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Company	Medusa Mining Limited
TIDM	MML
Headline	Co-O Mine Geology and Mineralisation Update
Released	09:15 14-Aug-2012
Number	9681J09

RNS Number : 9681J
Medusa Mining Limited
14 August 2012

Medusa Mining Limited
("Medusa" or the "Company")

Co-O Mine Geology and Mineralisation Update

14 August 2012

Medusa Mining Limited ("Medusa" or the "Company"), through its Philippines operating company Philsaga Mining Corporation, advises that

1. The Conceptual Exploration Target** of 3,000,000 ounces in 9,800,000 tonnes to 7,000,000 ounces in 23,500,000 tonnes using a grade range of 9 to 11 g/t gold with a preferred average grade of 10 g/t gold remains valid. The current deposit size is approximately 2,520,000 comprising current resources and past production. Within the resource model area there are currenly 979 drill hole intersections not yet included in the model.

2. Work is underway on zones of multiple epithermal and stockwork veining which may have bulk mining potential.

Examples include:

Hole Number	**Width (metres)**	**Grade (uncut) (g/t gold)**
EXP 070	40.05	2.91
EXP 073	22.50	4.46
EXP 101	15.05	19.64
EXP 121	18.45	9.35
EXP 124	14.70	4.05
EXP 134	10.75	12.45
EXP 140	17.30	4.17

3. Major advances have been made during the year in understanding the Co-O Mine geology as summarised below:

(i) The andesitic volcanic sequence at Co-O has been intruded by several andesitic to dioritic stocks;

(ii) The stocks and some of the volcanics were then over-printed in parts by porphyry-related copper-gold mineralisation with grades of 0.1 to 0.2% copper and 0.1 to 0.2 g/t gold, eg, EXP089: 198.65 metres at 0.13 % copper and 0.23 g/t gold, and EXP127: 789.60 metres at 0.12 % copper and 0.15 g/t gold. The source porphyry intrusive for this mineralisation has not yet been located;

(iii) The volcanic - intrusive complex was then cut by a large, funnel-shaped or flaring diatreme breccia pipe approximately 1,500 metres in diameter at surface that is well-preserved. The diatreme exploded through to the original surface depositing maar material peripheral to and on top of the diatreme;

(iv) The Co-O epithermal vein mineralisation post-dates the diatreme and maar material, and, in places, is superimposed on the earlier porphyry-related mineralisation. The veins generally die out within a few metres of penetrating the diatreme breccia due to its poor "cracking" charcteristics;

(v) The diatreme breccia flare and the associated maar deposits obscure vein extensions to the east, and some veins immediately adjacent to the Oriental Fault. The veins continue uninterrupted under the northern flare and maar deposits and are open to the east;

(vi) The implications of the diatreme recognition and delineation are that there is no longer the need to invoke substantial displacement along the Oriental Fault, and that the strong vein mineralisation should continue to similar depths on the west side of the Oriental Fault as that already delineated on the east side.

Peter Hepburn-Brown, Managing Director commented:

"As we continue to extend the size of the area of mineralisation, our confidence in the validity of the Conceptual Exploration Target size is enhanced. This year has again justified that level of confidence.
We have made major advances in the understanding of the Co-O Mine geology and potential during the year. This has been highlighted by the identification of extensive porphyry-related copper-gold mineralisation with the potential that it is connected to a major primary porphyry copper-gold source in the immediate vicinity.

We are currently reviewing and re-interpreting significant zones of multiple epithermal veining and stockworks which will be investigated for bulk mining techniques.
It is still very apparent that the Co-O vein system is open in all directions providing potential for resource inhancements for many years."

** The potential target size and grade is conceptual in nature, and there has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being defined as a mineral resource.

Co-O MINE CONCEPTUAL TARGET **

Drilling since the estimate of the Conceptual Exploration Target announced on 18 January 2010 has continued to expand the vein system, as supported not only by the 2012 global resource estimate of 2,019,000 ounces, but also by the 979 drill hole intersections >2g/t gold over >0.2 metres which are not yet included in the resource model.

The range for the Conceptual Exploration Target remains well supported at 3,000,000 ounces in

9,800,000 tonnes to 7,000,000 ounces in 23,500,000 tonnes using a grade range of 9 to 11 g/t gold with a preferred average grade of 10 g/t gold as shown in Table III.

