



**MEDUSA**

# QUARTERLY ACTIVITIES REPORT

## PERIOD ENDED

### 31 MARCH 2011

#### Snapshot of Medusa:

- ❑ Un-hedged, low cost, dividend paying gold producer focused on organic growth in the Philippines
- ❑ 5 years growth path to production of 400,000 ozs per year
- ❑ Growth underpinned by strong cashflow from Co-O Mine (narrow vein underground)
  - FY 2010/11: revised target 102,000 ozs at cash costs circa US\$190/oz
  - FY 2011/12: target 120,000 to 130,000 ozs at cash costs circa US\$190/oz
- ❑ Current Mineral Resources comprise
  - Co-O Mine: Indicated 603k ozs at 13.2 g/t gold; Inferred 898k ozs at 9.6 g/t gold
  - Bananghilig: Inferred 650k ozs at 1.3 g/t gold
- ❑ Current Probable Reserves : Co-O Mine 505k ozs @ 10.7 g/t gold
- ❑ Co-O Mine Resources and Reserves to be maintained at current levels
- ❑ Conceptual exploration target size \*\* of Co-O Mine of 3 to 7 million ozs
- ❑ Excellent exploration upside: high grade vein and disseminated bulk gold targets, plus seven copper targets
- ❑ 820 km<sup>2</sup> of tenements and exploration budget for FY 2010/11 of US\$21M

#### Board of Directors:

**Peter R. Jones** (Non-executive Chairman)

**Geoffrey Davis** (CEO)

**Peter Hepburn-Brown** (COO)

**Roy Daniel** (CFO)

**Robert Weinberg** (Non-executive Director)

**Andrew Teo** (Non-executive Director)

#### Capital Structure:

Ordinary shares: 188,233,911

Unlisted options: 750,000

#### Listings:

**ASX and LSE** (Code: MML), **TSX** (Code: MLL)

#### Address and Contact Details:

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#### OVERVIEW:

##### Co-O MINE PRODUCTION & DEVELOPMENT

- New Co-O plant with capacity for 200,000 ounces per year (750,000 tonnes per year) permitting in progress, design and supervising engineers appointed
- Quarterly production of 25,114 ounces at an average recovered grade of 11.58 g/t at cash cost of US\$191 per ounce
- Saga Shaft: revised plan to Level 7 depth, accelerated development commenced, shaft currently at 32 metres, temporary headframe erected
- New Level 1 adit advanced to 65 metres

##### Co-O MINE & REGIONAL DRILLING

- Discovery of new wide high grade vein below Level 5
- Drilling is continuing with six surface and four underground rigs.
- Results include 2.00 metres at 219.70 g/t gold, 0.80 metres at 42.33 g/t gold, 4.80 metres at 13.84 g/t gold, 9.65 metres at 12.58 g/t gold and 13.10 metres at 47.81 g/t gold

##### BANANGHILIG DEPOSIT

- Resource validation drilling continuing with two rigs and extensional drilling with four rigs
- Regional mapping continuing

##### SAUGON PROJECT

- Drilling with three rigs continuing

##### TENEMENTS

- Lingig & Tambis MPSAs 343, 344-2010-XIII resp. and EPs 030 & 031-XIII have been granted

##### FINANCIALS & CORPORATE

- Total cash and cash equivalent in gold on metal account at end of quarter of approximately US\$92.4 million
- An interim dividend of A\$0.05 per share was paid to shareholders on 23 March 2011

\*\* 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. Refer to Stock Exchange announcement dated 18 January 2010.

## PROJECT OVERVIEW

The locations of the Company's projects are shown on Figures 1 and 2.

