

# PROTO



RESOURCES & INVESTMENTS LTD

## STOCK EXCHANGE ANNOUNCEMENT

October 18, 2011

### Secondment as Proto Works Towards NT Drilling

#### ASX Release Stock Code: PRW

*Proto Resources & Investments Ltd ("Proto", "the Company") is pleased to announce the finalisation of a research sponsorship to further its exploration in the Northern Territory. Leading volcanologist Dr Mike Widdowson is to be seconded to Proto as part of a collaboration that will include jointly funding a PhD project to implement a suite of sophisticated geochemical analyses.*

#### **Executive Summary**

- Dr Mike Widdowson is to be seconded to further exploration at the Company's Waterloo project 80km southeast of Kununurra. This is part of an exploration collaboration that will also include the funding, jointly with The Open University, UK of a PhD student who will implement a program of sophisticated geochemical analysis including sulphur isotope analysis and Ar/Ar dating.
- The secondment will support the integrated database of structural geology, geochemistry and already identified geophysical anomalies that is being used to site upcoming drilling in the NT.

#### **Exploration Collaboration**

Proto Resources & Investments Ltd ("Proto", "the Company") is pleased to announce the finalisation of a research sponsorship including the linked professional secondment of leading volcanologist Dr Mike Widdowson to further exploration on Proto's Northern Territory tenements. Dr Widdowson is to be seconded to Proto as part of an exploration collaboration that will include the funding of a dedicated PhD project focused on the Waterloo project area. The research project is entitled: "Architecture, chemostratigraphy, and economic prospectivity of the Central Kalkarindgi flood basalt province, Australia".

Waterloo is being explored under Proto's joint venture with Peak Mining and Exploration Limited ("Peak") and is situated approximately 80km southeast of Kununurra in the Kimberley region of the Northern Territory. Waterloo sits within the extensive Antrim Plateau Volcanics. Waterloo comprises two granted exploration licenses (EL27416 and EL27420) and two applications (EL28504 and EL28505) that sit near the major structural feature, the Blackfellow Creek Fault. Dr Widdowson's work will be central to the sighting of drilling in the NT, which is now being planned based on structural features, available geochemistry and the anomalous geophysical results identified earlier in 2011. This work will substantially improve the geochemical database, that has already been expanded with data recently collected by a team from the Queensland University of Technology ("QUT") led by Dr David Murphy.

In order to support the work that Dr Widdowson is undertaking, Proto has agreed with The Open University ("OU") to jointly fund a postgraduate student in the period from 1 October 2011 to 30 September 2014. In

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In addition to funding 50% of student costs, the OU will also fund 50% of analytical costs that will directly contribute to Proto's exploration of the Waterloo area. This is to include preparation of thin sections, use of the OU's electron microprobe, sulphur isotope analysis and Ar/Ar. The student will participate in two extended field trips to Waterloo that Proto's staff, including Dr Widdowson, will be undertaking.

### **Research and Exploration Aims**

The aim of this PhD project is to combine volcanological and geochemical data to aid in constraining the broader geological setting and evolution of the Antrim Plateau Volcanics ("APV") (c. 128 – 132°E, 15 - 20°S). The studentship will include detailed field-based observation and sampling, generation and interrogation of geochemical data sets, and integration of these findings with archive data from borehole logging and Proto's recent geophysical surveys.

The aim of this project will be to determine the geochemical characteristics and dimensions of recognizable stratigraphical units/eruptive packages at a variety of scales over the APV, and so establish for the first time the eruptive units that constitute the volcanic hierarchy, and their relationship to the broader regional geological setting. This information is of importance because the APV is considered to have economic potential due to its similarities with the Noril'sk Ni-Cu-PGE sulphide deposits associated with sub-volcanic intrusions during the Siberian Trap flood basalt magmatic event.

### **Planned Work Programs**

The PhD project will include two, month-long, field reconnaissance and sample collection expeditions, and extensive geochemical analyses to be performed at the OU (ICP-MS and Ar/Ar dating work), QUT (XRF), and Leeds University (sulphur isotope analyses). These detailed analyses will aid in determining the economic potential of the flood basalt succession, the likelihood of crustal sill complexes, and the potential for the presence of associated mineralisation within the surrounding country rocks and basement.

In addition to the fieldwork and analytical data generated by the student, this PhD study use GIS techniques to build a virtual spatial framework into which the broader geological, geophysical and detailed stratigraphical, volcanological and chronological data will be combined. This will enable the wider structure of the APV to be comprehensively determined for the first time, and permit exceptional detail to be achieved in areas of extensive outcrop.

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### **Competent Persons Statement**

*The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves, together with any related assessments and interpretations, is based on information reviewed by Mr Peter Peebles a full-time employee of Darlington Geological Services Pty Ltd. Mr Peebles is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation 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 Mineral Resources and Ore Reserves". Mr Peebles consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.*