The combination of past production of approximately 510,000 ounces and the current global resource of 2,019,000 ounces indicates the deposit size is approaching the lower end of the Conceptual Exploration Target size range.

The additional support for this target is listed below:

- The total ounces already accounted for by the current global resource and past production is approximately 2,529,000 ounces.

- An increase in strike length by 400 metres to 2,000 metres as supported by drilling results available in various recent drilling announcements.

- As shown on the composite longitudinal projection in Figure 1 (please see link at the end of this announcement), all new drill holes since 30 June 2011 in the deposit with assays of ≥0.2 metres at ≥2 g/t gold up to 30 June 2012 have been added and support the mineralisation continuing to depth. The assay support levels at depth is increasing as drilling progresses with the deepest intersection to date recorded at 1,073 metres below surface of 1.0 metre at 10.39 g/t gold.

- Figure 2 (please see link at the end of this announcement) shows a longitudinal projection of the resource model and the 979 intersections within the projection which have not yet been included in the 2012 model. This will add significant resources as more data and interpretations improve the continuity of the intersections.

Figure1. (please see link at the end of this announcement) Composite longitudinal projection of the Co-O Mine showing the diatreme and all drill hole intersections below Level 6

Figure 2. (please see link at the end of this announcement) Composite longitudinal projection of the Co-O Mine showing the diatreme and the 979 drill holes not yet included in the resource model.

Table I. Co-O Mine Conceptual Exploration Target matrix **

Strike length (metres)	**Depth below Level I (metres)**	**Aggregate vein width (metres)**	**Conceptual tonnes**	**Gold grade (g/t)**	**Conceptual contained ounces**
1,500	500	5	9,825,000	10	3,159,000
		8	15,720,000	10	5,054,000
		10	19,650,000	10	6,318,000
	750	5	14,737,000	10	4,738,000
		8	23,580,000	10	7,581,000
		10	29,475,000	10	9,477,000
	1000	5	19,650,000	10	6,318,000
		8	31,440,000	10	10,109,000
		10	39,300,000	10	12,636,000
2,000	500	5	13,100,000	10	4,212,000
		8	20,960,000	10	6,739,000
		10	26,200,000	10	8,424,000
	750	5	19,650,000	10	6,318,000
		8	31,440,000	10	10,109,000
		10	39,300,000	10	12,636,000
	1,000	5	26,200,000	10	8,424,000
		8	41,920,000	10	13,479,000
		10	52,400,000	10	16,848,000

Notes:

(i) Approximately 510,000 ounces already mined from the deposit;
(ii) SG of 2.62 used for all estimates
(iii) Tonnes and ounces estimates rounded down to nearest 1,000; and
(iv) Highlighted cases indicate most geologically reasonable based on current knowledge

** The potential target size and grade is conceptual in nature, and there has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being defined as a mineral resource.

Co-O MINE LOCAL GEOLOGY

The Co-O Mine area is underlain by a probable Eocene (56 to 34 million years) to Oligocene (34 to 23 million years) age, gently north-dipping sequence of basaltic andesitic to andesitic volcanic flows and minor volcaniclastics (Fig. 3).

Figure 3. (please see link at the end of this announcement) Co-O Mine area interpreted geological map showing section lines A-A' and B-B'.

This sequence is intruded by Oligocene andesitic to dioritic stocks and dikes dated at 32 million years old and cut by north-trending steep faults with the Oriental Fault identified as the most significant fault to date (Sonntag & Hagemann, 2010).

There are three large outcropping intrusives, namely the Nangka, Road 17 and Pinayungan Intrusives, located east and southwest of the Co-O vein system, and several smaller ones in the vicinity. The Nangka and Pinayungan Stocks are in place while the rest are "floating" in the Co-O Diatreme including the large Road 17 Mega Block as explained below. At depth, Nangka Stock enlarges beneath the Co-O Diatreme to become a 400 metres east-west by >800 metres north-south body.

Porphyry-related copper-gold mineralization is hosted only in the Nangka Stock and the surrounding volcanics (Figs 4 to 6).

After a period of substantial uplift and erosion, a diatreme/maar complex explosively intruded all the above rock types (Figs. 3 to 6). Its presence explains the general absence of near surface epithermal veins east of the Oriental Fault instead of invoking a large down thrown movement of the zone as the veins are masked by the flare of the diatreme.

