on 15 Aug 2018 to validate the continuity of mineralisation along the 500 metre long projected strike length of the Royal Crowne Vein. A total of six holes were completed with two ongoing holes, and cumulative metreage of 1,590 metres by the end of the Sep 2018 quarter.

A total of 297 drill core samples from four holes and preliminary core samples from a fifth have been sent for assay. Of these total samples, 24 returned significant grades above 1.0 g/t gold with peak grade of 1 metre at 87.32 g/t from 156 metres (SNG027). Two sub-parallel zones of vein-style mineralisation have been recognised with a projected strike length currently at about 150 metres.

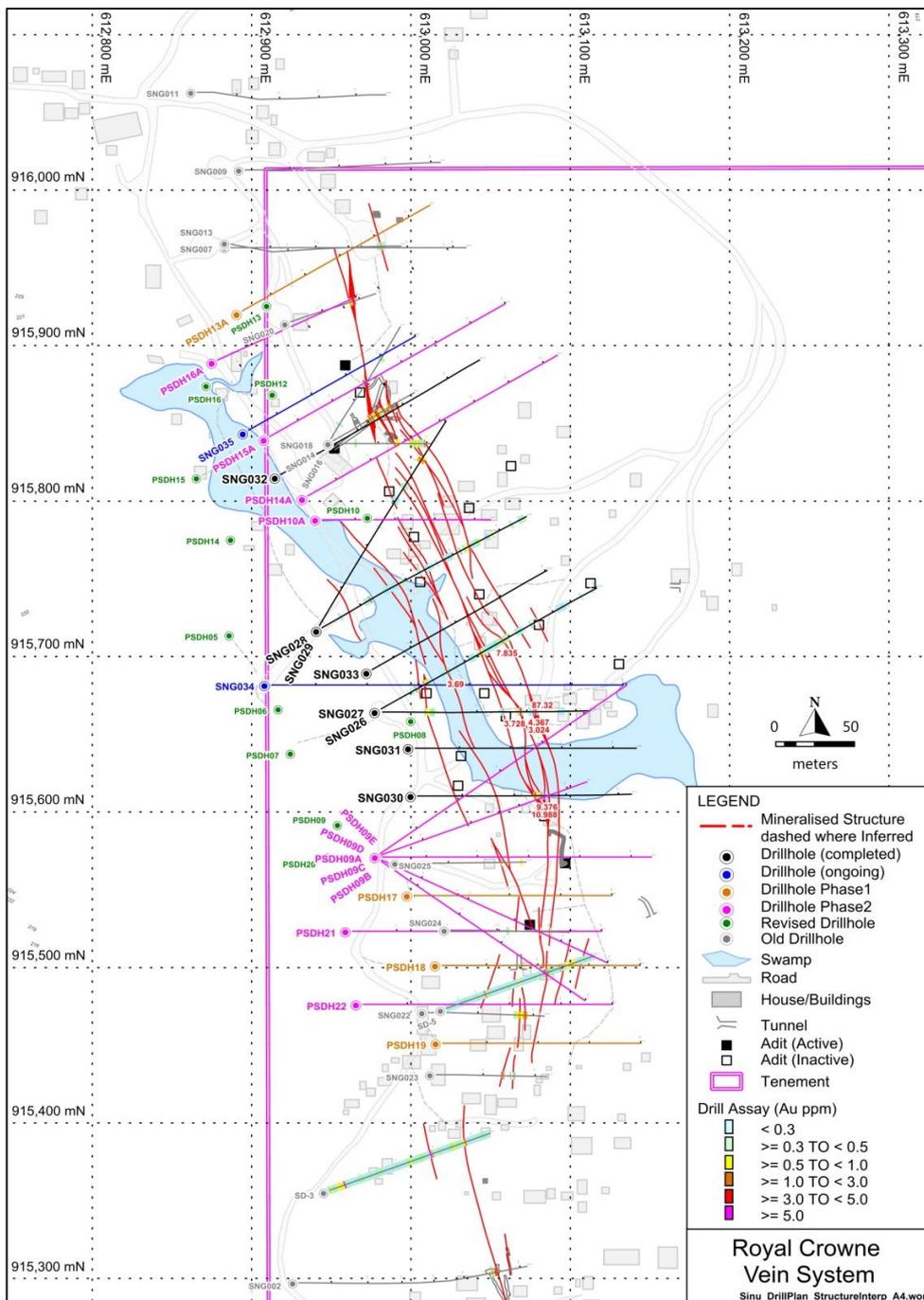


Figure 8: Map showing the location of high-grade small-scale mine workings and the projected undrilled segment of the Royal Crowne Vein in the Old Sinug-ang Area.

