

# PROTO



RESOURCES & INVESTMENTS LTD

## STOCK EXCHANGE ANNOUNCEMENT

12 April 2012

### Lindeman's Drilling Completed at 466.6m

#### ASX Release Stock Code: PRW

*Drilling of the Lindeman's Bore copper prospect in the Northern Territory has been completed at 466.6m. Several zones of interest have been intersected including a 20m section of quartz/carbonate stringers in foliated and chloritic mafic rock that contained pyrite and chalcopyrite from 385m.*

#### Executive Summary

- Drilling of the third deep diamond drill hole at Proto's 50%-owned Lindeman's Bore project has been completed 466.6m.
- The hole intersected promising geology including three mineralised zones of geological interest between 385-430m and particularly 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 LBD1. Quartz veining immediately above this is also of geological interest.
- Access to the government ore cutting shed has been booked and the entire hole will cut and sent for assay in the next 10 days.

#### Drilling Completed at Lindeman's Bore

The Board and Management of Proto Resources & Investments Ltd ("Proto", "the Company") is pleased to announce the completion of the third deep diamond hole (LBD3) at the Lindeman's Bore project 380km south west of Katherine Northern Territory. LBD3 was completed at a final vertical depth below surface of 466.6m. A preliminary account of geological interpretation, prior to a more detailed logging and geochemical sampling program is provided below.

The Company is encouraged by the geology that they have encountered in initial inspection of the core. LBD3 was drilled to target a tabular 500m by 500m electromagnetic ("EM") anomaly identified through sequential application of a Z-Axis Tipper Electromagnetic ("ZTEM") survey in 2010 and follow-up ground EM geophysical surveys performed during 2011. The ZTEM geophysical data returned potentially sulphide bearing geophysical signatures that encouraged further exploration under the Mississippi Valley style copper-lead-zinc mineralisation ("MVT") model that Proto is now testing at Lindeman's Bore.

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LBD3 was a vertical hole drilled at collar co-ordinates that were initially planned for an angled hole (as per Proto announcement of 5th December 2011). That angled hole was designed to drill through or near to the centre of the geophysics anomaly but was shifted to test its margin. Interpretation of the core suggests that LBD3 has intersected the western periphery of the anomaly, as indicated by the presence of stringer development throughout the various rock units.

### ***Three Zones of Alteration Intersected***

Proto is encouraged by the geology that they have encountered in various geological units of the Inverway Metamorphic Formation, consisting of mafic and meta-sedimentary stratigraphy. At this early stage of LBD3 logging interpretation, there are three mineralised zones of geological interest encountered in LBD3, not occurring in earlier diamond core holes LBD1 or LBD2. These three zones of interesting alteration and/or mineralisation in the new LBD3 hole are summarised as follows:

- quartz/carbonate stringers containing trace amounts of pyrite and chalcopyrite developed within a foliated and chloritic mafic rock unit (385-405m depth, see Figure 1);
- stringers of pyrite and trace amounts of chalcopyrite developed within a foliated and partly silicified black shale rock unit (405-419m depth, see Figures 2 and 3);
- minor pyrite and chalcopyrite stringer development in a foliated and banded, haematite-magnetite-chlorite meta-sedimentary rock unit (419-430m depth, see Figure 4).

LBD3 was completed at 466.6m having passed out of these favoured zones of alteration and associated pyrite/chalcopyrite stringers.



***Figure 1 – Quartz/carbonate stringers in foliated and chloritic mafic rock at 390.8m***

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*Figure 2 –Pyrite and chalcopyrite in stingers and on joint planes in black shale rock at 415.4m*



*Figure 3 –Hematite/magnetite/chlorite banding in metasediment, minor chalcopyrite at 415.4m*





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**Figure 4 – Minor pyrite and chalcopyrite stringer development in a foliated and banded, hematite/magnetite/chlorite meta-sedimentary rock unit at 423.6m**

The Company is encouraged by the style of alteration and presence of stringer alteration/mineralisation throughout these zones of interest in the Inverway Metamorphic stratigraphy, and awaits the outcome of a more detailed geological logging and sampling program, due to commence in mid-April, 2012.

In addition, the core returned at around 370m bore a strong resemblance to an intrusive intersected in the anomalous gold zone of LBD1 that sat at around 424-431m in that hole. Quartz veining was observed immediately above this zone in LBD3. The anomalous gold in LBD1 was interpreted to be associated with an intrusive felsic porphyry, but did not include the quartz veining observed in LBD3. The Company looks forward to receiving gold assays in relation to these observed features.

Core cutting will commence in 10 days, with material to be shipped for assay once that is complete. Access to the shed has meant that the first 110m of core drilled before the wet season has been held over and will be submitted with the remainder of the core.

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### **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.*