Note: diatremes are generally caused by the explosive release of gases and fluids from the catastrophic mixture of ground water from the surface and magma at depth.These gases and fluids force their way to the surface, causing pipe-like columns of broken or brecciated rock that flare outwards near surface producing funnel shaped features that are often concave on the surface after the explosive activity has ceased. The clouds of rock fragments and dust that are released settle around the annulus of the diatreme and also on top of the diatreme. If the diatreme surface remains concave or a natural depression, younger sediments will commonly accumulate in the depression, frequently under a lake that forms in the depression.

Figure 4. (please see link at the end of this announcement) North-south cross section of the interpreted geology along section line A-A looking west.

Figure 5. (please see link at the end of this announcement)East-west longitudinal projection of the interpreted geology along section line B-B' looking north.

The Co-O Diatreme is upward flaring in all directions towards the surface, measuring about 1.5 kilometres in diameter, and narrows down at depth like a funnel of unknown dimensions. Its root is probably located at the southern part of the Road 17 Intrusive. It is inferred that the diatreme may

easily reach 1 kilometre or more in depth as indicated by its surface dimension wherein the vertical extent is more than its lateral extent. The maar volcanics, which are the extrusive equivalent of the diatreme and deposited by the explosive activity of the diatreme, are still largely intact in the eastern and partly in the northern fringe of the diatreme and some isolated preserved outcrops to the west side of the Oriental Fault. The maar rocks consist of andesitic crystal lithic tuffs, with some dacitic facies, sometimes exhibiting crude to laminated subhorizontal bedding, minor intercalations of tuff breccias, accretionary lapilli tuffs and thinly bedded carbonaceous tuffaceous mudstones (Photos 1 and 2 (please see link at the end of this announcement)). The presence of accretionary lapilli tuff would indicate base surge deposits which were emplaced by violent subhorizontal blasts emanating from the diatreme's throat.

Photo1. (please see link at the end of this announcement) Contact of the upper andesite porphyry to diorite megablock with the underlying diatreme (Hole EXP093: 101 to110.55 metres).

Mega Blocks of the maar tuff and intrusive are floating in the diatreme representing fallen blocks and roof pendants in the upper part of the diatreme. The largest mega-block is the Road 17 Mega Block, about 400 metres wide by 800 metres long, located at the eastern portion of the diatreme and which is exposed on the surface (Figs 3 to 5 and Photo 1(please see link at the end of this announcement)).

After the emplacement of the diatreme/maar complex, mineralised hydrothermal breccias followed by epithermal gold veins were formed, overprinting the older porphyry-related copper-gold mineralisation. The veins generally strike west-northwest to due west and dip 55 to 75° to the north for all veins except the Central Vein which is vertically dipping.

Post-mineral re-activation of pre-existing north-trending faults, represented by the Oriental Fault and other sub-parallel faults, cut the epithermal veins, showing dextral (right lateral strike-slip) movement with a diagonal component (Standing & Noble, 2011). This faulting displaces the veins laterally to the south and downward by a few metres to several tens of metres.

After another episode of uplift and erosion, a thin veneer of polymictic conglomerate to a maximum thickness of about 30 metres, was deposited on top of the diatreme/maar complex (Fig. 3). The conglomerate consists of rounded to subangular clasts of all the pre-existing rocks including rare feldspar porphyry intrusive (which is common in the Tambis area), epithermal vein material, and petrified and young carbonised wood (Photo 2 (please see link at the end of this announcement)). This conglomerate contains alluvial gold.

Photo 2. (please see link at the end of this announcement) Polymictic conglomerate with carbonised wood and quartz vein clasts.

MINERALISATION

There are two mineralisation styles in the Co-O Mine area, namely the:

1. earlier or older porphyry-related copper-gold style, and
2. later or younger intermediate sulphidation epithermal gold-rich quartz vein style in the Co-O Mine

Since the epithermal gold veins are usually emplaced within about 1 kilometre from the paleo-surface while a porphyry copper system is emplaced at least 2 kilometres from the paleo-surface, there has been substantial uplift and passage of time between the two mineralisation events since the former overprinted the latter. Also, very little erosion of the epithermal veins has taken place since the older near-surface maar facies is still essentially intact. This is corroborated by the recent fluid inclusion study of Hagemann & Grignola (2012) which concluded that the paleo-depth of epithermal vein formation is about 61 to 295 metres.

