

# MARCH 2010 QUARTERLY REPORT

# 28 April 2010

# LEGEND MINING LIMITED

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### CONTACTS

Mr Mark Wilson Managing Director

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#### PROJECTS

Cameroon: iron ore, gold Pilbara: nickel, copper, zinc, iron ore

**Gum Creek:** copper, nickel, PGE, gold, iron ore

Mt Gibson: zinc, copper, gold

# HIGHLIGHTS

- Legend completes acquisition of 90% interest in Cameroon Project.
- Extensive (3,526km<sup>2</sup>) aeromagnetic and radiometric surveys completed at Cameroon.
  - Identifies occurrence of itabirite on a larger scale than previously known.
  - $\circ$   $\,$  Confirms the iron ore prospectivity of the project.
- High grade rockchip samples (65.2% to 69.3% Fe) returned from Eseka Prospect.

# **OVERVIEW**

The highlight of the quarter was the result of the aeromagnetic survey over the Mesondo and Ngovoyang tenements in Cameroon and the subsequent decision of Legend to exercise its right to acquire the 90% interest in Camina SA (Camina).

Camina has recruited six Cameroon geologists and support staff and is now a functioning exploration company with field work concentrating on the targets in the Eseka region.

Legend's Cameroon Exploration Manager, Mr John Stockley, arrived in Cameroon on 4 February 2010 and is now residing in Yaounde where Camina's corporate office is based. An exploration camp has been established just outside the town of Eseka and the assays from the first batch of rockchip samples, which included nine samples of +65%Fe, were released to the ASX on 14 April 2010. Further results from the next batch of rockchip samples are expected shortly.

The results of the Gum Creek (Woodley) magnetite inversion modelling are still awaited.



# 1. Cameroon Project

The Cameroon Project comprises granted exploration permits and an application covering an area of approximately 3,900km<sup>2</sup> and is considered prospective for iron ore and gold, 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 added advantage of being well served by access infrastructure including rail and road networks to and from the port city of Douala.

During the quarter, extensive aeromagnetic and radiometric surveys were completed over the Ngovayang and Mayo Binka areas. The results identified the occurrence of itabirite on a larger scale than previously known information indicated at Ngovayang, confirming the iron ore prospectivity of the project. Based on these results, Legend decided to exercise its right to acquire 90% of Camina SA, as approved by shareholders in December 2009, see ASX announcement 5<sup>th</sup> February 2010.

#### Settlement

The settlement of the transaction, pursuant to the Share Sale Agreement of 22 October 2009 and Resolutions passed at the General Meeting on 4 December 2009, occurred on 4 February 2010, with the issue of:

- a) 350M Legend shares,
- b) 200M Legend 5 year options exercisable at 4 cents per option,
- c) 400M performance options (a), exercisable for nil consideration, once a JORC compliant resource of 250Mt of iron ore containing a minimum of 50Mt of DSO is identified on the permits,
- d) 400M performance options (b), exercisable for nil consideration, once a JORC compliant resource of 2Bt of iron ore containing a minimum of 200Mt of DSO is identified on the permits OR the first US\$60M from sales of ore from the permits is achieved,

to the Camina Vendors and Vendor nominee parties.

#### Aeromagnetic/Radiometric Surveys

Aeromagnetic/radiometric surveys covering a total of approximately 3,526km<sup>2</sup> were completed over the Ngovayang (2,566km<sup>2</sup>, 12,818 line km) and Mayo Binka (960km<sup>2</sup>, 3,177 line km) areas on 18 February 2010. Both surveys were completed at an initial flight line spacing of 400m with follow up infill lines bringing the line spacing in more prospective areas to 200m.



The Ngovayang Project aeromagnetic image of the analytical signal of total magnetic intensity (Figure 2) shows internal banding within the metasedimentary host package, indicating the presence of magnetite within specific horizons. These magnetic units can often be correlated with itabirite mapped by le Bureau de Recherche Geologiques et Minieres (BRGM) in 1986. However, the magnetic units are much more extensive than the mapped units, indicating that the itabirite units are more widespread than previously thought, but do not always outcrop.

