

January 29, 2010

### **Quarterly Activity Report ending 31 December 2009**

### **ASX Release Stock Code: PRW**

### Highlights

- Further progress at Proto's flagship Barnes Hill project in Tasmania and at the Lindeman's Bore project in the Northern Territory
- Notice of Intent for the Barnes Hill project submitted to the Tasmanian Environmental Protection Authority with draft Guidelines for the Development Proposal and Environmental Management Plan ("DPEMP") released
- Progress report on the Barnes Hill detailed feasibility study received from Metals Finance Corporation ("Metals Finance"), confirming project economics outlined in the 2008 Scoping Study on the Barnes Hill project
- Final assay results received from diamond core drill hole LBD1 at Lindeman's Bore, revealing 24m intersection with anomalous silver close to surface (including 4m @ 16.15g/t Ag). Diamond drill hole LBD2 completed to a depth of 751.6m to test a magnetic target 1.9km to the north of hole LBD1
- Two new exploration licence applications lodged in the NT covering a combined 3,192 km<sup>2</sup>, doubling the Company's exploration holdings in the NT to 6,564 km<sup>2</sup>, on one granted licence and six licence applications
- Tenement transfers completed for the purchase of Warwick Resource's 100% owned Waite Kauri North nickel Mining Lease in Western Australia. The Waite Kauri North project contains a JORC compliant Inferred Resource of 3.9 million tonnes at 1.04% nickel

### Barnes Hill Project, Tasmania (Nickel Laterite, Nickel Sulphide and Iron Ore)

In November 2009 Proto Resources & Investments Ltd ("Proto", "the Company") commenced the second stage of a resource drilling campaign at the Barnes Hill nickel-cobalt deposit in Tasmania. Drilling was conducted on a nominal 50m x 50m grid pattern across the deposit. By the end of the quarter, a total of 312 aircore drill holes for 2,489 m had been completed as part of the program. The resource drill-out aimed

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to not only upgrade portions of the current Indicated Mineral Resource to a Measured category but also to test for possible extensions to the currently defined deposit.

Also in the quarter, Proto submitted a Notice of Intent ("NOI") for the proposed development of the Barnes Hill project to the Tasmanian Environment Protection Authority Board ("EPA Board)". The NOI submittal outlines the fundamentals of the Barnes Hill nickel-cobalt project to the EPA Board in order that it can issue environmental guidelines for the drafting of the project DPEMP. The Tasmanian Environment Protection Authority (EPA) has now released the draft DPEMP Guidelines. When completed the DPEMP will support the project development application to the Tasmanian West Tamar Council and supply detailed environmental information to the EPA Board for environmental assessment of the project.

As announced on 14 October 2009, Proto and Metals Finance have agreed to extend the term of their joint venture agreement. Under the revised terms, completion of bulk sampling and pilot leach test work, in conjunction with detailed engineering design and costing, will await the completion of the Proto drilling programme to upgrade the Barnes Hill Mineral Resource to Measured in accordance with the guidelines of the JORC Code (2004). Metals Finance has now completed a review and remodelling of the June 2008 scoping study and, based on key conceptual assumptions (presented in the following table), the conceptual project appears to remain financially robust.

Barnes Hill Model Parameters <sup>1</sup>		Base case
Available material*	8.6	Mt
Average Ni content*	1.1	%
Average Co content*	0.06	%
Projected Leach recovery Ni	80	%
Projected Leach recovery Co	70	%
Life of projected operation	12	years
Ni price	7.00	US\$/Ib
Acid price	90	A\$/t delivered
Exchange rate	0.8	US:Au
Total projected capex	85	A\$ million
Total projected revenue	1,526	A\$ million
Operating costs	672	A\$ million
Operating cost contingency	15	%
Projected surplus	854	A\$ million
Project IRR %	55	%
Project NPV (at a discount rate of 15%)	165	A\$ million

\*Note – the above model is based on conceptual resource factors which are considered to be achievable for the project and which are being used to establish target parameters for the ongoing study. They remain subject to the results of the drilling programme planned by Proto, confirmation of Ni and Co content, determination of factors such as mining loss and/or dilution and detailed flow sheet design, piloting and financial analysis to be carried out by Metals Finance.



The base case conceptual model presented in the Company's announcement of 14 October 2009 provides for a project surplus of A\$854 million over the life of the project or an NPV of A\$165 million.

In 2010 Proto will also be continuing exploration at Barnes Hill West. In the quarter, exploration targets have been set in relation to the assessment of the prospectivity of the historic Pandora Copper Mine located 2km to the west of the Barnes Hill nickel resource.

Meanwhile Proto has had a number of meetings with community stakeholders and the Company is continuing to pursue innovative processing technology that aims to improve reagent recovery and lower the environmental footprint of the project. This Clean Technology was a runner-up at the 2009 Australian Mining Prospect Awards, and is expected to reduce the expected vehicle movements, reagent usage and brine dam footprint as outlined in the NOI. The technology has already been through several iterations and a rigorously tested flow sheet is expected to be completed in March 2010. The technology is also expected to produce an iron and magnesium saleable product.

