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## DECEMBER 2010 QUARTERLY REPORT

21 January 2011

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### CONTACT

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Managing Director

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### PROJECTS

**Cameroon:** iron ore, gold

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

**Mt Gibson:** zinc, copper, gold

**Gum Creek:** iron ore

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### HIGHLIGHTS

- **Cameroon drilling programme recommenced**
- **New tenement, EP221, granted**

### OVERVIEW

Two bulldozers commenced work on the 29<sup>th</sup> of November preparing the access tracks and drill pads to the priority targets in the Eseka region, being Hill 35 and 419. Mapping has identified >50m of magnetite rich metasediments at these localities.

The drill crews have mobilised to Cameroon and the drilling is scheduled to commence shortly. The plan is that the programme will methodically move southwards through the project area drilling priority targets identified from the aeromagnetic survey and mapping.

The geological team has been busy conducting first pass reconnaissance work over aeromagnetic features in the southern area of EP144. Now that EP221 has been granted that work will extend further south into that area. Some of the early indications from this work has confirmed the prospectivity identified in the aeromagnetic survey.

Should any of this reconnaissance work reveal targets which demand priority drilling, the programme and the contractor are able to accommodate these possibilities.

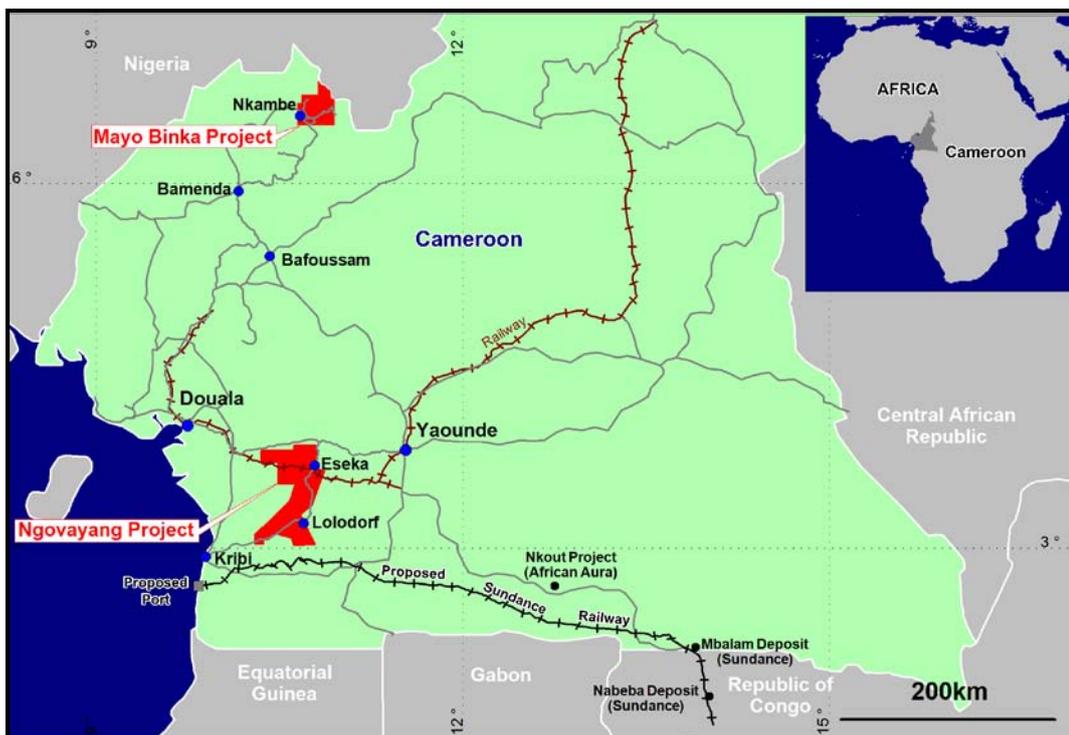
## 1. CAMEROON PROJECT

The Cameroon Project comprises four granted exploration permits covering an area of approximately 3,900km<sup>2</sup> and is considered prospective for iron ore, see Figure 1. Discovery of 50Mt of direct shipping ore (DSO) is the primary target, however itabirite ore (lower grade but potential very high tonnage) will also be targeted. The Ngovayang Project area has the advantage of being well served by access infrastructure including rail and road networks to and from the port city of Douala.