At Mayo Binka, the aeromagnetic image of the analytical signal of total magnetic intensity (Figure 4) has identified magnetic features in the central eastern portion of the tenement associated with an area with known outcropping massive magnetite/hematite. Previous rockchip sampling of this outcropping massive magnetite/hematite and associated itabirite units returned iron values ranging from 55-67% Fe.

#### Eseka Prospect

Exploration has been focussed on the Eseka area and included establishing gridlines over the prospect at 400m spacing to assist geological mapping and rockchip float sampling. Geological mapping, geochemical sampling and trenching activities are ongoing and critical to advancing the geological knowledge of the prospect in conjunction with the aeromagnetic data.

A field exploration camp has been established in the northern part of the prospect to aid field activities and logistics. Environmental approvals and base line studies with community consultation is underway in the Eseka region in preparation for future drill rig access.

Results from a total of 72 non-systematic rockchip float/grab samples have been received from Eseka, of which 60 relate directly to iron exploration. An additional 153 rockchip float/grab samples have been submitted for analysis with results pending.

The rockchip samples fall into three broad categories based on rock type and associated assay results; 1) massive magnetite, 2) goethitic/limonitic material after itabirite, and 3) weathered itabirite with variable iron/silica content.

The massive magnetite group is characterised by high iron values between 65-69% Fe with associated low silica, alumina, phosphorus and loss on ignition (LOI) values. The goethitic/ limonitic group has an iron range of 50-63% Fe with varying levels of silica, alumina, phosphorus



and LOI. Iron values of the weathered itabirite group have a range of 30-47% Fe (average 39% Fe) with associated silica ranging from 11-51% SiO<sub>2</sub> (average 39% SiO<sub>2</sub>), which is typical for itabirite bodies.

Results for these three groups of samples are presented in Tables 1-3, while sample locations with iron values are shown on Figure 3.

Sample No.	UTM_E	UTM_N	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%
583001	696241	399663	69.1	0.9	0.9	0.02	-1.0
583109	696111	399950	67.1	1.3	1.5	0.07	0.5
583117	696343	400355	68.7	0.6	1.5	0.02	-1.5
583131	695798	399973	65.2	2.0	1.3	0.21	3.0
583133	696175	400009	66.1	1.6	0.9	0.13	3.5
583134	696285	399994	67.3	1.8	1.2	0.08	0.1
583136	696710	400010	66.9	0.9	1.4	0.13	2.6
583213	696217	399614	65.7	1.2	1.6	0.06	2.0
583215	696384	399615	69.3	0.7	1.0	0.03	-1.4

## Table 1: Massive Magnetite – Eseka Prospect Rockchip Results

Co-ordinates: Universal Transverse Mercator WGS84, Zone 32 ,Northern Hemisphere Assay Method : Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> by fusion XRF, P% calculated from  $P_2O_5$  fusion XRF LOI – Loss on Ignition at 1,000<sup>0</sup>C by fusion XRF

#### Table 2: Goethitic/Limonitic Material – Eseka Prospect Rockchip Results

Sample No.	UTM_E	UTM_N	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%
583102	696697	402467	50.6	5.3	7.5	0.41	14.4
583103	696453	402669	57.5	3.3	3.7	0.33	10.5
583104	696408	402690	52.6	6.0	4.3	0.33	14.2
583105	696370	402551	63.5	1.6	2.3	0.09	4.8
583107	695821	400729	54.8	4.1	2.5	0.51	14.5
583118	696397	400354	53.1	4.3	4.7	0.54	14.0
583122	695316	400784	50.3	10.3	4.1	0.39	13.2
583201	695579	401209	55.5	3.3	2.5	0.55	14.5
583202	696516	401223	60.4	2.7	3.7	0.21	7.6
583203	696581	401229	57.8	4.1	3.6	0.26	9.6
583206	694317	399703	53.9	5.1	2.6	0.51	14.5
583208	695375	399600	51.6	13.8	1.5	0.45	9.7
583211	696026	399618	62.5	1.7	2.7	0.17	6.5
583216	696433	399626	52.6	4.6	6.2	0.25	13.5
583217	695525	399608	50.7	5.5	7.4	0.37	14.3