## Durian Prospect

The Durian Prospect is located about 1km north of the Co-O Mine (Figures 8 & 9) and is defined by an oblong-shaped moderate to high IP chargeability anomalous zone with coincident low resistivity anomalous zones. The geometry of the IP anomaly suggests the potential presence of a structurally-controlled vein-style mineralisation associated with a diatreme structure and/or shallow intrusion.

A six-hole scout drilling program for 2,500 metres is planned to test the east and west margin of the IP anomaly for the potential presence of vein-style mineralisation analogous to the Co-O Vein System. Three holes have been planned to test the eastern IP anomaly. Three planned holes at the western portion were put on hold pending resolution of access concerns with surface stakeholders.

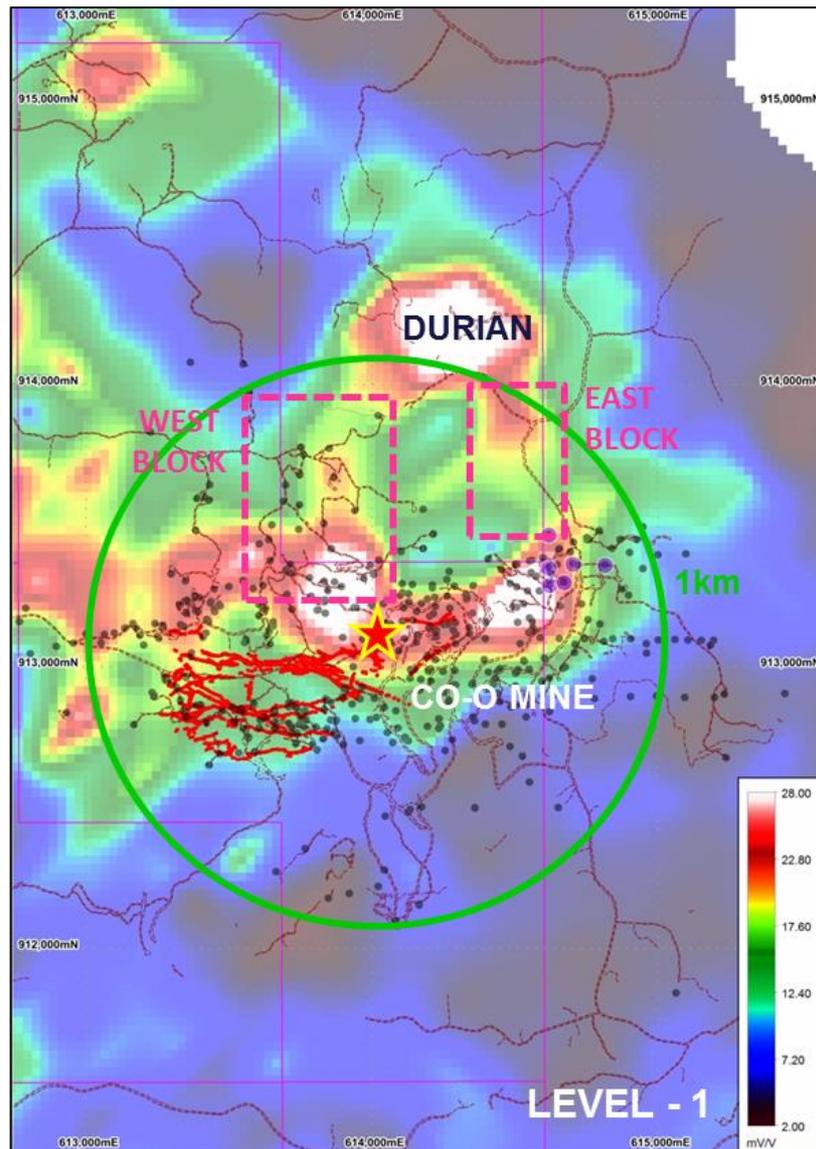


Figure 9: Map showing the IP chargeability anomaly within the Durian Prospect relative to Co-O Mine and vein deposit (projected at Level 1), and proposed areas to be drill-tested.