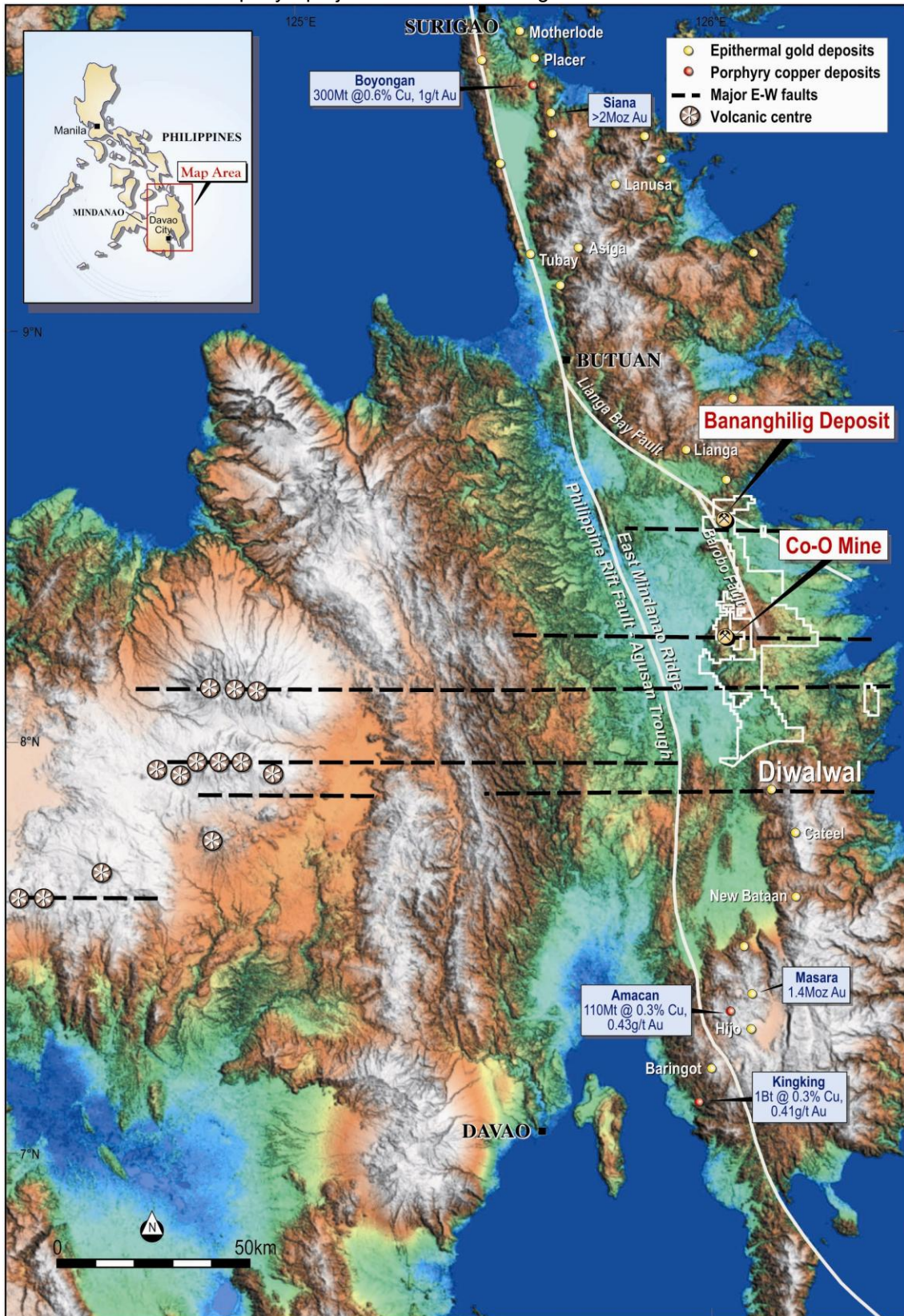


Figure 1. Location diagram showing the Company's tenement areas and prominent East-West structures