Co-ordinates: Universal Transverse Mercator WGS84, Zone 32 ,Northern Hemisphere

Assay Method : Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> by fusion XRF, P% calculated from  $P_2O_5$  fusion XRF

LOI – Loss on Ignition at 1,000°C by fusion XRF



# Table 3: Itabirite – Eseka Prospect Rockchip Results

Sample No.	UTM E	UTM N	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%
583002	685737	391906	35.5	46.4	0.7	0.09	1.2
583004	684189	382946	39.3	41.5	0.7	0.04	0.3
583005	684185	382944	33.2	51.2	0.5	0.02	0.7
583009	680036	396368	43.8	34.3	0.8	0.04	2.2
583010	680029	396340	43.1	36.1	0.4	0.03	0.8
583011	680021	396242	43.9	36.1	0.3	0.08	0.1
583012	680024	396213	43.3	36.4	0.3	0.07	1.4
583013	680044	396148	44.8	35.3	0.2	0.07	0.3
583014	679920	395761	44.0	34.6	1.0	0.06	-0.3
583101	696849	402376	30.3	37.1	10.3	0.03	6.1
583106	695501	400901	39.6	40.7	0.6	0.08	0.5
583108	696115	400078	36.7	42.8	1.1	0.09	0.2
583110	695158	400460	42.6	36.2	0.7	0.09	0.8
583111	695292	400419	45.5	11.8	9.5	0.04	12.8
583113	695489	400402	35.2	45.5	0.6	0.10	-0.4
583114	695490	400403	30.4	47.8	0.5	0.13	1.8
583115	695489	400402	35.7	47.5	0.1	0.07	0.2
583116	695750	400358	36.6	42.1	1.2	0.10	0.0
583119	695663	400706	35.7	46.0	0.5	0.07	0.2
583120	695617	400708	42.8	37.0	0.8	0.09	0.4
583121	695268	400788	39.2	39.1	1.0	0.09	0.3
583123	696099	400791	34.5	43.4	2.2	0.08	-0.2
583124	696604	400808	35.9	44.9	1.1	0.09	0.1
583127	695135	399998	38.0	42.4	1.2	0.10	0.5
583128	695572	399990	38.9	38.2	1.6	0.17	2.8
583130	695708	399983	33.5	46.3	1.3	0.08	1.1
583132	696080	399980	37.0	43.3	0.9	0.10	1.5
583135	696634	400010	44.1	26.4	1.3	0.14	8.3
583205	694850	399592	30.9	44.9	6.3	0.21	1.2
583207	695282	399592	38.4	41.9	1.2	0.06	0.1
583209	695525	399608	45.0	18.5	5.0	0.29	10.8
583210	695957	399616	37.2	41.9	1.7	0.07	0.7
583212	696047	399603	47.7	15.5	4.0	0.07	12.3
583214	696307	399601	37.9	41.5	0.9	0.08	1.1
583218	696766	399622	40.2	38.8	0.5	0.05	1.5
583219	696975	399598	39.3	40.2	0.6	0.04	0.8

Co-ordinates: Universal Transverse Mercator WGS84, Zone 32 ,Northern Hemisphere

Assay Method : Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> by fusion XRF, P% calculated from  $P_2O_5$  fusion XRF

LOI – Loss on Ignition at  $1,000^{\circ}$ C by fusion XRF



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

- Continue geological mapping, geochemical sampling and trenching at Eseka.
- Evaluation of priority targets in the northern Ngovayang area in close proximity to existing rail/road infrastructure.
- Continue regional iron mineralisation target identification utilising aeromagnetic litho-structural interpretation and Landsat data processing focussing on elevated iron content and alteration patterns.