## Reconnaissance Exploration within MPSA 299

Field validation in the area focused on the roughly east-west trending 300 to 400 metres long Laklak Vein. However, assay results all returned grades below 1.0 g/t gold. Future work on this tenement ground will re-focus on the Kaopong and West Road 17 Veins located 2km from the Co-O Mine to re-assess their potential as drillable targets.

## REGIONAL EXPLORATION (NEW PROJECT GENERATION)

The compilation, screening and selection of potential new gold projects in the Asia Pacific region remains an ongoing activity.

### Epithermal Gold and Porphyry Cu-Au projects (Queensland, Australia):

The Company and its JV partner, Ellenkay Gold Pty Ltd (ABN 77 607 195 184), is currently working with the land holders to progress the required agreements to secure drill access.

Engagement with native title holders to prepare for clearance of the initial drill programs at both Mt Clark West (porphyry copper prospect) and Hill 212 (epithermal gold prospect) is also underway.

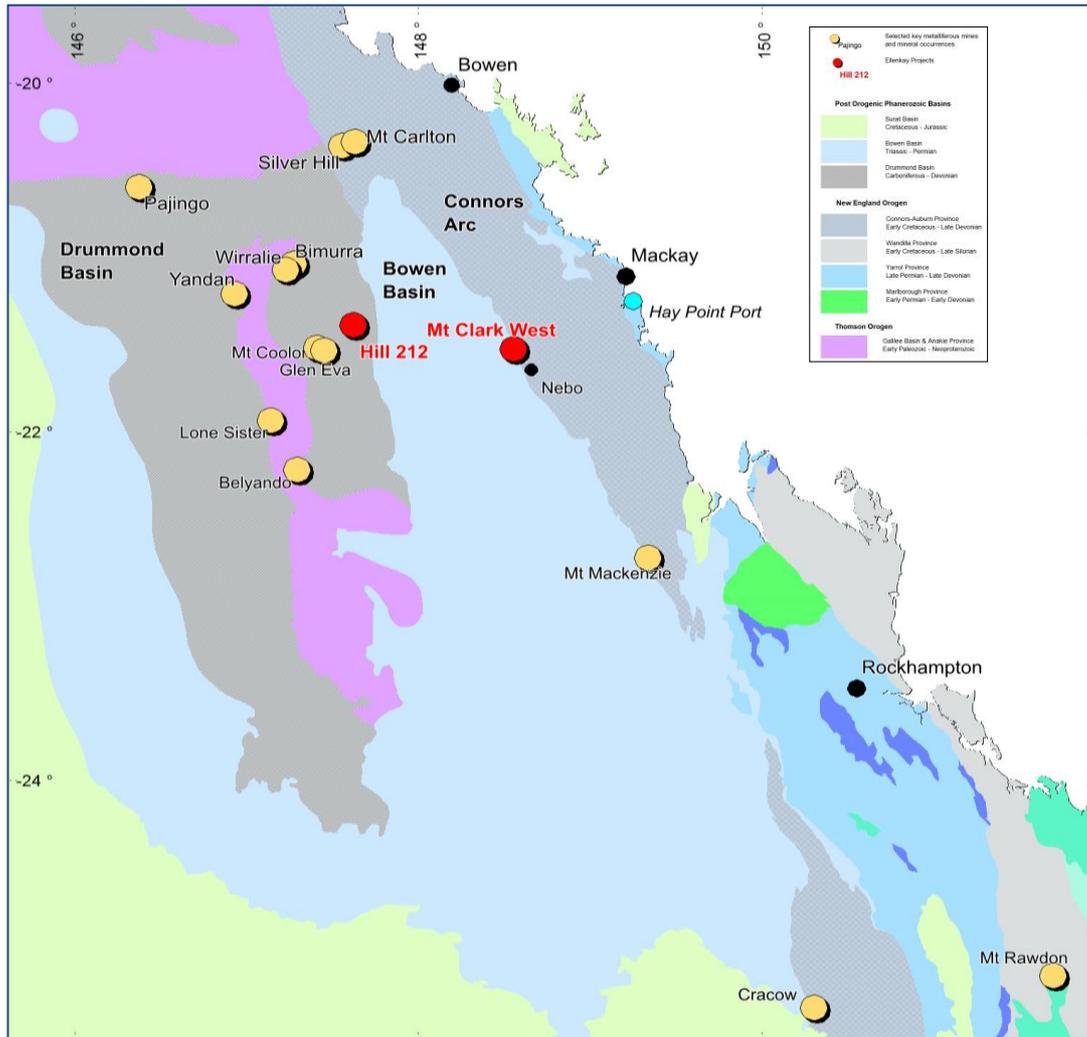


Figure 10: Location map showing the two projects (red dots)

