

Yandera Village

Marengo Mining Limited December 2009 Quarterly Activities Report

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ASX/POMSoX Share Code: MGO TSX Share Code: MRN

HIGHLIGHTS

YANDERA COPPER-MOLYBDENUM-GOLD PROJECT

Exploration

- Resource extension drilling intersects 357 metres @ 0.44% Cu at the Dimbi-Gamagu Zone.
- First pass drilling at Kombruku produces narrower zones of mineralisation.
- Oetailed airborne magnetic survey successfully completed.

Definitive Feasibility Study (DFS)

- OFS on track for completion in December 2010.
- With the second seco
- Geotechnical diamond drilling commenced

CORPORATE

Cash balance at quarter end of A\$16.8M (C\$15.8M).





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ABOUT MARENGO MINING

Marengo Mining Limited is an Australian-based metals company focused on the development of its 100%-owned Yandera Copper-Molybdenum-Gold Project in Papua New Guinea (PNG).

With its headquarters in Perth, Western Australia, Marengo listed on the Australian Securities Exchange on November 13, 2003 and subsequently on Papua New Guinea's POMSoX on November 10, 2006. Marengo reinforced its global development strategy with the successful completion of a listing on the Toronto Stock Exchange in April 2008.

Since 2007 Marengo has successfully raised A\$68 million, underpinning the current Definitive Feasibility Study and exploration programs, on the Yandera Project.

For current resource estimates for the Yandera Project refer to the Company's website (**www.marengomining.com**)

YANDERA PROJECT, MADANG PROVINCE, PNG

(MARENGO MINING LIMITED - 100%)

Exploration

Drilling

Three diamond rigs operated during the quarter with emphasis on completing the first program of drilling at the Kombruku Prospect (see below). In addition, two sterilisation holes were completed at Omora and a single hole at Dimbi which successfully targeted an extension of the mineralisation in this area (see below). A total of 4,561 metres of drilling were completed during the quarter.

Drilling has now commenced for the 2010 field season and four diamond rigs have initially been contracted. The initial focus will be to follow up on last season's successful drilling at Dimbi and the Imbruminda, and Gamagu zones where previous drilling produced a number of very significant mineralised intersections.

Dimbi – Gamagu

Hole No YD245 (Dimbi – Gamagu)							
From (m)	To (m)	Width (m)	Cu%	Mo (ppm)	Au (g/t)	Ag (g/t)	CuEq%
48	405	357	0.44	96	0.07	2.35	0.45
Includes the following intersections							
192	405	213	0.54	140	0.09	2.42	0.55
258	291	33	1.04	101	0.08	3.20	1.05
381	402	19	0.67	190	0.27	3.04	0.86

Note: CuEq % = Cu% + (Mo%x10). Au and Ag values are not included

Drilling recommenced at the Yandera Central Resource during November 2009 with one hole (YD245) being completed before the Christmas shutdown. This hole was sited on the historic drill pad DDH062 in the Dimbi-Gamagu zone. YD245 drilled in a southerly direction (185° mag @-60° dip) and reached a final depth of 413.7 m down hole. Mineralisation in these rocks is associated with pronounced quartz-sericite alteration of the country rock granodiorite and various porphyritic intrusive. Bornite, chalcocite and cuprite mineralisation were noted in places, as well as fracture hosted molybdenite.

The current data points to a strong NW-SE structural control on mineralisation in this zone, in line with other parts of the deposit. These results are very promising and highlight the potential for the Dimbi-Gamagu zone to provide additional high-grade tonnes to the Yandera resource.

Future drilling in the Yandera resource area will follow up on these significant results for the Dimbi-Gamagu area, as well as the Imbruminda zone.



The high grade potential of Imbruminda has already been demonstrated from previous drilling operations, however a number of gaps exist in the current data set, preventing optimum modelling of the resource in this area. Figure1. is a long section through the deposit based on current data.

