

## SEPTEMBER 2009 QUARTERLY REPORT

8 October 2009

#### **LEGEND MINING LIMITED**

ASX Symbol: **LEG** 

ABN 22 060 966 145

Level 2, 640 Murray Street West Perth Western Australia 6005

PO Box 626 West Perth Western Australia 6872

Phone: +61 8 9212 0600 Facsimile: +61 8 9212 0611

Email:

legend@legendmining.com.au www.legendmining.com.au

#### **CONTACTS**

Mr Mark Wilson Managing Director

Mr Derek Waterfield Exploration Manager

#### **PROJECTS**

**Pilbara:** nickel, copper, zinc, iron ore

Gum Creek: copper, nickel,

PGE, gold, iron ore

Mt Gibson: zinc, copper, gold

Cameroon: iron ore, gold

### **LOCATION OF PROJECTS**



### **HIGHLIGHTS**

- Signing of Heads of Agreement over iron ore project in Cameroon, West Africa.
- Modelling over Cleaverville Banded Iron Formation (BIF) in Pilbara underway to assess magnetite iron ore potential.
- High resolution aeromagnetic survey completed over 22km BIF at Gum Creek with modelling to assess magnetite iron ore potential to follow.

## **OVERVIEW**

Final due diligence and drafting of the full form agreement for the Cameroon Project is progressing well. It is expected a Shareholder meeting (EGM) will be held by the end of November for shareholders to approve the Cameroon transaction. Negotiations with geophysical contractors to fly an extensive aeromagnetic survey commencing as soon as possible after the EGM are well underway.

Magnetic inversion modelling at the Pilbara Project has been undertaken to assess the magnetite potential of BIF within the Cleaverville Formation. A similar evaluation of the Woodley BIF at Gum Creek is proceeding, following the completion of a high resolution aeromagnetic survey to provide quality data for modelling.

The results of the magnetic inversion modelling at the Pilbara and Gum Creek Projects are eagerly awaited and are expected to have a big bearing on the future work programmes at both areas.

Cash and investments at current market prices total \$16.6M.



# 1. Cameroon Project

IIIO BSN | BUOSJBQ JO-

Legend announced to the ASX on 4 September 2009 that it had signed a legally binding Heads of Agreement (HOA) with Camina SA to explore for iron ore in Cameroon, West Africa. The HOA gives Legend the right to acquire a 90% interest in two granted exploration permits and one exploration permit application, covering an area of approximately 2,400km², via a 90% ownership of Camina, see Figure 1. Camina, its consultants and advisors have substantial experience and expertise in dealing with mineral projects, infrastructure and government relationships in Cameroon which will be invaluable in advancing the project.

The Project comprises two granted exploration permits with iron ore potential, "Ngovayang" and "Mayo Binka", and an exploration permit application "Bijouka" adjacent to Ngovayang which has potential for gold mineralisation, see Figure 1. Ngovayang in particular is well served by access infrastructure including rail and road networks to and from the port city of Douala, which will greatly assist the exploration phases of work and potentially facilitate a start-up production transport system to port.

Within the Ngovayang Permit, 57km of itabirite has been identified in 13 separate zones from BRGM mapping in 1986. These itabirite zones, which can contain 20-45% Fe, are considered possible proto ore for higher grade direct shipping ore (DSO) mineralisation due to supergene/alteration processes.

Discovery of 50Mt of DSO is the primary target for Legend, which would translate into an initial 1-2Mtpa operation with potential future expansion. A secondary target is the lower grade, but potentially very large tonnage of itabirite. This type of material has the ability to be beneficiated into a valuable saleable product, however significant CAPEX for crushing/grinding/magnetic separation processing is required.

The Bijouka exploration permit application lies to the immediate SE of the Ngovayang Permit and contains minor alluvial gold workings where a six gram "nugget" has been panned. The source of the gold is unknown, but considered to be shear/fault related.

The Mayo Binka Permit contains essentially Proterozoic gneiss with subcropping boulders and scree of massive magnetite/haematite. The extensive scree and cover in the area will necessitate trenching to assist geological mapping and geochemical sampling.



Under the terms of the HOA, Legend is committed to a minimum exploration expenditure of A\$1M within a 12 month period. This exploration programme will aim to provide sufficiently significant results for Legend to justify the acquisition of 90% of the shares in Camina.

