



DARTMININGNL

ABN: 84 119 904 880

## EXPLORATION UPDATE

**Initial Morgan drilling successfully completed,  
Unicorn deep diamond drilling has commenced with visible  
molybdenite identified from near surface**

### HIGHLIGHTS

- Morgan initial drill program completed with wide intersections of visible sulphides, assay results will be reported when available. Additional drilling will be undertaken following a full interpretation of results and down-hole geophysics.
- Phase 2 Diamond Drilling has commenced at the Unicorn molybdenum-copper-silver porphyry prospect, diamond hole DUNDD004 has already intersected significant visible molybdenite (Photo 1) from 29 metres to the current depth of 100metres.
- The Unicorn porphyry is a very large mineralised rhyolite dome, unique in Australia, with similarities to the Climax mine (USA) primary molybdenum deposit.



**Photo 1:** Current drillhole DUNDD004 shows molybdenite as blue-grey flakes and aggregates in a silica vein (under pointer tip) within breccia host rocks of highly silicified and sericitised sub volcanic rhyolite.

19th April 2010



### **MORGAN PHASE I DRILL PROGRAM COMPLETED**

Phase I drilling of two deep holes at the Morgan Prospect was completed with DMMDD002 at 673 metres. The hole intersected a significant zone of visible molybdenite mineralisation within highly altered sediments and porphyry dykes above what is interpreted to be a concealed porphyry complex. The core is still being sampled and assays results will be reported as they come to hand. Initial interpretation suggests DMMDD002 intersected mineralisation including molybdenite in the upper portion in highly altered sediments and porphyry dykes (as has been previously reported). The mineralisation is considered to be stockwork veining above the intrusion. Geological logging has identified at least three different phases of porphyry intrusion, one showing significant molybdenite mineralization in silica stockwork veins, the hole has been cased to allow down-hole geophysics. A full evaluation will be completed before the next drill program to target the concealed porphyry at depth.

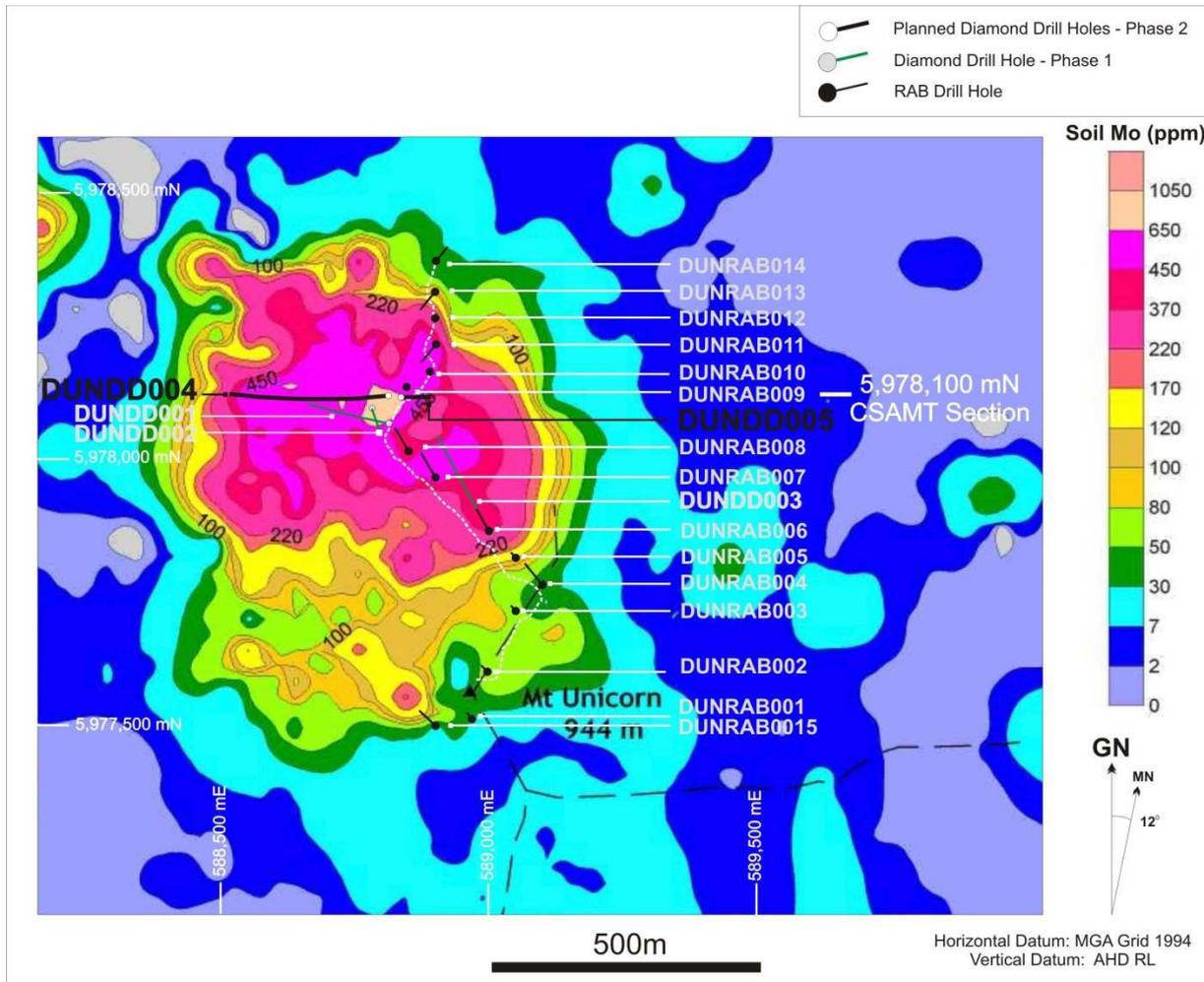
### **UNICORN PHASE II DRILLING UNDERWAY**