### *New Exploration Permit Granted*

During the quarter, exploration permit EP221 (“Ngoyang2”) was officially granted to Legend’s 90% owned subsidiary Camina SA covering an area of 667km<sup>2</sup>. The permit is located immediately south of EP144 at the Ngovayang Project and increases the project’s contiguous area to 2,972km<sup>2</sup>, see Figures 1 & 2.

With the permission of the relevant authorities, the area of EP221 was included in Legend’s regional aeromagnetic/radiometric survey completed in February 2010. Results from the survey confirmed the permit’s prospectivity for iron ore, clearly showing the southerly continuation of magnetic units identified to the north on EP144, see Figure 2.



**Figure 1: Cameroon Project Location and Infrastructure**

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### ***Diamond Drilling Programme***

The Geosearch drilling crew have arrived on site at Eseka and are preparing to recommence the proposed 5,000m diamond drilling programme, which was suspended on 30 September 2010 due to monsoonal rains. This drilling is targeting a combination of aeromagnetic and topographic highs associated with +50% Fe rockchip sample results.

Two bulldozers are currently in operation preparing drill pads and rig access tracks in the Eseka and Melombo regions at the Ngovayang Project. Additional equipment has also been purchased, including an all terrain vehicle and extra 4WD vehicles to assist the logistical support of the drilling operations.

### ***Regional Reconnaissance***

First pass regional reconnaissance by the eight man geological team commenced during the quarter over strong aeromagnetic features in the southern part of the Ngovayang Project area. This work is aimed at identifying surficial evidence of iron deposits associated with coincident magnetic and topographic highs.

Early observations from a number of areas are sufficiently encouraging to warrant follow up programmes including vehicular access tracks to facilitate geological mapping and geochemical sampling and ultimately drilling. Any high priority areas identified during this work will be fast tracked to the drill testing stage.

Evaluation of the iron ore potential of the magnetic features on the recently granted permit EP221 will be included in future reconnaissance programmes. This reconnaissance work is very challenging and time consuming given the rugged terrain and thick vegetation, however because of these factors, limited if any reconnaissance has been undertaken previously.

### ***Reprocessing of Aeromagnetic Data***

Reprocessing of the aeromagnetic data has been completed aimed at highlighting features with the highest magnetic intensity, see Figure 2. This reprocessing has outlined linear magnetic features interpreted to represent stratigraphic units of itabirite or metamorphic banding associated with magnetite-bearing gneiss.

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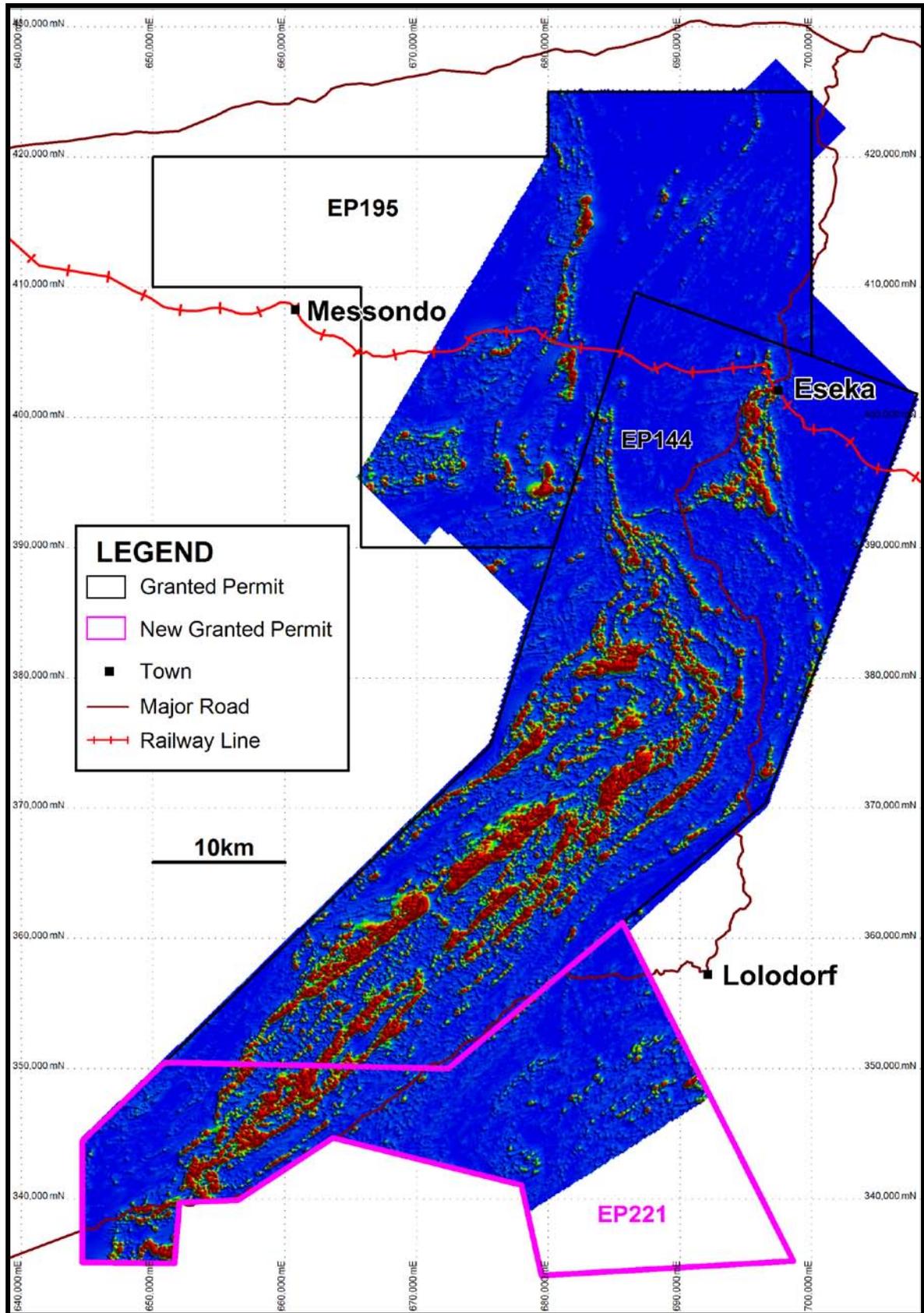


