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ASX RELEASE

STRATEGIC RARE EARTH ELEMENT (REE) TARGETS IDENTIFIED AT GARDNER-TANAMI URANIUM PROJECT

- ***Identification of high-grade strategic "heavy" REE (HREE) in hydrothermal xenotime mineralisation associated with Browns Range uranium anomalies***
- ***Studies suggest HREE-bearing xenotime quartz stockworks are associated with regionally significant potentially ore-deposit forming processes***
- ***Exploration in 2010 to include Browns Range HREE targets***

Northern Uranium Limited (ASX: NTU) is pleased to report significant REE targets at its 100%-owned Gardiner-Tanami project, following the identification of unusually high concentrations of HREE in hydrothermal quartz-xenotime mineralisation in the Browns Range Dome area.

Heavy REE's have a substantially higher market value on a per pound basis than the more common light REE's.

Recently completed studies by project operator Amfex have confirmed the potential of the Browns Range quartz-xenotime mineralisation.

Northern Uranium Executive Chairman Mr Kevin Schultz said the Company was proposing a significant focus of exploration activities in this area in 2010, in tandem with the on-going uranium exploration program on its flagship project.

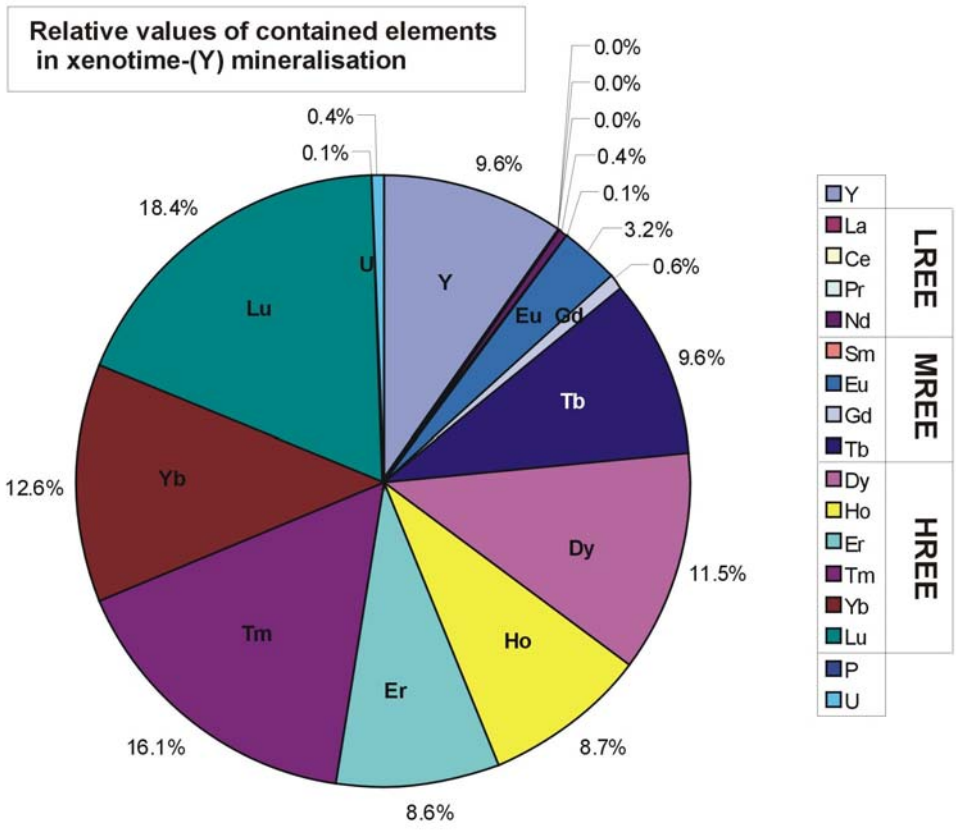
"The HREE discovery represents an exciting avenue for additional value at the Gardiner-Tanami project, alongside our core uranium focus," Mr Schultz said.

"With rare earths now at very high prices as a consequence of the recent imposition of export quotas by the world's dominant producer China, the Browns Range area presents an attractive target for REE exploration," Mr Schultz said.

"Rare earths are vital in such high-tech developments as hybrid cars, wind turbines and low-energy light bulbs, and their strategic importance in a world embracing green technology has also raised our level of interest in further exploring these occurrences," he said.