Porphyry-related Copper-Gold Mineralisation

The porphyry-related copper-gold mineralisation is generally weak and is hosted in the Nangka Intrusive and the surrounding volcanics (Fig. 4). The mineralisation is not classical porphyry copper-gold since the alteration is chloritic to propylitic instead of the conventional potassic, sericitic and/or sericite-chlorite, and due to the local presence of lead-zinc sulphides together with chalcopyrite. Also the Nangka Intrusive is still considered a pre-mineral host rock and not the causative intrusive, i.e. the intrusive that brought about the mineralisation. This is evidenced by the fact that mineralisation is irregular in distribution within the stock, and consequently is currently termed "porphyry-related" copper-gold mineralisation.

The mineralisation occurs in four irregularly shaped discontinuous zones along a northerly trending corridor about 650 metres east-west by 850 metres north-south. The northern and southern mineralised zones are more developed than the centrally located ones. Also, the mineralised zones are positioned deeper towards the south. Figure 4 (please see link at the end of this announcement) shows that the northern mineralised zone lies between the surface and mine Level 7, while the southern zone is generally at mine Level 4 to below Level 16, and that the mineralisation is confined mainly at the northern and southern margins of the stock (Fig. 4). The northern mineralised zone is 250 to 400 metres wide by 400 metres vertically while the southern zone is 150 to 300 metres wide by >600 metres vertically. Vertical hole EXP127 on Figure 4 (please see link at the end of this announcement) shows that the mineralisation is likely still open at >1 kilometre below the surface as indicated in Table II.

Table II. Examples of porphyry-related copper-gold mineralisation intersections using 1g/t gold upper cut

Hole ID	East	North	Dip (°)	Azimuth (°)	From (m)	Interval (m)	% Cu	g/t Au (cut)
EXP089	614542	912901	-55	180	328.10	198.65	0.13	0.23
EXP127	614551	912592	-0	-90	326.10	789.60	0.12	0.15

The copper-gold mineralisation is characterised by sheeted to multi-directional <1 to 2 mm grey quartz-sulphide veinlets and rare sulphide fracture fills and disseminations. Veinlet density is about 2 to >10 per metre. The sulphides consist of <1 to 3 % pyrite, <0.1 to 0.5 % chalcopyrite, and sporadic occurrence of sphalerite and galena. These veinlets are overprinted by epithermal veins in some areas as shown in Photo 3 (please see link at the end of this announcement).

Photo 3. (please see link at the end of this announcement) Chloritic altered andesite porphyry intrusive with porphyry-related 2-3mm wide greyish quartz-sulphide veinlets (0.14 to 0.18% Cu & 0.14 to 0.23 g/t Au) overprinted by a 200 mm wide milky epithermal quartz vein (98.76 g/t Au) and other narrower ones. (Hole EXP089: 377.75 to 382.35 metres).

The porphyry-related copper-gold mineralization is generally weak. Values range from 0.11 to a maximum of 0.31 % Cu and 0.11 to 0.24 g/t Au with a Cu:Au ratio of about 1:1 to 1:2.

It is the presence of epithermal gold veins/stockworks that increases the gold grade of the overprinted porphyry-related copper-gold mineralisation. Thirty eight EXP holes containing wide zones of both porphyry-related copper-gold and epithermal gold veins have been identified to date, some of which are shown in Table III. Other potential wide multiple vein zones outside the copper zone have also been identified, These zones will be considered for underground bulk mining as additional data becomes available and interpretation work progresses.

Table III. Examples of EXP holes with wide mineralisation zones using a 2 g/t Au intersection boundary cut-off

Hole	**East**	**North**	**Dip (°)**	**Azimuth (°)**	**From (m)**	**Interval (m)**	**g/t Au (uncut)**
EXP067	614484	913297	-50	160	561.15	11.65	3.27