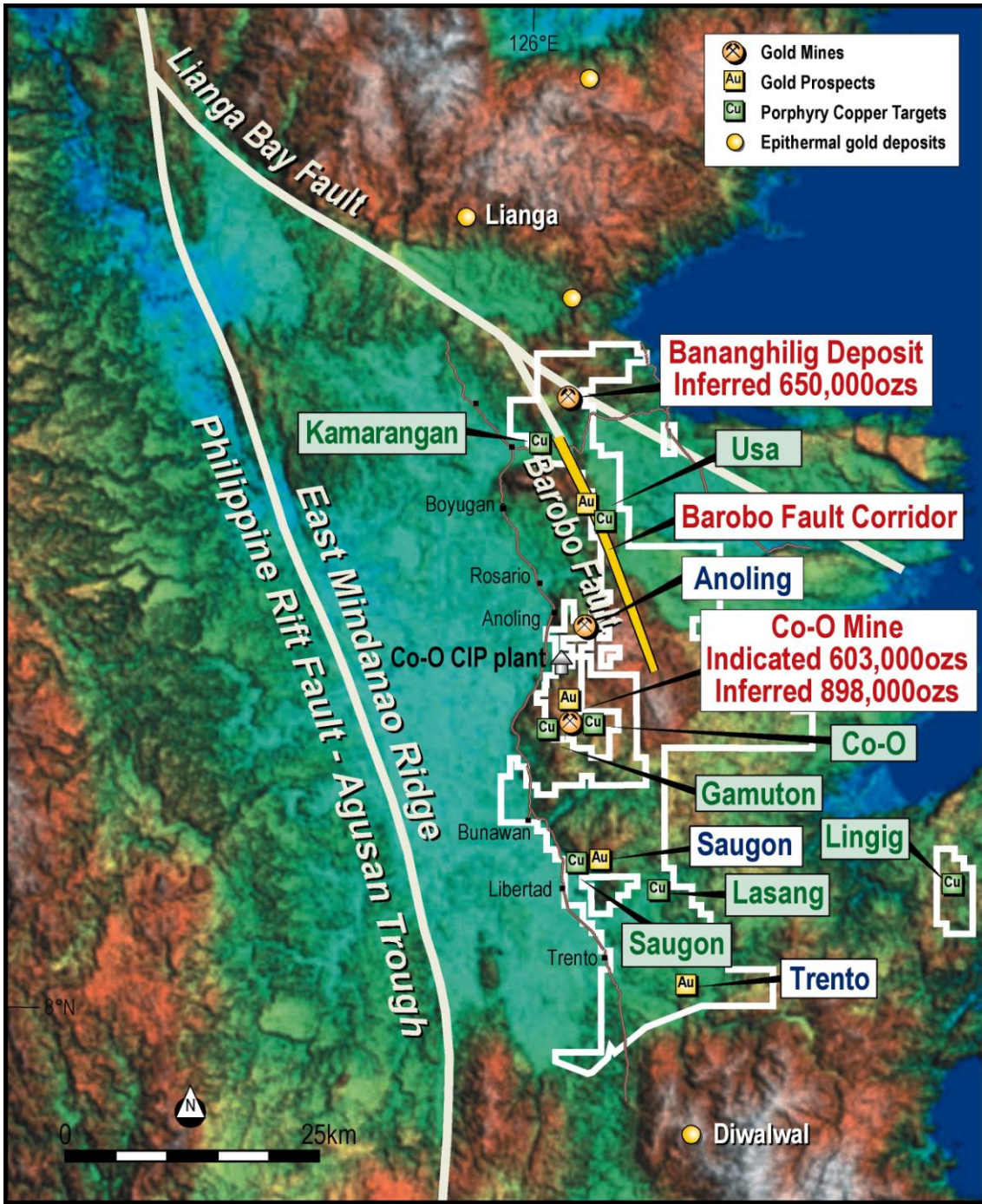


Figure 2. Regional tenement map showing mines and prospects

# Co-O MINE

## Gold Production

The production statistics for the March 2011 quarter with comparatives for the previous three quarters as well as the year-to-date production statistics are summarised in Table I below.

**Table I.** Gold production statistics

Period	Unit	Qtr ended 31 Mar 11	Qtr ended 31 Dec 10	Qtr ended 30 Sep 10	Qtr ended 30 Jun 10	YTD 31 Mar 11
Tonnes mined (1)	WMT	71,060	61,621	60,367	53,872	193,048
Ore milled	DMT	71,747	66,038	52,463	60,611	190,248
Recovered grade	gpt	11.58	13.09	15.77	13.65	13.26
Recovery	%	94%	94%	94%	94%	94%
Gold produced (2)	ozs	25,114	26,123	25,004	25,012	76,241
Cash costs (3)	US\$	\$191	\$185	\$187	\$182	\$188
Gold sold	ozs	25,911	23,224	25,659	24,858	74,794
Average gold price received	US\$	\$1,401	\$1,384	\$1,208	\$1,182	\$1,329

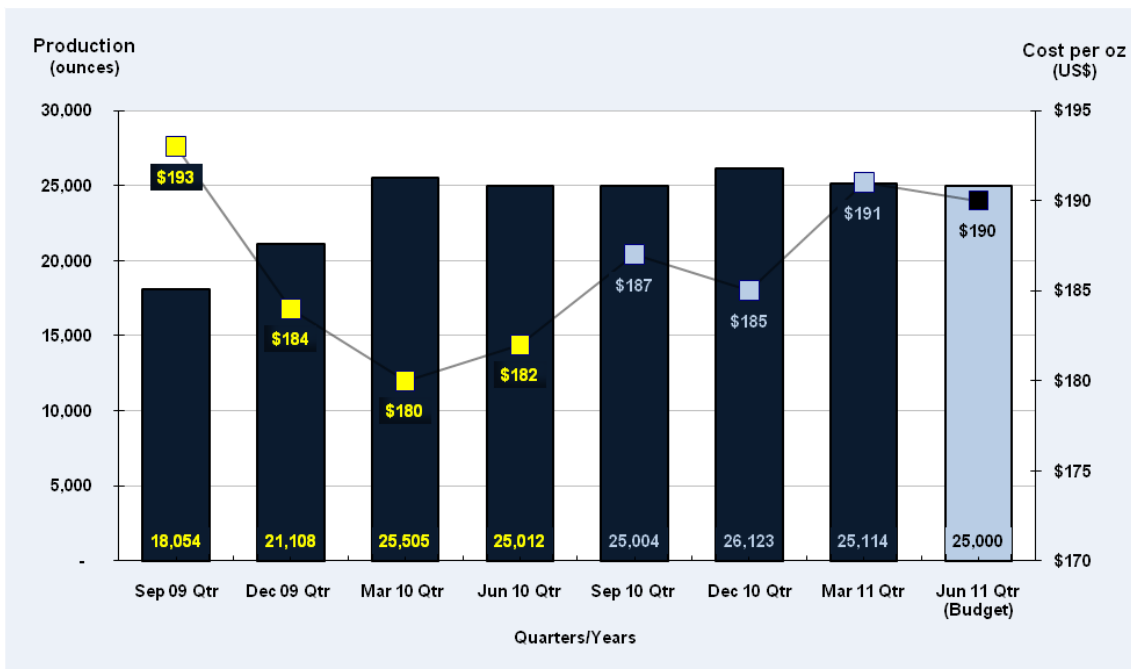
**Note:**

- (1) The moisture content in wet tonnes ranges between 6 to 7%
- (2) Gold production is actual gold poured (and requires no further processing) during the period and does not reflect changes in the balance of gold in circuit. It includes any gold awaiting shipment
- (3) Cash costs refers to the cost of gold mined (net of development costs), produced but not necessarily sold and includes royalties and local business taxes of US\$52 per ounce for the current qtr (Dec 10 qtr: US\$51/oz, Sep 10 qtr: US\$50/oz, Jun 2010 qtr: US\$46/oz, YTD 2010/11: US\$51/oz)