An outline of the exploration programme is given below:

- High resolution aeromagnetic/radiometric surveys are planned over the entire tenement package i.e. Ngovayang, Mayo Binka and Bijouka.
- Interpretation of aeromagnetic data targeting areas with potential for DSO.
- Geological mapping, geochemical sampling and trenching.
- Drill testing of priority target areas.

## **Cameroon Project - Next Phases of Work**

- Three week geological reconnaissance programme to assess the iron ore and gold potential of the Ngovayang, Mayo Binka and Bijouka tenements. Assessment will involve; regional mapping with the aid of the Niton portable XRF analyser and geochemical sampling.
- Commence aeromagnetic/radiometric survey over Ngovayang, Mayo Binka and Bijouka tenements during the December Quarter.
- Continue GIS data compilation over the project areas.

# 2. Pilbara Project

IUO BSN IBUOSIBQ J

The Pilbara Project is located 7-50km south of Karratha in the northwest of Western Australia, (Figure 2) and comprises 686km<sup>2</sup> of granted tenements and tenement applications. Legend has previously defined 14 priority drill targets from airborne Versatile Time Domain Electromagnetics (VTEM) and ground EM surveys. The Project is considered prospective for nickel-copper, copperzinc and iron ore.

During the quarter, Legend commissioned Southern Geoscience Consultants (SGC) to undertake magnetic inversion modelling over banded iron formation (BIF) units of the Cleaverville Formation. The modelling covered a strike length of approximately 20km and will provide an indication of the unit's magnetite potential and assist with designing future exploration programmes. Results are expected during October.



# Mt Marie JV (Legend earning 70% from Fox Radio Hill PL)

Exploration Licence E47/1878 was granted on 4 August triggering the commencement of the earn-in period for the JV. Legend can earn a 70% interest in tenements E47/1806, E47/1807 and E47/1878 by spending \$450,000 within three years and has spent \$250,435 as at the end of this quarter.

The JV tenements contain two high priority VTEM targets as well as 9.2km of the magnetite prospective BIF of the Cleaverville Formation. Magnetic inversion modelling over the BIF is currently being undertaken and results are expected in October.

# Munni Munni JV (Legend 30%, East Coast Minerals NL 70%)

Statutory government approvals for a proposed RC drilling programme targeting volcanic hosted massive sulphide base metals and silver mineralisation were received during the quarter, however heritage approvals/clearances are still required before drilling can commence.

#### **Pilbara Project - Next Phases of Work**

- Assess the results of the magnetic inversion modelling over the Cleaverville Formation BIF.
- Heritage Agreement negotiations with the Ngarluma Aboriginal Corporation to continue.
- Drilling of previously identified VTEM/ground EM and iron ore targets, following signing of Heritage Agreement and receiving all statutory clearances.

## 3. Mt Gibson Project

During the quarter the report for Stage 2 of the "Mt Gibson Targeting Project" was received from Predictive Discovery Pty Ltd using technology developed at CSIRO in the Predictive Mineral Discovery Co-operative Research Centre. The results of Stage 1 & 2 have been extremely valuable in advancing the knowledge of the structural and lithological controls on the gold mineralisation. Unfortunately this work has not identified any new favourable structural positions of sufficient size to warrant drill testing.

The Mt Gibson Project remains prospective for volcanic-hosted massive sulphide (VHMS) style mineralisation similar to Oz Minerals' world-class Golden Grove Mine situated 100km to the north, see Figure 2.



Legend has continued the decommissioning of the Mt Gibson plant/mill infrastructure during the quarter, with all salvageable equipment sold and scrap metal merchants commencing clean up work. To date, the sale of equipment has realised a total of \$506,000.

# Mt Gibson Project - Next Phases of Work

- Decommissioning of the plant/mill infrastructure to continue.
- Rehabilitation of the plant/mill site will be undertaken with a view to reducing the environmental liability.

# 4. Gum Creek Project

The Gum Creek Project is considered prospective for intrusion-related (Ni-Cu-PGE), komatiite flow-related (Ni) sulphide mineralisation and iron ore, see Figure 2.

During the quarter, a high resolution aeromagnetic survey was completed over the 22km strike length of the Woodley BIF. The survey was aimed at providing high quality data for magnetic inversion modelling of the BIF to assess the magnetite potential of the unit. Results of the modelling are awaited.

# West Bungarra JV - E47/709 (Legend 70%, Gateway Mining Ltd 30%)

Statutory government approval was received for the RC drilling programme targeting two ground EM conductors adjacent to the margin of the Bungarra Intrusive Complex.