Southern Geoscience Consultants, which completed all the post survey modelling for both the magnetic, IP and resistivity surveys, have completed an initial drilling plan to test the most prospective zones identified from their previous modelling for Mt Clark West.

At Hill 212 the JV has reviewed all data generated by previous holder Battle Mountain Mining and has incorporated it with the additional field work conducted by Ellenkay Gold in the last two years. This work program has identified initial drill targets to test the most prospective zones.

## **CORPORATE:**

As advised to the ASX on 3 Sep 2018, Non-Executive Director, Mr Peter Hepburn-Brown, passed away.

The Board and staff extend their deepest sympathies to Peter's family.

## **FINANCIALS** (un-audited)

As at 30 Sep 2018, the Company had total cash and cash equivalent in gold on metal account of approximately US\$11.8 million (30 June 2018: US\$15.1 million).

The Company sold 23,818 ounces of gold at an average price of US\$1,206 per ounce in the Sep 2018 quarter (Jun 2018 qtr: 22,435 ounces sold at an average price of US\$1,293 per ounce).

During the Sep 2018 quarter, the Company incurred:

- Exploration expenditure (inclusive of underground exploration) of US\$1.8 million (Jun 2018 qtr: US\$1.6M);
- US\$3.7 million on capital works (inclusive of new E15 Service Shaft) and associated sustaining capital at the mine and mill (Jun 2018 qtr: US\$5.5M);
- US\$6.9 million on continued mine development (Jun 2018 qtr: US\$6.4M); and
- Corporate overheads of US\$1.2 million (Jun 2018 qtr: US\$0.9M).

In addition to the expenses highlighted above, which form part of AISC of US\$1,126 per ounce for the Sep 2018 quarter, the Company also expended cash in the following areas during the quarter:

- Net decrease in creditors/borrowings of approximately US\$1.3 million;
- Net increase in warehouse inventory and receivables of approximately US\$0.2 million;
- Net movement of indirect value added tax (refundable in tax credits) of approximately US\$2.2 million; and
- Tax and interest charges totalling approximately US\$1.0 million.

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

### Medusa Mining Limited

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

Mr Llorca is General Manager, Geology and Resources, and is a full-time employee of Medusa Mining Limited, 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 (JORC)." Mr Llorca consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **DISCLAIMER**

