

# PROTO



RESOURCES & INVESTMENTS LTD

## STOCK EXCHANGE ANNOUNCEMENT

24 October 2012

### Iron Ore and Lindeman's Bore Update

**Stock Codes: ASX: PRW, OTCQX: P000Y**

*Proto Resources & Investments Ltd ("Proto", "the Company") is pleased to update the market on its general development and exploration progress. The Definitive Feasibility Study ("DFS") for the Barnes Hill nickel project in Tasmania is now complete. Proto is also continuing preparations for a fourth drill hole (LBD-4) into the previously identified electromagnetic ("EM") conductor that was shown to bear copper and gold mineralisation by drill hole LBD-3.*

#### **Executive Summary**

- The Barnes Hill nickel project DFS is now substantially complete with only ore leech optimisation to be further refined. The feasibility assessment on the iron ore material at Barnes Hill is proceeding. This 'overburden' above the nickel is being targeted with a view to early production. This work is being integrated with the current feasibility outcomes.
- Final targeting is being completed for the fourth drill hole at Lindeman's Bore. This follows ground geophysics to better target the mineralisation associated with the gold and copper intersections encountered in LBD 3.

#### **Barnes Hill Iron Ore and Nickel Project Update**

The Barnes Hill nickel DFS is now complete with only ore leech optimisation to be further added to. This DFS includes the increased mining rate of 500,000 tonnes per annum. The DFS is able to draw strongly on the detailed information already prepared for the Development Application and Development Proposal and Environmental Management Plan for the Barnes Hill project that were lodged last year. The release of the DFS follows bulk sample leaching tests of Barnes Hill ore, which confirmed both the rate of nickel recovery and acid consumption parameters. Under the DFS, 250 tonnes of cobalt are to be produced per year as well as 4,000 tonnes of nickel. The cobalt price is approximately \$26,700 per tonne in comparison to the nickel price which is approximately \$17,000 per tonne.

The assessment of the iron ore project at Barnes Hill is also proceeding with a view to early production. Proto also recently received a summary note on the iron ore potential from Metals Finance Limited ("Metals Finance, ASX: MFC) who has been undertaking the feasibility work under its joint venture agreement with Proto. This concentrated on the confirmed discrete zone of near surface iron-enriched material related to the Barnes Hill north ore body. Further work, aimed at providing an assessment of potential for classification of this material under the JORC code (inferred resource) is now being incorporated into the final feasibility report. This report also reviewed the previously announced results of the metallurgical

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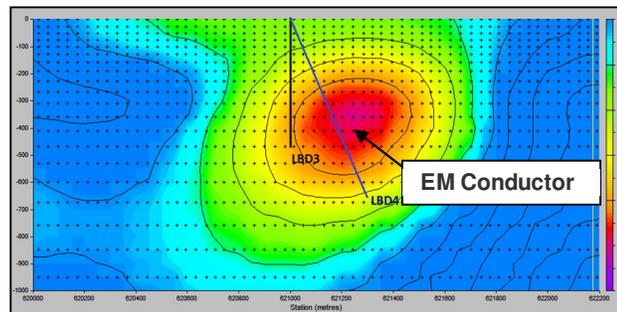
testing undertaken by Robbins Metallurgical Pty Ltd. This metallurgical test work was performed on iron rich samples from the northern pit of the resource. This work has identified a discrete near surface zone on the top of the Barnes Hill nickel laterite ore body, which has shown itself in preliminary testing to be upgradable using low-intensity magnetic separation to a 62+% Fe with 2.7% SiO<sub>2</sub> and 4.6% Al<sub>2</sub>O<sub>3</sub>.

Following this, discussions have continued with potential off-takers who specialise in a segment of the iron ore market where such silica and alumina levels are acceptable. A further stage of wet high-intensity magnetic separation was also shown to produce a bulk iron concentrate with average 51.92% Fe 3.54% SiO<sub>2</sub>, 6.94% Al<sub>2</sub>O<sub>3</sub> and 0.13% Ni can be produced as shown in the table below. Proto is awaiting the results of further high intensity testing that is being performed in China. This is expected to enhance the quality of this second iron product, widening the potential purchasers and blending options for this material.

### **Fourth Hole at Lindeman’s Bore**

Final targeting is now being completed at the Lindeman’s Bore project in the Northern Territory for a drill hole that will aim to pierce the centre of the gold and copper mineralisation that was intersected by the earlier third drill hole (LBD-3). This fourth drill (LBD-4) hole is targeting the centre of an EM conductor that was shown to carry copper and gold mineralisation.

LBD-3 targeted a 500m by 500m bedrock conductor and was completed to a depth of 466.6m. It intersected three mineralised zones of geological interest between 385-430m, including a 20m section of quartz/carbonate stringers in foliated and chloritic mafic rock that contained pyrite and chalcopyrite from 385m. In addition, an intrusive intersected at around 370m bore a strong resemblance to an interpreted felsic intrusive that hosted the anomalous gold zone of LBD-1. Final placement of the hole is being completed using the data and interpretation of detailed ground-based magnetic and gravity surveys recently completed at Lindeman’s Bore. The approximate location of LBD-4 is shown in Figure 1 below.



**Figure 1 –Location of the LBD-4 Drill Hole**

### **Competent Persons Statement**

The information in this release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Carl Swensson, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Swensson is a director of Swensson Integrated Resource Management Services and has sufficient experience 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”. Mr Swensson consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.

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