Xenotime (a yttrium and rare earth bearing phosphate mineral) in the Browns Range Dome area was first identified in the 1980s by PNC Exploration while exploring for uranium. PNC named the area of quartz-xenotime mineralisation "Area 5 Prospect" and tested one of the larger quartz-xenotime veins (10-30cm wide, 15m long) by costeaning and shallow drilling, obtaining results up to 16% yttrium (Y), 0.2% uranium (U), 0.5% light REE (LREE) and 12% HREE.

Afmex, as the operator for Northern Uranium's uranium exploration program since 2007, also encountered previously unknown quartz-xenotime mineralisation 4km to the north-northeast (NNE) of Area 5 Prospect. The hydrothermal xenotime-quartz stockworks discovered by Afmex are similar to the Area 5 occurrences. Xenotime concentration was recorded by Afmex as being up to 3-4 wt-%.



Price distribution by REE in the xenotime mineralisation, Browns Range Dome area

Recent Afmex U-Pb isotopic dating on xenotime from the area 4km NNE of Area 5 Prospect gave a concordant age at 1701±26Ma corresponding to a post-"Tanami Orogen" (approx. 1800Ma) hydrothermal event in the region. These dates suggest that the quartz-xenotime mineralisation may be linked to regional scale tectonic reactivation, implying ore-deposit potential in the Browns Range Dome area.

Hydrothermal quartz-xenotime mineralisation in the Browns Range area

Geology of the Browns Range Dome

Area 5 Prospect is located on the western side of the Browns Range Dome, a Paleoproterozoic dome formed by a granitic core intruding the Paleoproterozoic "Browns Range Metamorphics" (meta-arkoses, feldspathic metasandstones and schists) and an Archaean orthogneiss and schist unit to the south. The dome and its aureole of metamorphics are surrounded by the Mesoproterozoic Gardiner Sandstone of the Victoria-Birrindudu Basin (Figure 1).

Area 5 was described by PNC Exploration as consisting of outcrops of arkose, conglomerate and minor quartz mica schist. Sub-cropping ultramafic rocks and a banded iron formation (BIF)/quartz pebble conglomerate occur in the area. Calc-silicate rocks are also recorded 4km to the east. Elongate, probably discontinuous magnetic ultramafic bodies, up to 400m wide, appear to have been intruded along faults trending 060˚.

Proposed work program

Figure 2 shows that the Area 5 Prospect and the new Afmex discovery 4km to the NNE are in areas of anomalous uranium radiometrics and topographic highs. The topographic highs may be due to erosion-resistant outcropping quartz stockworks and are immediate targets for on-ground investigations. The figure also shows that based on anomalous uranium radiometrics the REE target zone is open in several directions and extends over some 11km.

The REE exploration program, which is to proceed in conjunction with the 2010 Oracle-Soma uranium exploration program, will include review and re-processing of the Hymap hyperspectral airborne mapping data and airborne radiometrics. The presence of minor uranium in xenotime means that any subtle airborne radiometric anomalies will require checking on the ground. Hymap may be useful in detecting the quartz stockworks (+/- xenotime) and associated alteration clay signature.

After the initial reconnaissance promising areas will be selected for detailed geological and structural mapping, rock chip sampling and ground radiometrics. Follow-up in areas of interest will include detailed geochemical soil sampling and/or systematic detailed ground radiometrics to outline potential drill targets.

About Northern Uranium

Northern Uranium Limited is primarily a uranium exploration and development company and holds large and prospective projects in Western Australia and the Northern Territory.

The Company has a strategic alliance with the French nuclear group, Areva NC, via its wholly owned subsidiaries, Areva NC Australia Pty Ltd (Areva) and Afmeco Mining and Exploration Pty Ltd (Afmex). Areva, which has a substantial shareholding in Northern Uranium, is the operator, through Afmex, of uranium exploration and development of the Gardiner-Tanami Project, and will also market any uranium produced by Northern Uranium.

The Gardiner-Tanami project covers an area of approximately 11,000km^2 centred on the WA-NT border 200km southeast of Halls Creek. Northern Uranium and the project operator Afmex have been exploring for unconformity-related uranium deposits in the area since 2007.