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

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

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

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

# APPENDIX A

## Co-O Mine - JORC Code, 2012 Edition - Table 1 report

### Section 1. Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handled XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverized to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Drill (DD) core and stope face channel samples are the two main sample types. DD core samples: Half core samples for DD core sizes LTK60, NQ and HQ, and whole core samples for DD core sizes TT46.</li> <li>Stope and Development samples: Stope face channel samples are taken over stope widths of 1.5 to 3m, for both waste and mineralised material.</li> <li>DD drilling is carried out to industry standard to obtain drill core samples, which are split longitudinally in half along the core axis using a diamond saw, except for TT46 core. Half core or whole core samples are then taken at 1m intervals or at lithological boundary contacts (if &gt;20cm), whichever is least. The sample is crushed with a 1kg split taken for pulverization to obtain four (4) 250g pulp samples. A 30g charge is taken from one of the 250g pulp packets for fire assay gold analysis. The remaining pulp samples are retained in a secure storage for future reference.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>Drill core orientation is measured using the Ezy-Mark™ front-end core orientation tool.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measure taken to maximize sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>For each core run, total core length is measured with the recovery calculated against drilled length. Recovery averaged better than 95%, which is considered acceptable by industry standards.</li> <li>Sample recovery is maximised by monitoring and adjusting drilling parameters (e.g. mud mix, drill bit series, rotation speed). Core sample integrity is maintained using triple tube coring system.</li> <li>No known relationship has been observed to date between sample recovery and grade. Core recovery is high being &gt;95%. No sampling bias has been observed.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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 is recorded by geologists, then entered into a digital database and validated.</li> <li>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.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or call core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>All current drill core is sawn longitudinally in half along the core axis using a diamond saw to predetermined intervals for sampling. Cutting is carried out using a diamond saw with the core resting in a specifically designed cradle to ensure straight and accurate cutting.</li> <li>No non-core drill hole sampling has been carried out for the purposes of this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Development and stope samples are taken as rock chips by channel sampling of the mining face according to geological boundaries.</li> <li>The sample preparation techniques are to industry standard.</li> <li>The sample preparation procedure employed follows volume and grain size reduction protocols (-200 mesh) to ensure that a representative aliquot sample is taken for analysis. Grain-size checks for crushing and pulverizing are undertaken routinely.</li> <li>For PQ/PQ3, HQ/HQ3, NQ/NQ3 and LTK60 core, the remaining half core is retained for reference.</li> <li>Core sample submission sizes vary between 2-5kg depending on core size, sampling interval, and recovery. The assay sample sizes are considered to be appropriate for the style of mineralisation.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>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 &lt; 5g/t, and FA30-GRAV for Au grades &gt; 5g/t. Both sample preparation and analytical procedures are of industry standards applicable to gold deposits.</li> <li>A QAQC system has been put in place in the PMC Assay Laboratory since 2006. It has been maintained and continually improved up to the present. The quality control system essentially, utilises certified reference materials (CRMs) for accuracy determination at a frequency of 1:60 to 1:25. For precision, duplicate assays are undertaken at 1:20 to 1:10 frequency. Blanks are determined at 1:50 or 1 per batch. Samples assayed with lead button weights outside the accepted range of &gt;25 to &lt;35 grams, are re-assayed after adjustment of the flux.</li> <li>Inter-laboratory check assays with an independent accredited commercial laboratory (Intertek Philippines, Manila) are undertaken at a frequency of 1 per quarter. Compatibility of assay methods with the external laboratory is ensured to minimize variances due to method differences.</li> <li>The QAQC assessment showed that the CRMs inserted for each batch of samples, generally had accuracy within the acceptable tolerance levels. Duplicate assays generally returned assays within <math>\pm 20\%</math> MPRD for FY2016. Replicate assays of CRMs, showed good precision within &lt; 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.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>All drilling is diamond drilling and no twinning of holes has been undertaken. The majority of drilling is proximal to mine development and intersections are continually being validated by the advancing mine workings.</li> <li>Geological logging of drill core and drilling statistics are hand written and transferred to a digital database. Original logs are filed and stored in a secure office. Laboratory results are received as hardcopy and in digital form. Hardcopies are kept onsite. Digital data is imported into dedicated mining software programs and validated. The digital database is backed up on a regular basis with copies kept onsite.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>A local mine grid system is used which has been adapted from the Philippine Reference System of 1992 (PRS92).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Topographic and underground survey control is maintained using located SCS, which are located relative to the national network of geodetic control points within 10km of the project area. The Company's SCS 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.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Sufficient drilling and underground face sampling has been completed to support Mineral Resource and Ore Reserve estimation procedures.</li> <li>Sample compositing has not been applied to exploration data for the purposes of reporting.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is hosted within narrow, typically &lt;2m wide quartz veins. Orientations of the veins are typically E-W, with variations from NE-SW to NW-SE, with dips varying from flat-lying to steep dipping to the 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.</li> <li>Due to the nature of this style of mineralisation and the limited underground access for drilling, drilling may not always intersect the mineralisation or structures at an optimum angle, however this is not considered to be material. A good understanding of the deposit geometry has been developed through mining such that it is considered that any sampling bias is recognised and accounted for in the interpretation.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>In September 2018, Intertek Testing Services Phils, Inc. conducted and reported on an independent review of available QA/QC data. There were procedural issues identified by the audit that were immediately rectified.</li> <li>The Laboratory is accredited to ISO 14001: 2015.</li> <li>A yearly independent audit by a third party is scheduled in May 2019.</li> <li>Since October 2016, the Philsaga laboratory was visited several times by Mr JP Llorca. 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.</li> <li>The accuracy of the gold determinations was 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.</li> <li>Sampling techniques and database management is to industry standard.</li> </ul>