Figure 2: Aeromagnetic Image (Analytical Signal of Total Magnetic Intensity)

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As well as defining these linear features, the magnetic image also identifies areas with structural complexity related to folding and faulting. These structural sites are very important, as they may represent locations with high grade hematite formation due to supergene/alteration processes.

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

- Continue 5,000m man portable diamond drilling programme at Hill 419, Hill 335, Melombo, Melombo West, Melombo East, Bibondi and Logmangan prospects.
- Continue regional reconnaissance in the southern portion of the Ngovayang Project.
- Commence reconnaissance work over the newly granted exploration permit EP221.
- Undertake geophysical processing/modelling of high priority target areas.

## **2. PILBARA PROJECT**

The Pilbara Project is located 7-50km south of Karratha in the northwest of Western Australia 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 electromagnetic surveys. The Project is considered prospective for nickel-copper, copper-zinc and magnetite iron ore.

No exploration activities were possible over the Pilbara Project due to access issues related to heritage agreement negotiations.

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

Nothing to report.

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

Nothing to report

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

- 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.

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### 3. MT GIBSON PROJECT

All statutory environmental reporting for 2010 was completed during the quarter including the Annual Environmental Report and tailings dam and groundwater bore monitoring.

#### Mt Gibson Project - Next Phases of Work

- Ongoing rehabilitation works will continue on the heap leach ponds and tailings dam with a view to reducing the environmental liability.

### 4. GUM CREEK PROJECT

Legend sold its last Gum Creek Project assets during the quarter with the signing of a Sale Agreement with Nemex Resources Limited ("Nemex") over the Woodley tenements (E57/632 & E57/634). Under the terms of the agreement, Legend will receive 3.3 million fully paid Nemex shares, 1.65 million options and \$100,000 cash reimbursement. The transaction is conditional upon Nemex successfully completing a capital raising and obtaining approval to list on the ASX.

### 5. RESIGNATION OF EXPLORATION MANAGER

Regrettably, for personal reasons, Mr Derek Waterfield tendered his resignation as Exploration Manager effective 21 January 2011. Mr Waterfield, in a part-time consulting role supported by Xserv, a geological consulting company associated with Legend Director Mr Dermot Ryan, will continue to provide the necessary technical services to Legend until a suitable replacement can be appointed. All Legend staff and directors wish Mr Waterfield well for his future and thank him for his generous contribution to the company over the past five years.

#### Mark Wilson

Managing Director

21 January 2011

*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.*