Gold production for the quarter was marginally higher than budget at 25,114 ounces, at an average recovered grade of 11.58 g/t gold and cash costs of US\$191 per ounce, inclusive of royalties and local business taxes of US\$52 per ounce.

Medusa, an un-hedged gold producer, sold 25,911 ounces of gold at an average price of US\$1,401 per ounce during the quarter.

A breakdown of actual and forecasted production ounces and cost per ounce by quarters for the last seven quarters and the remaining quarter of this fiscal year is highlighted in Graph 1.



Graph 1. Co-O quarterly production graph with unit costs (Actual-fiscal year 2009/10, actual-Sep/Dec 2010 & Mar 2011 quarters and forecast-remainder fiscal year 2010/11).

## Operations

### New Co-O Plant

In November 2010, the Board approved the construction of a new plant with capacity to produce 200,000 ounces of gold per year based on processing up to 750,000 tonnes per year at the current reserve grade of the Co-O Mine.

Permitting is in progress with a timeline of late September 2011 for completion.

The Company has contracted Arccon (WA) Pty Ltd for the process engineering, plant design and construction supervision.

The construction time for the new plant after the necessary regulatory approvals are granted is estimated at approximately 21 months, and the full benefits of the expansion are expected to be realised from mid calendar year 2013.

### Mine Development

The Saga Shaft sinking has reached 32 metres and erection of a temporary headframe has been completed. The shaft plan has been revised so that this shaft will initially be sunk to Level 5 (200 metres below surface as originally planned), and then extended to Level 7 (300 metres below surface). Completion to Level 5 is estimated to be during the December 2011 quarter, subject to ground conditions, and to Level 7 during the June quarter of 2012.

Plate 1 shows the collar area of the Saga Shaft and the temporary headframe.

Accelerated development was commenced during the quarter to ensure the underground infrastructure and on-vein development will be in place as the shaft reaches Level 5 then Level 7. This accelerated development, from approximately 500 metres per month to approximately 800 metres per month, is programmed to continue for approximately the next 18 months and will increase the proportion of development ore supplied to the mill.

Development on Level 6 is focussing mainly to the east from the Sabor Shaft.

The new Level 1 adit (Fig. 3) to access the Royal Veins and North Tinago Veins has advanced 65 metres. At 80 metres the first cross-cut to the south to the Saga Shaft will commence which will also cut some of the NT veins identified by surface drilling. This adit will also be used as a drilling platform to delineate parallel veins.



Plate1. Saga Shaft collar area and temporary headframe

## Mine Production

Production has continued uninterrupted at the mine. Surface stockpiles are approximately 7,000 tonnes and underground broken ore is approximately 55,000 tonnes.

## Mill Expansion

Installation of two new leach tanks will be completed late May and will increase the leaching capacity to approximately 1,000 tonnes per day.

Expansion and upgrading of the gold room will be completed in late April.

## Mine Resource Drilling

Surface drilling with two rigs has continued at the Co-O Mine mainly at the eastern end of the deposit focusing on infill drilling east of the Agsao River (Figure 3 and Table II). Underground drilling with four rigs (Figure 4 and Table III) is on-going for resource delineation and pre-development drilling. The announcement of 5 April 2011 contains additional detailed results for the MD series of holes and the underground drill holes with intersections down to 0.20 metres width which are summarised at  $\geq 0.5$  metre down hole widths in Tables II and III.

The underground drilling has located a new exceptionally wide high grade vein section east of the Oriental Fault and below Level 5 as shown by the intersections in holes L5-039 and L5-041.

**Table II.** Surface drill hole results  $\geq 3$  g/t gold and  $\geq 0.5$  metres downhole for new holes MD 300 to MD 305 and complete assays for a previously partly reported hole designated \*\*