INVESTOR INFORMATION

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Capital Structure:

Share Price (NTU): $0.165 c
Issued Shares: 72.7m
Market Cap: $12m

Company Management:

Kevin Schultz – Executive Chairman
Adrian Griffin - Non executive Director
Bob Hair - Non executive Director
Colin McCavana - Non executive Director
Philippe Portella - Non executive Director
Robin Wilson – General Manager

FOR AND ON BEHALF OF THE BOARD

Kevin Schultz
Executive Chairman

Competent Person Declaration

The information in this report accurately reflects information prepared by competent persons (as defined by the Australasian Code for Reporting of Mineral Resources and Ore Reserves). It is compiled by Mr K Schultz, an employee of the Company who is a Fellow of The Australasian Institute of Mining and Metallurgy with the requisite experience in the field of activity in which he is reporting. Mr Schultz has sufficient experience which is relevant to the style of mineralisation and the 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 Schultz consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Figure 1
Gardiner-Tanami Project – WA tenements and geology

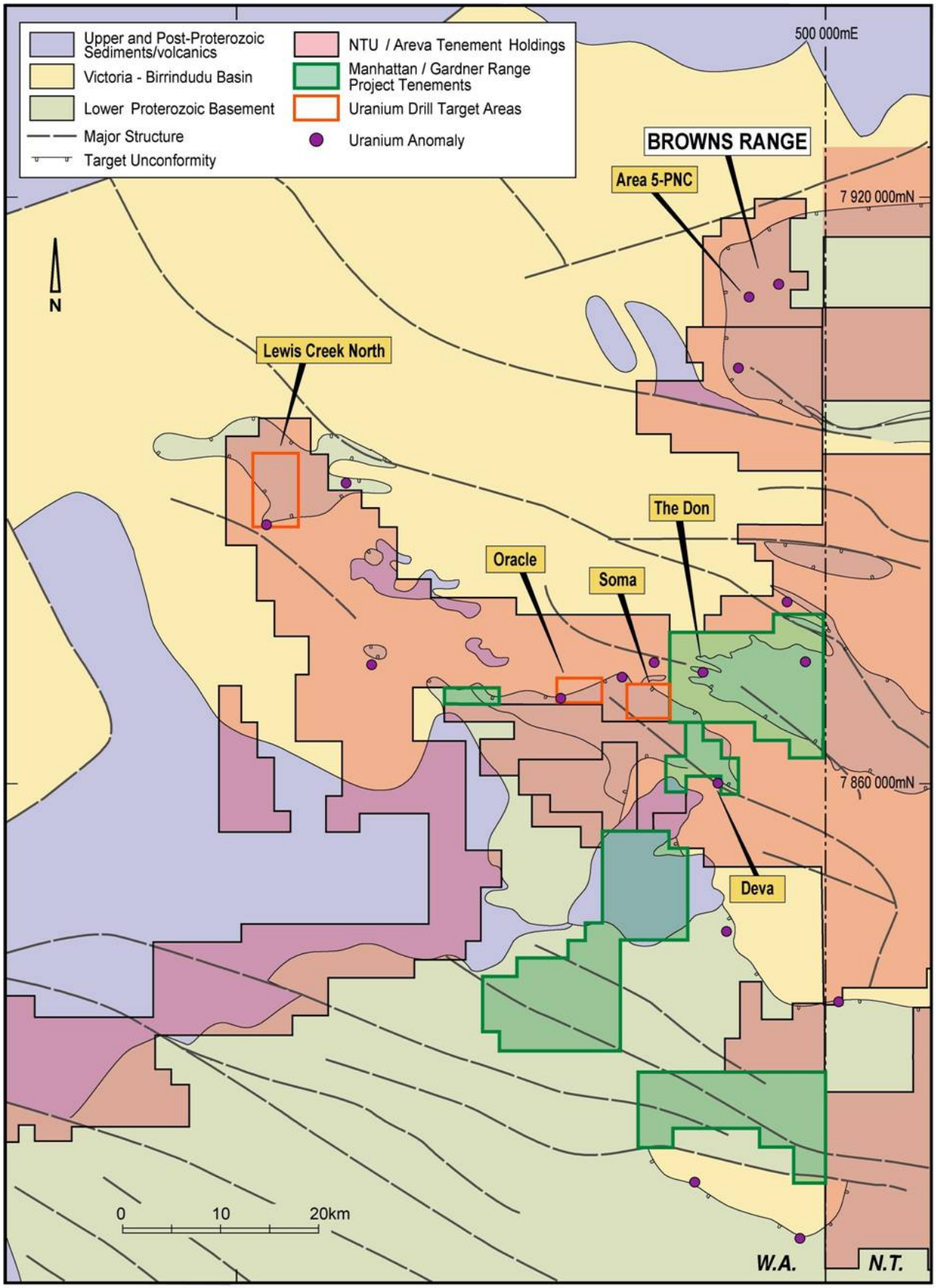

Figure 2
REE target areas – uranium radiometrics and topographic contours