## 2. Pilbara Project

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 magnetite iron ore.

Legend has been invited to attend a Ngarluma Aboriginal Corporation Board Meeting to discuss outstanding issues related to the proposed heritage agreement, which has delayed field activities.

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

#### 3. Mt Gibson Project

A rehabilitation plan for the Mt Gibson plant/mill site was completed by Legend's environmental consultants following a site visit.

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

• Final rehabilitation around the plant/mill site has commenced 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, Legend divested its interests in one exploration licence and eight prospecting licences in the Thangoo area.

Delays in finalising the magnetic inversion modelling of high resolution aeromagnetic data over the 22km strike length of BIF at Woodley have been experienced. Results are expected shortly.

## West Bungarra JV – E57/709 (Legend 70%, Gateway Mining Ltd 30%)

Nothing to report.

#### **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.

#### 5. Corporate

During the quarter Legend signed a Sale Agreement with Nemex Pty Ltd, a company associated with Mr Bruce Legendre, whereby Legend sold its interests in the 'Thangoo' group of tenements to Nemex for \$10,000. These tenements comprised a portion of the Gum Creek project and the board deemed that the nominal sale was preferable to dropping the tenements in question.

Mark Wilson Managing Director 28 April 2010

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.



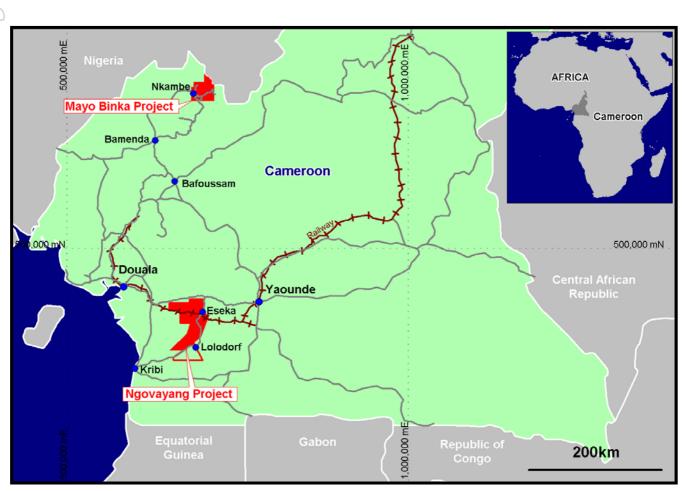


Figure 1: Cameroon Project Location



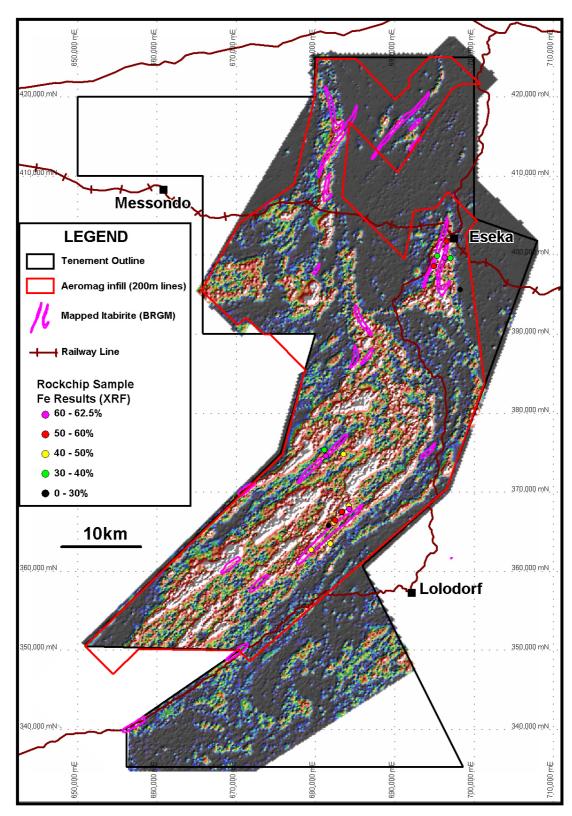


Figure 2: Ngovayang Project - Aeromagnetic Image (Analytical Signal of Total Magnetic Intensity) with Rockchip Iron Results