## Section 2. Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Aside from the prescribed gross royalties’ payable to the Philippine government (2%) and the Indigenous People (1%), no other royalties are payable on production from any mining activities within the MPSA.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgement and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not distract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>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 publicly 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.</li> <li>Easting, northing and RL of the drillhole collars are in both the local mine grid, PRS92 and UTM WGS84 Zone 51 coordinates.</li> <li>Dip is the inclination of the hole from the horizontal. For example, a vertically down drilled hole from the surface is - 90°. Azimuth is reported in magnetic degrees, as the direction toward which the hole is drilled. Magnetic North &lt;-1° west of True North.</li> <li>Down hole length is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of a mineralised intersection as measured along the drill trace.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade result, the procedure used for aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No top cutting of assays is done for the reporting of exploration results.</li> <li>Short lengths of high-grade assays are included within composited intercepts.</li> <li>Metal equivalent values are not reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The orientation of the veins is typically E-W, with variations from NE-SW to NW-SE with dips varying from flat-lying to steep to the 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.</li> <li>All drill results are downhole intervals due to the variable orientation of the mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported these should include but not limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>A longitudinal section is included showing significant assay results locations (Figures 4 &amp; 5). Tabulated intercepts are included as Table II.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No other substantive exploration data has been acquired or considered meaningful and material to this announcement.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions of depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling area, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Recent drilling focused on the eastern geological limits of GHV from Levels 9 to 15 with less than favourable results due to the disruptive diatreme. However, the GHV shows mineralisation at L16. Also, from L-9 to 15, the northern veins indicate the favourable mineralisation.</li> <li>Mineralisation is still open to the east down plunge, 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.</li> </ul>

## APPENDIX B:

### Tenement Schedule (as at 30 Sep 2018)

Name	Tenement ID	Registered Holder	Company's Interest at		Royalty <sup>1</sup>	Area (hectares) at	
			30 Jun 2018	30 Sep 2018		30 Jun 2018	30 Sep 2018
Co-O Mine	MPSA 262-2008-XIII	PMC	100%	100%	-	2,539	2,539
	MPSA 299-2009-XIII	PMC	100%	100%	-	2,200	2,200
Co-O	APSA 00012-XIII	BMMRC	100%	100%	-	340	340
	APSA 00088-XIII	Phsamed	100%	100%	-	4,742	4,742
	APSA 00098-XIII	Philcord	100%	100%	1% NPI	507	507
	APSA 00099-XIII	Philcord	100%	100%	1% NPI	592	592
Saugon	EP 017-XIII	PMC	100%	100%	-	3,132	3,132
	EPA 00066-XIII	PMC	100%	100%	-	6,769	6,769
	EPA 00069-XIII <sup>2</sup>	Phsamed	100%	100%	-	2,519	2,519
	EPA 00087-XIII <sup>2</sup>	PMC	100%	100%	-	87	87
Tambis	MPSA 344-2010-XIII	Philex	100%	100%	7% NSR	6,208	6,208
Apical	APSA 00028-XIII	Apmedoro	Earning 70% (JV)		-	1,235	1,235
Corplex	APSA 00054-XIII	Corplex	100%	100%	3% NSR	2,118	2,118
	APSA 00056-XIII	Corplex	100%	100%	-	162	162
	APSA 00077-XIII	Corplex	100%	100%	4% GSR	810	810
	EPA 00186-XIII	Corplex	100%	100%	3% NSR	7,111	7,111
Sinug-ang	EPA 00114-XIII	Salcedo/PMC	100%	100%	-	190	190

#### Notes:

1. Royalties payable to registered holders, aside from the prescribed royalties' payable to the Philippine government and the indigenous people.
2. Awaiting for approval and confirmation by MGB of area reduction.

#### ABBREVIATIONS:

##### Tenement Types

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

##### Registered Holders

PMC	Philsaga Mining Corporation	Philex	Philex Gold Philippines Incorporated
BMMRC	Base Metals Mineral & Resources Corporation	Das-Agan	Das-Agan Mining Corporation
Phsamed	Phsamed Mining Corporation	Apmedoro	APMEDORO Mining Corporation
Philcord	Mindanao Philcord Mining Corporation	Salcedo	Neptali P. Salcedo
Corplex	Corplex Resources Incorporated		

##### Royalty

NPI	Net Profit Interest	GSR	Gross Smelter Royalty
NSR	Net Smelter Royalty		