Future exploration activity will concentrate on fully assessing the Imbruminda zone and its potential at depth.

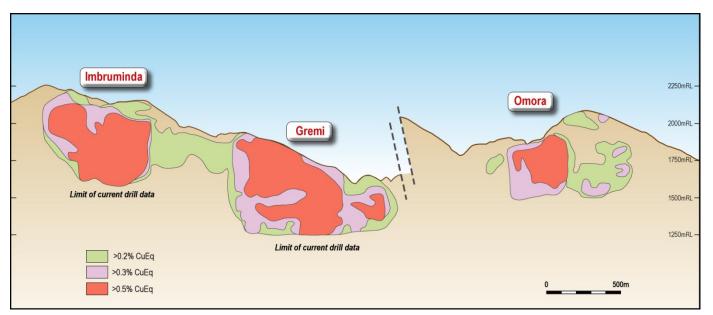


Figure 1. Yandera Central Porphyry

Kombruku

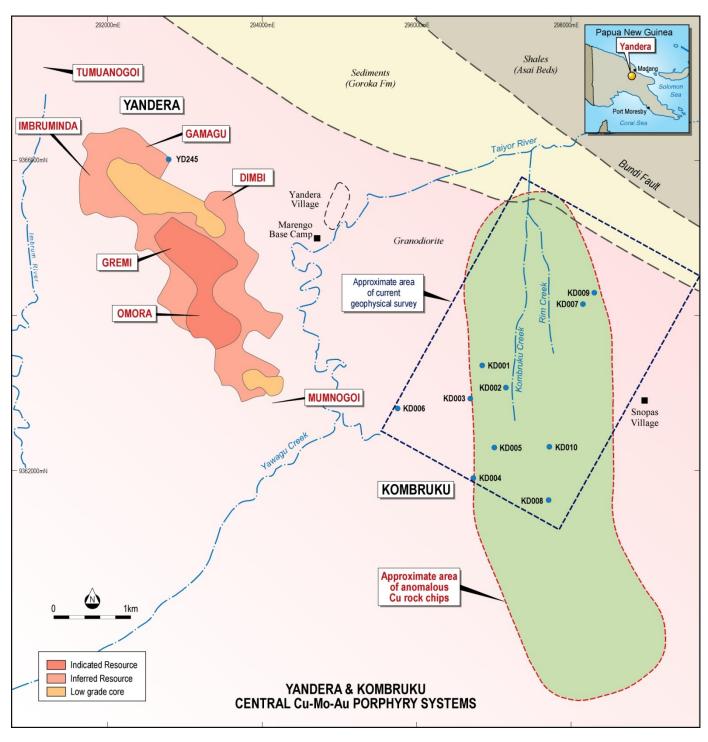
Marengo has completed an initial 10 hole drilling program to test the promising surface mineralisation encountered in this area and to follow up on the anomalies identified by the IP survey. The locations of these drill holes can be seen in Figure 2.

Although no significantly wide mineralised intersections were encountered, several of the holes produce localised intersections of interest. These include two 3 m intersections grading >0.3 % Cu in KD002, and two intersections in KD004 at 198 m and 213 m, grading 186 ppm Mo (Cu @ 0.21%) and 311 ppm Mo (Cu @ 0.11 %) respectively. A relatively broad zone at down hole depth > 300 m in KD006 produced a number of mineralised intersections with four > 0.2% Cu and one at > 0.3 % Cu. Some elevated Mo was noted associated with the higher Cu values.

Future work at Kombruku will involve the integration and interpretation of all available geological, geophysical and geochemical data obtained thus far. Future drilling operations at this prospect will be planned around the outcome of the interpretative phase, as the initial 10-hole program provides only a localised view of this prospect, given its large surface area.