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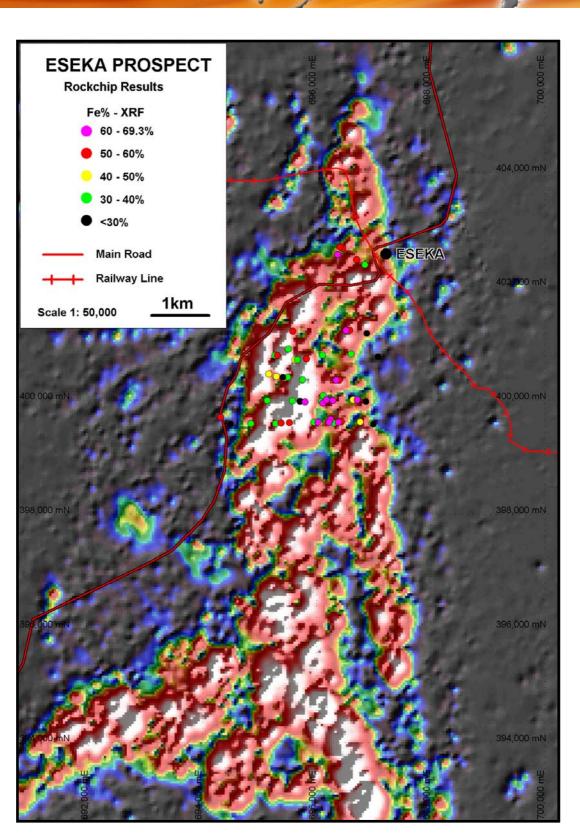


Figure 3: Eseka Prospect – Rockchip Sample Results (Iron) on Aeromagnetic Image (Analytical Signal of Total Magnetic Intensity)



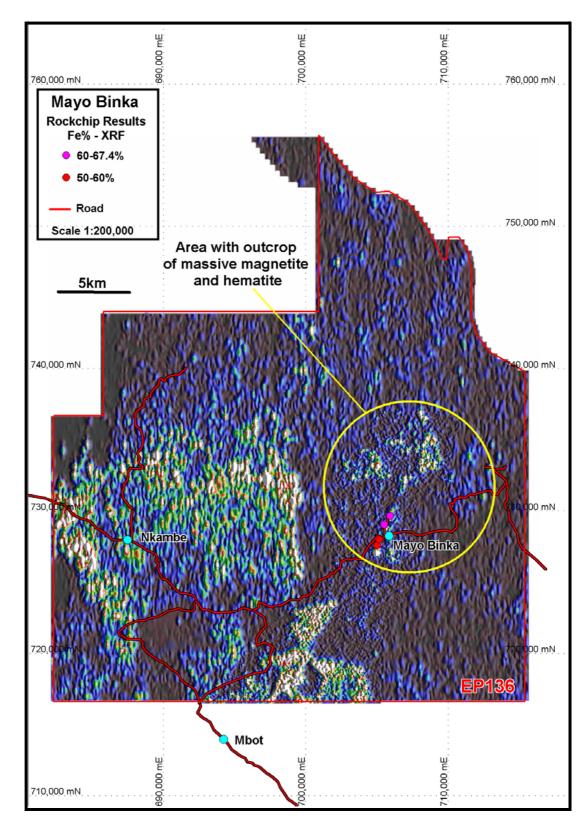


Figure 4: Mayo Binka Project - Rockchip Sample Results (Iron) on Aeromagnetic Image (Analytical Signal of Total Magnetic Intensity