Phase II diamond drilling has commenced at the Unicorn molybdenum-copper-silver (Mo-Cu-Ag) porphyry prospect with holes to 800 metres planned. Following detailed interpretation of previous shallow drilling, geophysics and alteration studies, the first hole of the Phase II program is located where high grade molybdenum was identified within fresh sulphide mineralisation (See ASX report dated 1 October 2008) containing **0.083% Mo, 0.18% Cu and 5.7ppm Ag from 30 to 50 metres in RAB hole DUNRAB09**. The hole ends in mineralisation and clearly shows significant molybdenum, copper and silver within basal fresh sulphides associated with a hydrothermal silica alteration assemblage of the lithocap. Typically, high level lithocaps are lower grade or barren when overlying a porphyry Mo system. Petrography of drill core undertaken by CSIRO from the Phase I Unicorn drill program revealed favourable adularia alteration and possible silica "Brain Structure" a form of Universal Solidification Texture widely recognised as indicative of potentially high molybdenum grades. Deep Phase 2 diamond drilling, now underway, will target the interpreted primary magmatic Mo mineralisation domains. (Figure 2). The Phase 2 Diamond Drilling Program is supported by a State Government grant of \$80,000 (the maximum amount) awarded in Round 3 of the Rediscover Victoria Drilling program.