### Lindeman's Bore, Northern Territory (Nickel Sulphide, Copper and PGEs)

On 10 November 2009, the Company announced the final assay results from diamond drill hole LBD 1, which was completed in June 2009 to a vertical depth of 751m (Table 1) at the Lindeman's Bore project. The Lindeman's Bore project, on granted exploration licence EL 25307, is located 380km southwest of Katherine. The hole was drilled to test a coincident geophysical gravity and magnetics anomaly which the Company feels was explained by the intersection of magnetic basaltic sills in hole LBD 1.

- These previously announced results include:
  - 24m @ 4.92g/t Ag from 32m including 4m @ 16.15g/t Ag
  - o 5m @ 0.13g/t Au from 380m and 6m @ 0.03% Co & 0.05% Cu

In the quarter drill hole LBD 2 was completed to a final depth of 751.6m (Table 2). This hole was drilled to test a magnetic target located 1.9km to the north of hole LBD 1. The geological log of drill hole LBD 2 showed that the hole passed through sedimentary rock units of the Proterozoic aged Limbunya Group before passing through an erosional unconformity and into metamorphosed sedimentary and volcanic rock units of the Inverway Metamorphics. Magnetic mafic volcanics were also intersected near the end of the hole. The full hole length of core will be cut, sampled and assayed during January and February 2010.

A fixed loop surface electromagnetic (EM) survey was also completed over the collar positions of drill holes LBD 1 and LBD 2. Analysis of results by Southern Geoscience Consultants has indicated the presence of a moderate off hole bedrock conductor to the north of drill hole LBD 2 which is dipping to the north. A 50 sample soil geochemistry program was also been completed around the collar position of drill hole LBD 1 This soil sampling program followed seven 100m spaced sample lines located north and south of the collar position of drill hole LBD 1 and are currently being assayed.

On 13 October 2009, Proto also announced that the Company had doubled its exploration footprint in the Northern Territory with the successful lodgement of two new exploration licence applications (ELAs 27617 & 27618). The new applications cover a combined area of 3,192 km<sup>2</sup> and are located 95km to the east of the Company's Lindeman's Bore nickel project (EL 25307) near the community of Kalkarindji and 300km southwest of Katherine. The new tenement applications covered portions of the Neave Fault and also an interpreted volcanic vent at Wave Hill, which may have acted as a conduit for basaltic magma during extrusion of the Antrim Plateau basalts. Upon grant of the exploration licences, Proto intends as the first



exploration phase to undertake airborne geophysical surveys and modelling to assist with targeting and surface geological mapping and sampling where appropriate.

#### Table 1 – Drill Hole LBD 1 Collar Co-ordinate Information

Hol	e ID	Northing (m)	Easting (m)	Dip (°)	Final Depth (m)
LBD ·	1	8066817	619792	-90	751

• Hole collar located by handheld GPS (GDA94 datum, Zone 52).

• Vertical drill hole.

• HQ3 sized core from surface to 53.5m and NQ2 sized core from 53.5m to 751m.

#### Table 2 – Drill Hole Collar Location, Lindeman's Bore

Hole ID	Northing	Easting	Dip (°)	Final Depth (m)
LBD 2	8068950	619810	-90	751.6

• Hole collar located by handheld GPS (GDA94 datum, Zone 52)

• Vertical drill hole.

### Waite Kauri North, WA (Nickel Laterite) and Mt Vetters, WA (Gold and Nickel)

During the quarter, Proto completed tenement transfers under its agreement to purchase Warwick Resources Limited's ("Warwick," ASX:WRK) 100% owned Waite Kauri North project in the Western Australian goldfields north of Kalgoorlie. Economic assessment of this granted Mining Lease (M37/1189) is now being undertaken in order to establish development pathways for the JORC compliant Inferred Mineral Resource of 3.9 million tonnes at 1.04% Ni and 0.04% Co, (representing 40,541 tonnes of contained nickel and 1,448 tonnes of contained cobalt) that has previously been estimated for the project using a 0.7% Ni cut-off grade.

Following ground EM and RC drilling last quarter Proto continued the planning of an initial ground scintillometer or spectrometer survey evaluating a uranium-thorium airborne radiometric anomaly which occurs in the southwestern project area. This exploration is planned for early 2010.

### Corporate Development

At a General Meeting of shareholders held 30 November 2009, all resolutions put to the meeting passed unanimously by show of hands. The resolutions covered the re-election of directors and the issuing of shares as remuneration across a number of consultants and staff members. Share issues as approved in



the earlier General Meeting of 24 July 2009 and arrangements to substitute equity for cash were also made in the period.

In response to developments in the quarter, Chairman and Managing Director Andrew Mortimer said today, "The Barnes Hill project is moving swiftly towards development with the final resource drilling and development surveys being virtually completed. This project gives Proto the very real possibility of generating significant earnings in the near term when the project moves from development into production."

### Appendix 5B

The attached Appendix 5B is Proto's quarterly statement of cashflows for the three months ended 31 December 2009.

There has been no mining or development activity or expenditure in the period.

For further information please contact:

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The information in this report that relates to Exploration Results is based on information compiled by Andrew Jones, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Jones is a fulltime employee of TasEx Geological Services Pty Ltd 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 Jones consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.