Hole number	East	North	Dip (°)	Azimuth (°)	From (metres)	Width (metres)	Grade (uncut) (g/t gold)
MD291 **	614223	913120	-55	192	334.10	1.20	4.13
					378.40	0.55	11.92
					452.60	1.40	5.69
MD295 **	614223	913120	-65	193	400.45	5.65	6.05
					462.00	0.60	6.16 (*)
					612.90	0.50	3.41 (*)
MD297 **	614018	913157	-64	205	97.40	1.00	3.17 (*)
					179.50	2.45	3.39 (*)
					296.65	1.00	3.03 (*)
MD298 **	614160	913111	-50	193	265.45	0.65	12.87 (*)
					425.40	2.00	219.17 (*)
					443.10	1.10	14.07 (*)
					489.20	1.60	7.89 (*)
MD300	614160	913113	-60	196	0.00	4.00	5.89 (*)
					342.50	0.60	5.07 (*)
MD301	614020	913156	-55	188	143.65	0.55	15.13 (*)
					549.75	0.55	4.57 (*)
MD302	614021	913156	-52	174	143.10	2.70	6.24 (*)
					176.15	2.15	14.33 (*)
					216.90	1.80	5.56 (*)
					295.70	0.80	42.33 (*)
MD303	614114	913101	-57	206	55.00	2.50	7.76 (*)
					205.80	0.85	54.70 (*)
					315.35	1.00	4.05 (*)
					366.35	1.00	31.45 (*)
					400.60	0.80	3.70 (*)
					429.50	0.60	6.30 (*)
					610.00	0.80	5.81 (*)

**Notes:**

- (i) Intersection widths are downhole drill widths not true widths;
- (ii) Assays denoted by (\*) are by Philsaga Mining Corporation's laboratory, all other assays are by McPhar Geoservices Inc. in Manila;
- (iii) Grid co-ordinates based on the Philippine Reference System 92.

**Table III.** Underground drill hole results  $\geq 3$  g/t gold and  $\geq 0.5$  metres downhole.

Hole number	East	North	Dip (°)	Azimuth (°)	From (metres)	Width (metres)	Grade (uncut) (g/t gold)
<b>LEVEL 2</b>							
L2-041	613313	912873	3	193	60.80	0.55	5.63 (*)
<b>LEVEL 3</b>							
L3-014	613965	913136	3	36	61.40	0.60	24.47 (*)
L3-016	613730	912861	3	225	69.60	3.30	5.06 (*)
					75.60	0.80	4.67 (*)
L3-017	613728	912863	3	231	102.10	0.60	17.58 (*)
<b>LEVEL 4</b>							
L4-010	613563	912804	3	359	43.05	3.05	5.32 (*)
L4-011	613561	912804	3	322	95.75	1.40	3.59 (*)
<b>LEVEL 5</b>							
L5-027	613942	912887	-19	203	71.80	1.20	4.93 (*)
L5-028 **	614136	912893	-19	190	25.30	0.50	3.63 (*)
					69.70	0.60	10.41 (*)
					162.40	4.80	13.84 (*)
					208.20	0.80	49.93 (*)
L5-031	613945	912887	0	140	120.05	1.50	6.38 (*)
					143.80	3.70	7.31 (*)
					223.40	0.60	3.65 (*)
L5-033	613943	912887	0	162	55.10	0.60	13.47 (*)
L5-034	613942	912887	0	183	110.40	0.55	27.96 (*)
L5-035	613942	912887	0	200	117.10	0.80	7.93 (*)
L5-039	613943	912887	-53	187	180.95	9.65	12.58 (*)
L5-041	613943	912887	-53	183	162.80	13.10	47.81(*)

**Notes:**

- (i) Intersection widths are downhole drill widths not true widths;
- (ii) Assays denoted by (\*) are by Philsaga Mining Corporation's laboratory, all other assays are by McPhar Geoservices Inc. in Manila;
- (iii) Grid co-ordinates based on the Philippine Reference System 92.

