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## **QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2010**

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### **Rio Pardo Project**

During the quarter, Lefroy Resources Limited (Company) finalised the share sale agreements for the purchase of the Rio Pardo Project, together with the notice of meeting required for the upcoming annual general meeting of shareholders to be held at 10am on 4 November 2010 at the Celtic Club, 48 Ord Street, West Perth. The proposed acquisition of 100% interest in the Rio Pardo Iron Ore Project in Brazil is subject to approval of Lefroy's shareholders at that meeting.

In addition, the Company has issued a prospectus to enable Lefroy to undertake a capital raising of up to \$7 million at a price of 20 cents per share on a post consolidation (1:2) basis.

As announced on 6 October 2010 the share sale agreements were executed and the notice of meeting was dispatched to shareholders. A summary of the share sale agreements can be found on page 17 of the notice of meeting. An independent geologist's report on the Rio Pardo Project is attached at Appendix 1 of the notice of meeting. The notice of meeting can be accessed electronically via the company's website at [www.lefroyresources.com.au](http://www.lefroyresources.com.au).

The prospectus was lodged with ASIC on 18 October 2010 and can also be accessed electronically via the company's website at [www.lefroyresources.com.au](http://www.lefroyresources.com.au).

### **Project Background Summary**

As announced on 5 July 2010, the Company has entered into a Heads of Agreement (Agreement) to acquire a 100% interest in the Rio Pardo Iron Ore Project located in Brazil, which provides the Company with entry into an emerging world class iron ore province via a project that has excellent potential for short term valuation uplift from early drilling.

The Project is located in the North Minas Gerais Iron Province in Brazil, close to the town of Rio Pardo de Minas. The Project is situated within an emerging world class iron ore province that rivals Brazil's Iron Quadrangle in potential. This province contains a number of multibillion tonne iron ore deposits owned by Mineração Minas Bahia S.A. (MIBA), Honbridge Ltd (Salinas) and Vale do Rio Doce (Vale).

The Rio Pardo block of tenements covers 338.5km<sup>2</sup> just north and adjacent to ground held by MIBA and Salinas. Aeromagnetic surveys and ground traverses indicate that the MIBA ore zones continue into the Project ground. Initial work on the Project indicates a potential resource equivalent to that contained within the MIBA ground with the opportunity to add additional resources along a parallel trend. The magnetite-haematite diamictite ores in this area beneficiate easily to product grades in excess of 65% Fe with low impurities suitable for high grade pellet feed.

The Project is 380kms from the port of Ilhéus and 160km from the town of Caetité. A major east west railway is currently being constructed by the Brazilian Federal Government between the port of Ilhéus and Figueirópolis with the section from Ilhéus to Caetité due for completion in mid 2011. A rail spur of 160km will need to be completed to connect this iron ore province to the major railroad being built at Caetité.

### **Exploration Program**

A program is planned to quickly define a JORC compliant resource and quickly determine the size and scope of the Project. Upon completion of the acquisition Lefroy plans an immediate aeromagnetic and drilling programme to demonstrate the continuity of the deposit and define an initial JORC compliant resource.

Following on from this further drilling will be completed to determine the size of the deposit together with additional metallurgical test work and capital and operating cost estimates and other studies to complete a scoping study designed to determine comparisons to those achieved on nearby projects.

### **Chile Uranium Exploration Tenements**

#### **Project Review**

Efforts to find a suitable joint venture partner for the company's projects in Chile are ongoing.

### **Corporate**

#### **Financial Position**

At the end of the quarter Lefroy had a cash balance of \$1.7 million.

For further details contact:

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