## **Gum Creek Project - Next Phases of Work**

- Assess the results of the magnetic inversion modelling over the Woodley BIF.
- Drill testing of ground EM conductors during the December quarter.

# 5. Corporate

### **Treasury Operations**

Legend's treasury operations incurred a significant loss with the collapse of the Apex Minerals NL (AXM) share price over the past three months. Legend decided to exit the investment after the rights issue was announced on 25 September 2009 and sold its full holding of 25M shares for \$1,290,663 between 28 September and 1 October. The sales all settle in October and thus are not accounted for in the September Quarter cash flow 5B Report.



Legend's current treasury investments consist of 1.9M shares in Independence Group NL (IGO) valued at \$8,968,000 and 1.5M shares in Accent Resources NL (ACS) valued at \$225,000. The ACS shares were received as part consideration for the sale of a tenement (M59/166) from the Mt Gibson Project.

# **Half Yearly Accounts**

The audited 30 June 2009 accounts were lodged with the ASX on 9 September 2009.

M.W. +

#### **Mark Wilson**

**Managing Director** 

8 October 2009

The information in this announcement that relates to Exploration Results has been compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Legend Mining Limited. Mr Waterfield has sufficient relevant experience in the styles of mineralisation and types of deposit under consideration, and in the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code), and consents to the inclusion of the information in the form and context in which it appears.



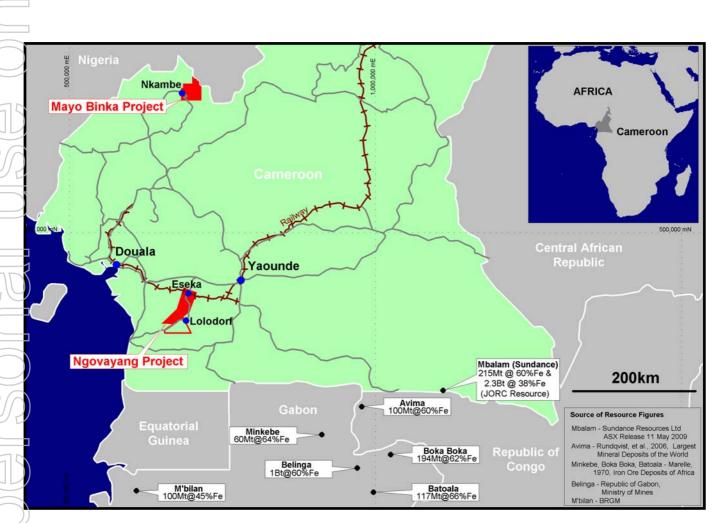


Figure 1: Cameroon Project Location and Regional Iron Ore Deposits



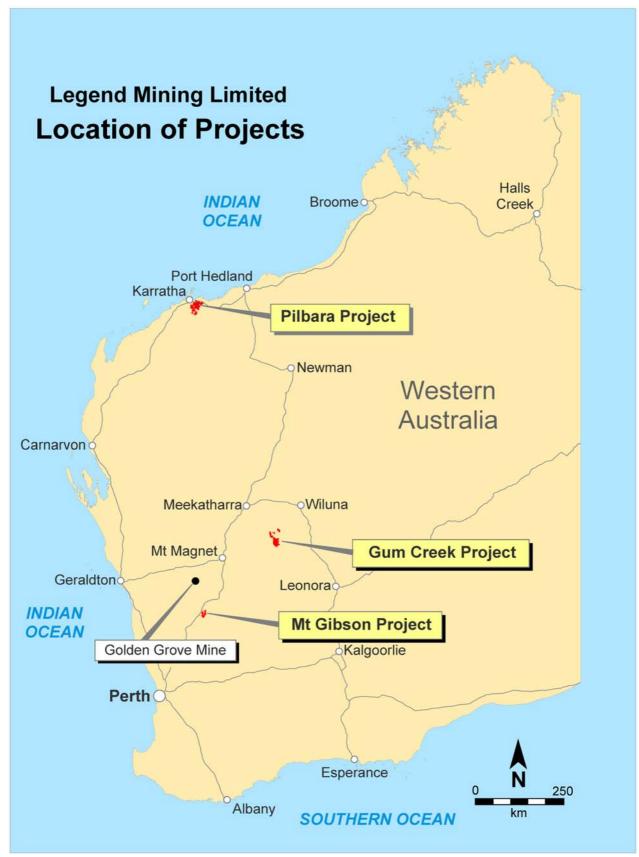


Figure 2: Western Australian Project Location