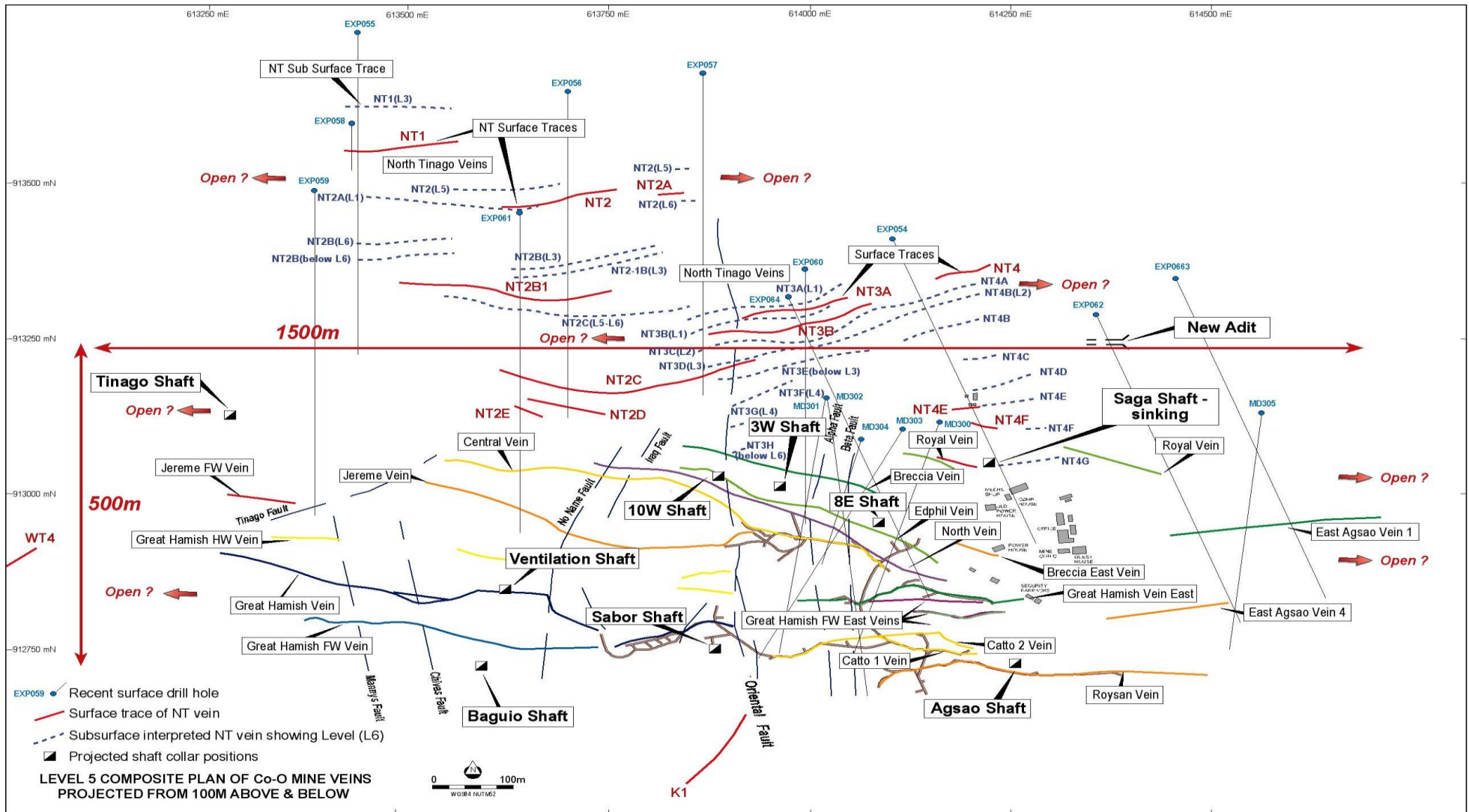


Figure 3. Map of the Co-O Mine showing the locations of drill holes MD300 to MD305 and EXP54 to EXP65



## Regional Drilling

Mapping, trenching and surface drilling around the Co-O Mine with four rigs is continuing (Fig. 3). The announcement of 5 April 2011 contains additional detailed results down to 0.2 metre widths which are summarised at  $\geq 0.5$  metre downhole widths in Table IV.

Some holes have returned multiple intersections increasing the potential of the North Tinago vein set.

It should be emphasised that, as new vein systems are drilled, drill intersections in veins rarely provide ore-grade intersections in every hole. As the data base grows, and the characteristics of each vein become clearer, statistical assessment of the percentage of oregrade drill hole intersections required, maybe as low as 40% of holes with ore grade intersections, will increasingly provide the levels of certainty for turning exploration drill results into ore that can be developed with confidence.

**Table IV.** Regional drill hole EXP 054-065 results  $\geq 3\text{g/t}$  gold and  $\geq 0.5$  metres downhole

Hole number	East	North	Dip (°)	Azimuth (°)	From (metres)	Width (metres)	Grade (uncut) (g/t gold)
EXP054	614102	913410	-50	160	710.60	1.15	12.49 (*)
					782.25	0.55	8.29 (*)
EXP055	613438	913741	-50	180	586.55	0.70	5.10 (*)
EXP062	614354	913289	-50	160	482.20	0.70	30.43 (*)
					594.15	1.00	8.87 (*)
					736.10	1.00	3.74 (*)
EXP064	613972	913316	-50	160	348.50	1.00	3.42 (*)

Notes:

- (i) Intersection widths are downhole drill widths not true widths;
- (ii) Assays denoted by (\*) are by Philsaga Mining Corporation's laboratory, all other assays are by McPhar Geoservices Inc. in Manila;
- (iii) Grid coordinates based on the Philippine Reference System 92.

## Co-O Drill Hole Sampling and Assaying Procedures

Samples are taken from mainly HQ sized (hole outside diameter 96 mm, hole inside diameter 63.5mm) and some NQ sized (hole outside diameter 75.8 mm, hole inside diameter 47.6 mm) drill core. The selected sample intervals are halved by diamond saw and half the core was bagged, numbered and sent to the Company laboratory. In a small number of cases to confirm the geological logging, the selected interval was re-split and ¼ core re-submitted for assay.

Initial sample preparation and assaying is undertaken at the Company's on-site laboratory. Samples are dried at 105°C for 6 to 8 hours, crushed to less than 1.25 cm by jaw crusher, re-crushed to less than 3 mm using a secondary crusher followed by ring grinding of 700 to 800 grams of sample to nominal particle size of less than 200 mesh. Barren rock wash is used between samples in the preparation equipment. The samples are assayed by fire assay with Atomic Absorption Spectrometer (AAS) finish on a 30 gram sample. All assays over 5 g/t gold are re-assayed using gravimetric fire assay techniques on a 30 gram sample.