Airborne Geophysical Survey

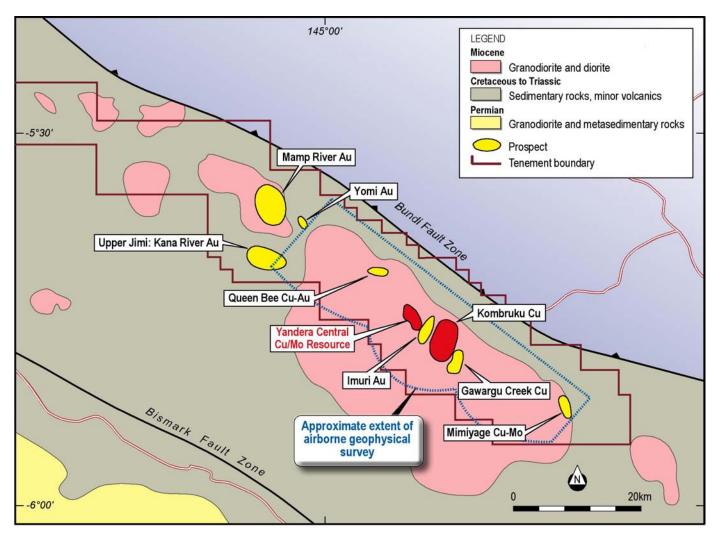
During the quarter a helicopter mounted magnetic and radiometric survey was completed over a significant portion of the Yandera Project area (refer Fig 3.).

This program was carried out by UTS Geophysics (a member of the Aeroquest Group) and was flown on 100 metre line spacing, at an approximate flying height of 60 – 80 metres.

This key data is now undergoing processing and interpretation and will prove very effective in the regional exploration program for the current year onwards.



Figure 3. Yandera Project Area



Definitive Feasibility Study

During the quarter the Company continued to focus its attention on the Yandera DFS, which has a scheduled completion date of December 2010.

Activities included further studies on the hydroelectric power options, which indicated even better potential for local watercourses to provide the required power requirements.

Planning of the bathymetry survey was completed and it is expected that oceanographic testing of suitable deep ocean canyons, suitable for Deep Sea Tailings Placement (DSTP) will be completed during the current quarter.

A larger bulk sample of mineralised material (+50 tonnes) will be sourced from the Yandera deposit over coming months, to provide additional material to complete metallurgical testwork and to support the previous highly encouraging recovery and concentrate results.

The first two of five planned pit slope angle geotechnical diamond drill holes have commenced since the end of the quarter. The core will be orientated and carefully logged and samples will be selected for testing. The testing will include:

- 1. UCS unconsolidated compressive strength determination
- 2. Point Load testing, and
- 3. Direct shear testing.

The aim of the drilling and testing is to determine the safe wall angles in the different geological domains that make up the walls of the open pit mine.

Pit optimisation studies were progressed and will be further refined to produce the final pit model for the DFS document, although further refinement will continue as new results come to hand.

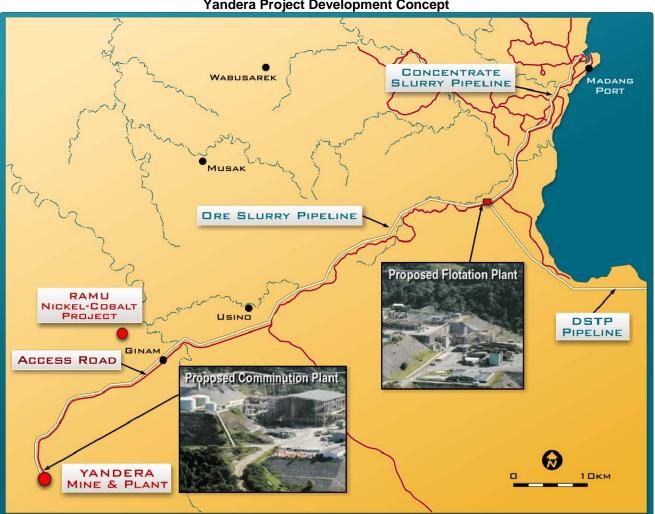


Figure 4. Yandera Project Development Concept

Community Matters

Marengo continues to maintain excellent relationships with communities at and around Yandera and celebrated the end of another successful season with local communities just prior to the Christmas break.