EXP070	614398	913159	-50	160	444.45	40.05	2.91
					542.40	7.75	4.06
EXP072	614503	912978	-50	180	316.60	12.80	3.39
					390.00	9.80	2.11
EXP073	614271	913339	-50	160	780.30	22.50	4.46
EXP074	614212	913281	-50	160	571.20	15.20	2.70
EXP081	614349	912938	-50	180	231.50	12.10	2.66
EXP089	614542	912901	-55	180	340.85	11.70	3.99
EXP095	614066	913152	-47	160	490.70	12.05	2.30
					529.00	14.15	2.29
					598.20	21.80	2.64
EXP101	613838	912888	-47	190	387.70	15.05	19.64
EXP120	614586	913271	-50	160	474.40	15.15	2.49
EXP121	614551	912992	-55	180	568.65	18.45	9.35
EXP124	614549	913123	-52	160	452.05	14.70	4.05
EXP134	614604	913032	-65	180	815.70	10.75	12.45
EXP140	614659	913216	-54	180	484.05	17.30	4.17

Notes:

(i) Intersection widths are downhole drill widths not true widths;
(ii) Assays denoted by are by Philsaga Mining Corporation's laboratory;
(iii) Grid coordinates based on the Philippine Reference System 92.

Epithermal Gold Mineralisation

The intermediate sulphidation epithermal gold mineralisation has overprinted the porphyry-related copper-gold mineralisation.

Initiation of the epithermal system is represented by structurally controlled, discontinuous, and commonly narrow <1 to 5 metre wide hydrothermal breccias which are sometimes mineralised but generally <1 g/t gold. A large barren hydrothermal breccia body, 75 metres by 270 metres, has been recognised at the south-western portion of the area (Fig. 3).

The hydrothermal breccias were followed by the formation of the main stage well-mineralised epithermal quartz veins which occasionally penetrated the edges of the diatreme/maar complex and sometimes cut the hydrothermal breccias. It is clear that the epithermal gold veins prefer the competent pre-breccia rocks which crack easily and cleanly compared with the diatreme which is incompetent and has poor cracking characteristics. The exceptions are the Ka Opong and Road 17 veins which clearly cut the upper part of the maar volcanics and where test drilling of these veins within the maar rocks has so far located only low grade gold values.

The relationship of the epithermal gold veins and the diatreme in the mine on Level 6 is shown in Figure 6. (please see link at the end of this announcement)

Figure 6. (please see link at the end of this announcement) Co-O mine Level 6 geology showing the outline of the diatreme breccia, the porphyry-related copper zones and epithermal gold veins from the resource model. Section lines A-A' and B-B' marked.

The epithermal quartz veins are dominantly westerly trending and sub-vertical, with lesser 40 to 50º dipping veins. In summary, some of the vein characteristics are:

- the veins are polyphasal exhibiting massive, banded and vein breccia textures;
- the high gold grades are associated with crustiform-colloform banding; and
- the sulphides comprise mainly pyrite, <1 to 5 %, and minor sphalerite, chalcopyrite, galena.

Fluid inclusion studies on mine vein samples during the year concluded:

- the temperature of formation was ~ 210 to 280° C and within approximately 60 to 300 metres below the paleo-surface;
- the fluid salinities were generally low, i.e. 0 to 6.7 wt % NaCl equivalent; and
- that the above ranges fall well within the epithermal range of deposition.

Alteration types identified are:
- silicic (quartz ± illite-calcite) - confined to vein zones and hydrothermal breccias;
- argillic (illite ± quartz-calcite) - surrounds the veins - millimetres to hundreds of metres; and
- chloritic to propylitic (chlorite ± epidote ± smectite-calcite) - increases and finally dominates at depth.

At surface, the mapped alteration shows that the:
- veins are within a laterally extensive mushroom-shaped argillic envelope which is,
- in excess of 1.5 km x 1.5 km in area, and
- clearly associated with gold vein mineralisation;
- outlying chloritic to propylitic zone is overprinted by argillic alteration; and
- propylitic zone is considered to be regional in extent, i.e. pre-mineral.

The alteration patterns at depth are:
- the argillic envelope abruptly tapers down along the veins until only a few metres to millimetres wide;
- the chloritic to propylitic alteration zone increases and finally dominates at depth; and
- there appears to be no identifiable pattern between the chloritic and propylitic zones.

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Information in this report relating to Exploration Results has been reviewed and is based on information compiled by Mr. Geoff Davis, who is a member of The Australian Institute of Geoscientists. Mr. Davis is the Non-Executive Chairman of Medusa Mining Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a "Competent Person" as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Davis 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 announcement may contain 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.

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