Check assaying of the majority of samples used in the yearly resource estimates is undertaken by McPhar Geoservices Phils Inc ("McPhar"), a NATA and ISO 9001/2000 accredited laboratory in Manila. The pulps are airfreighted to McPhar who fire assay 30 grams of samples using AAS finish and a selected number of samples are checked using gravimetric fire assay techniques. Duplicate samples and standards are included in each batch of check samples.

When reporting results, where available, the assays of McPhar as an independent laboratory have been given priority over the Company laboratory's results.

## TENEMENTS

Figure 5 shows the locations of the Company's granted tenements. During the quarter the Tambis tenement containing the Bananghilig Deposit was granted as Mineral Production Sharing Agreement ("MPSA") 344-2010-XIII, the Das-Agan tenement containing the Lingig copper prospect as MPSA 343-2010-XIII and Exploration Permits ("EP") numbers 030 and 031-2010-XIII.

## TAMBIS-BAROBO REGION

The Tambis project, currently comprising the Bananghilig Gold Deposit and the Kamarangan copper-molybdenum porphyry prospect (Figure 2), is operated under a Mining Agreement with Philex Gold Philippines Inc. over application APSA-000022-XIII which covers 6,262 hectares.

Processing of the application is well advanced.

### Bananghilig Gold Project

Validation drilling of the resource based on historical drilling has commenced with two man-portable rigs. Four other rigs are continuing with extensional and scout drilling.

The aim is to increase the resources to a level which could provide a 5 year minimum mining life at a production rate of approximately 200,000 ounces per year.

Regional mapping has been continuing around the deposit and an update on this will be provided in May.

### Usa Porphyry Copper-Gold Prospect

The Usa prospect is located within Mineral Production Sharing Agreement application XIII-00077 and the Company has a Memorandum of Agreement with Corplex Resources Inc.

A programme of soil sampling over the favourable geology is planned.

## LINGIG

Mineral Production Sharing Agreement 343-2010-XIII with an area of 3,824 hectares was granted.

## ANOLING

The Mines Operating Agreement with Alcorn Gold Resources Inc. covers MPSA application 039-XIII situated approximately 8 kilometres north from the millsite as shown on Figure 2.

Processing of the MPSA is progressing.

Mapping and sampling is continuing. Drilling may recommence prior to the granting of the MPSA.

## SAUGON PROJECT

### First Hit Vein

#### Background

Figure 2 shows the Saugon Project located approximately 28 kilometres by road from the Co-O Mill. Work in 2004 involved drilling at the First Hit Vein (holes SDDH1 to SDDH35) in conjunction with underground development via a 30 metre deep inclined winze down the vein-breccia to assist in understanding the mineralisation.

Further details are contained in the announcements dated 20 April 2010 and 1 December 2010.

#### Drilling

Drilling is continuing with three drill rigs. Regional mapping and prospect trenching are also in progress.