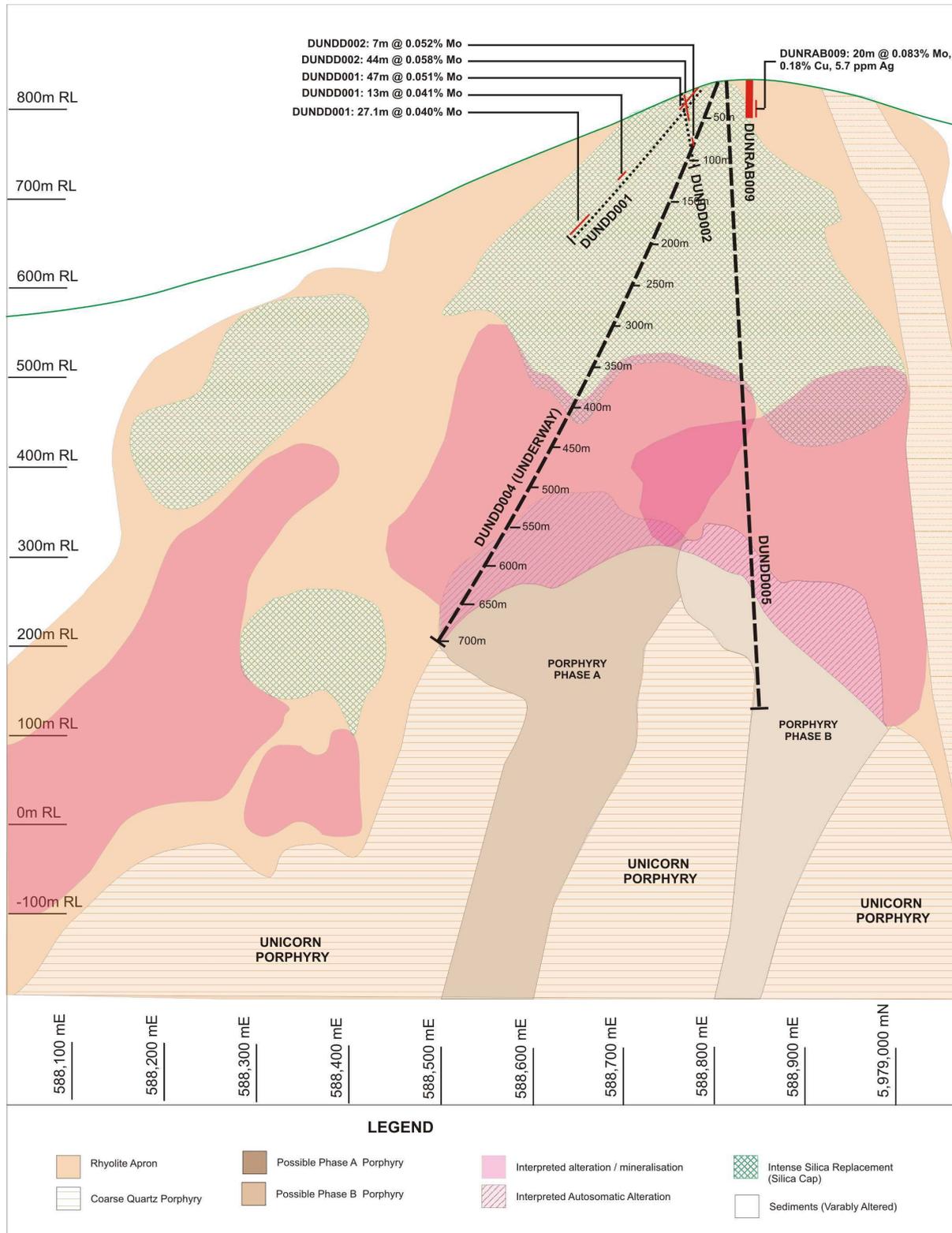
### **A NEW MOLYBDENUM PORPHYRY PROVINCE**

wart considers the Unicorn and Morgan porphyry Mo systems are part of a series of mineralised porphyry prospects occurring throughout the Dart tenements in North East Victoria. Regional modelling with follow-up hydro-geochemical and soil geochemical traverses has identified the **Boebuck** and **Bunroy** porphyry prospects. This discovery of a new Mo-polymetallic metallogenic province is a highly significant discovery within Australia.

*A more detailed geological discussion of these results can be found on the Dart Mining website: [www.dartmining.com.au](http://www.dartmining.com.au)*



**Figure 1** Plan of completed Phase 1 RAB & diamond holes and Phase 2 diamond drill holes DUNDD04 & DUNDD05 on Unicorn's Mo surface geochemistry map.



**Figure 2.0** Simplified geological model cross section on Line 5,978, 100mN showing planned drilling into a complex of alteration with Mo-Cu-Ag mineralised domains over a central porphyry core.



**Photo 2** Unicorns highly silicified hydrothermal alteration Mo lithocap outcrop forms prominent topographic bluffs. Detailed inserts show leached vughs, some after sulphide are now limonitic zones. The silica bluff (top right insert) visible from the Mount Morgan porphyry prospect some 7.5km to the SW. Mid right insert shows a silica bluff from the base on the north western side of Mount Unicorn. Close-up views (lower right & left) shows the mineralised silicified lithocap anomalous in molybdenum, copper and silver and distally lead.

- ENDS -

**COMPETENT PERSON'S STATEMENT**

Information in this report that relates to a statement of exploration results of the Company is based on information compiled by Bernhard Hochwimmer B.Sc. AIG and Dean Turnbull B.App.Sc.(Geol) AIG. Both Mr Hochwimmer and Mr Turnbull are Directors of Dart Mining NL and have sufficient experience relevant to the style of mineralisation and type of deposits under consideration and to the activity undertaken. They are qualified as competent persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (or "JORC Code"). Mr Hochwimmer and Mr Turnbull consent to the inclusion of this information in the form and context in which it appears in this report.

For further information visit our website at [www.dartmining.com.au](http://www.dartmining.com.au) or contact

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