Landowner Association

During the quarter the Yandera Project Landowner Association (LOA) constitution was lodged for registration with the National Government authorities. Following the registration process local elections will be held for office bearers, under the supervision of Provincial Government officers.

The Company's community relations team continue to engage with local communities to provide them with updates on Marengo's activities and future plans. These visits give local residents an opportunity to ask questions or put forward suggestions regarding the Company's activities.

Health, Safety & Environment

Marengo is committed to providing a safe and healthy workplace, and continues to take steps to ensure that this is practised at all levels, within the Company. It is pleasing to report that during the quarter the Yandera site continued to operate without any serious work injuries.

The Yandera site employs health professionals to ensure that site staff receive immediate attention resulting from any injuries or health issues, should they occur. Since implementation this facility has expanded to provide general medical assessment and initial treatment to local communities. More substantial medical treatment is provided by government officers at regional centres and in emergency situations Marengo provides helicopter evacuation.

At all times Marengo aims to operate to world class environmental standards and continues to operate without any significant effect on the environment or local communities.

Household Census

During the quarter the Company's consultant anthropologist completed a household census of local communities along the proposed mine access road.

This survey completes the census work in the Yandera area, including proposed plant sites and the mine access road to the Ramu River.







CORPORATE AND FINANCIAL

Cash Reserves

At the end of the quarter the Company had cash at bank of A\$16.8M (C\$15.8M).

Annual General Meeting

The Company's Annual General Meeting was held on 5 November 2009, with all resolutions being passed.



Les Emery Managing Director / CEO 28 January 2010

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NOTES

Certain statements in this report contain forward-looking information. These statements address future events and conditions and, as such, involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the statements. Such factors include, among others, the results of future exploration, risks inherent in resource estimates, increases in various capital costs, availability of financing and the acquisition of additional licences, permits and surface rights. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statements were made, and readers are advised to consider such forward looking statements in light of the risks set forth in the company's continuous disclosure filings as found at www.sedar.com

Scientific and technical information in this report including that relating to drilling intercepts and mineralisation but excluding the Yandera resource estimate were prepared by Mr Peter Dendle. Mr Dendle is a member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Marengo Mining Limited. Mr Dendle has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition). Mr Dendle is also a "Qualified Person" as defined by National Instrument 43-1-1 "*Standards of Disclosure for Mineral Projects*" ("NI 43-101") Mr Dendle verified the data underlying the information in this report prepared by him.

Except to the extent not set out herein, for a (i) summary description of rock types, geological controls and dimensions of mineralised zones, and the identification of any significantly higher grade intervals within a lower grade intersection; (ii) a summary of the relevant analytical values, widths and, to the extent known, the true widths of the mineralised zones; (iii) a summary description of the geology, mineral occurrences and nature of the mineralisation found; and (iv) a summary description of the type of analytical or testing procedures utilized, sampled, sampled, sample size, the name and location of each analytical or testing laboratory used and any relationship of the laboratory to the issuer please refer to the Company's technical report filed on SEDAR and dated November 9, 2007. There is no drilling, sampling, recovery or other factors that could materially affect the accuracy or reliability of the data referred to below.

Mr Dendle consents in writing to the issue of this report, to the extent of matters based on his information in the form and context in which it appears.

CORPORATE DIRECTORY

DIRECTORS John Horan Chairman

Les Emery / CEO Managing Director

Doug Dunnet Non-Executive Director

Sir Rabbie Namaliu Non-Executive Director

Susanne Sesselmann Non-Executive Director

John W Hick Non-Executive Director

Elizabeth Martin Non-Executive Director

COMPANY SECRETARY

John Ribbons Company Secretary & CFO

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TSX CODE MRN

AUDITORS

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Photographs by Hugh Brown (www.hughbrown.com)