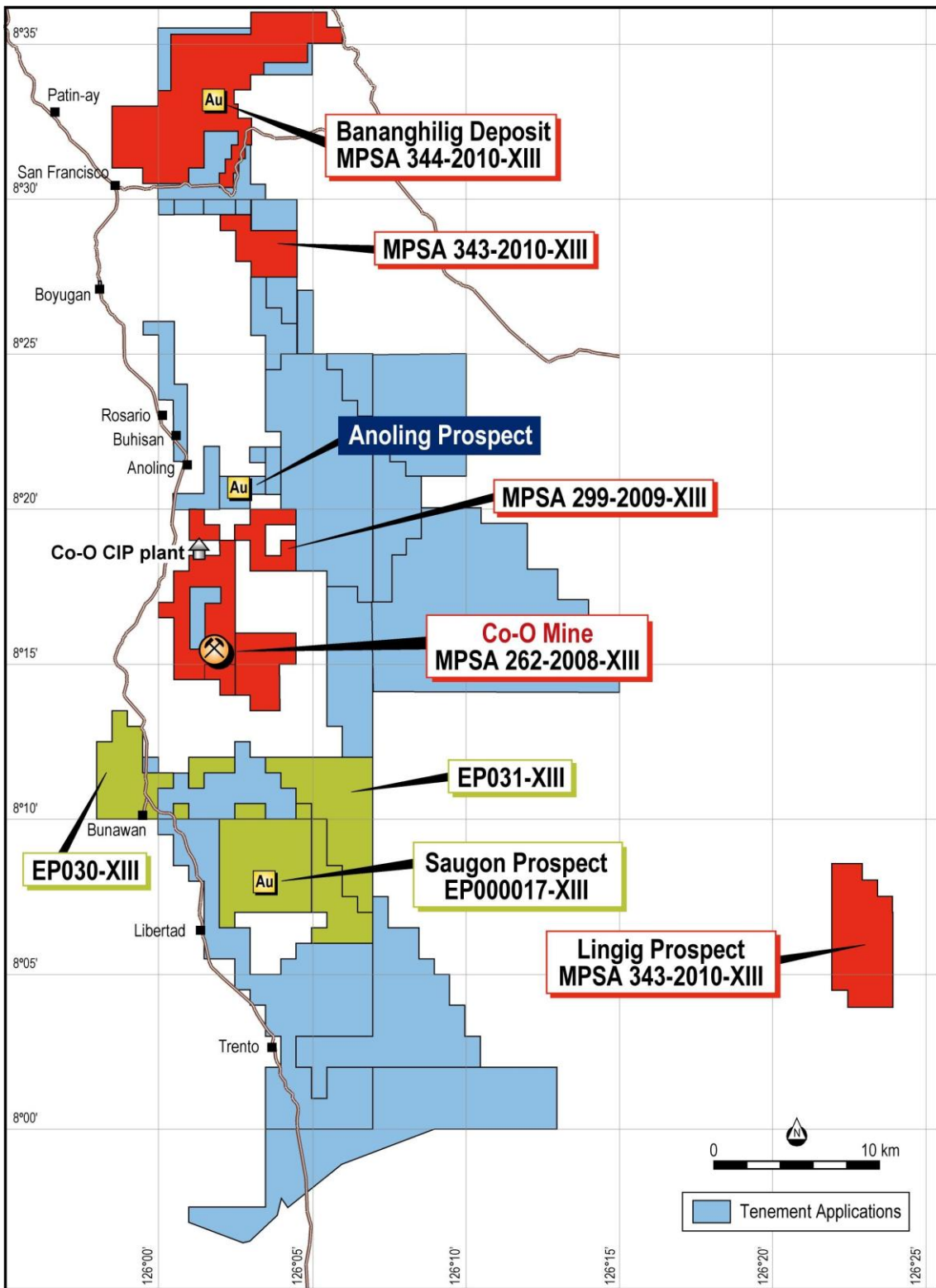


Figure 5. Map showing granted tenements

## **FINANCIALS** (unaudited)

As at 31 December 2010, the Company which is debt free, had total cash and cash equivalent in gold on metal account of approximately US\$92.4 million (31 Dec 2010: US\$87.2 million).

During the quarter,

- the Company sold 25,911 ounces of gold at an average price of US\$1,401 per ounce (Dec 2010 qtr: sold 23,224 ounces of gold at an average price of US\$1,384 per ounce);
- incurred exploration expenditure of US\$7.1million (Dec 2010 qtr: US\$7.1 million);
- expended US\$2.4 million on capital works associated sustaining capital at the mine and mill and also with the construction and furnishing of the Group's new office premises in the Philippines (Dec 2010 qtr: US\$2.2 million); and
- spent US\$4.6 million on general and accelerated mine development, inclusive of shaft sinking costs (Dec 2010 qtr: US\$2.1 million).

## **CORPORATE**

### **Dividend**

An interim unfranked dividend of A\$0.05 per share was paid to shareholders on 23 March 2011.

### **Managing Director, Geoff Davis commented:**

*"The Company has attained its forecast gold production for the quarter and is on track to meet its annual forecast production.*

*At the Co-O Mine, the Saga Shaft is progressing and the Level 1 adit to access the Royal and NT veins is well underway. The accelerated development programme will continue to open up new levels and new veins.*

*Drilling at the Co-O Mine continues to deliver some outstanding results, and potential resource additions in the area of the Royal and North Tinago veins are taking shape.*

*The permitting process for the new Co-O Mill is progressing and currently on track to be completed by the end of September 2011.*

*At the Bananghilig prospect drilling with six rigs is continuing. Initial findings of an extensive regional mapping programme over the Tambis region will be reported shortly."*

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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 Managing Director 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" and is a "Qualified Person" as defined in "National Instrument 43-101" of the Canadian Securities Administrators. 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.

Information in this report relating to **Mineral Resources** has been estimated and compiled by Mark Zammit of Cube Consulting Pty Ltd of Perth, Western Australia. Mr Zammit is a member of The Australasian Institute of Mining & Metallurgy and has sufficient experience that 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and is a "Qualified Person" as defined in "National Instrument 43-101" of the Canadian Securities Administrators. Mr Zammit consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report relating to **Ore Reserves** is based on information compiled by Declan Franzmann, B Eng (Mining), MAusIMM. Mr Franzmann is a full-time employee of Crosscut Consulting. Mr Franzman has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and is a "Qualified Person" as defined in "National Instrument 43-101" of the Canadian Securities Administrators. Mr Franzmann consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Refer to the revised Technical Report which was filed on Sedar in August 2010 for further discussion of the Co-O Deposit's geology, structural controls, drilling, sampling and assaying information, and any known material environmental, permitting, legal, title, taxation, socio-political, marketing or other relevant issue.

**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.

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.