

30 July 2010

ASX RELEASE

**EARLY SUCCESS AT BROWNS RANGE HEAVY RARE
EARTHS (HREE) PROJECT**

- **Two new quartz-xenotime discoveries with rock chip assays up to 7.95% Total REE + Yttrium (TREE+Y)**
- **High proportion (c. 70%) of rare earths are high value HREE, resulting in value per tonne of up to US\$5,727 distinguishing Browns Range as a strategically important HREE exploration target area.**
- **Four separate mineralised prospect areas now identified within an overall >5km long target area**
- **Drilling follow-up planned for commencement in Q4 2010**
- **Petrology report on recent rock chip samples confirms coarse-grained xenotime mineralisation in quartz veins indicating potential simple processing**

Northern Uranium Limited (ASX: NTU) is pleased to report early success of reconnaissance geological mapping and rock chip sampling at the Company's 100%-owned Browns Range project (E80/3547 & 3548) located 150km southeast of Halls Creek. New quartz-xenotime discoveries indicate the presence of widespread xenotime mineralisation containing high-value HREE and Yttrium. Sampling by Northern's strategic alliance partner, Afmeco Mining and Exploration Pty Limited ('Afmex') in 2008 and historical exploration by PNC Exploration while exploring for uranium in the 1980s, identified xenotime mineralisation within hydrothermal quartz veins and quartz breccias. The recently completed field program was designed to further investigate these high-grade xenotime occurrences, outline their extent and identify new target areas.

A total of 59 rock chip samples were collected from the Browns Range area, with 11 returning assays with TREE+Y greater than 1% and up to a maximum of **7.95% TREE+Y** (see table below).

Table 1 – Summary of anomalous rock chip samples (>1% TREE)

Sample Id	Prospect	Northing	Easting	TREE(%)	TREE+Y(%)	THREE(%)	THREE+Y(%)
BRRK001	Gambit	7913771	494035	0.98	2.63	0.65	2.30
BRRK004	Gambit	7913773	494114	0.90	2.31	0.63	2.05
BRRK006	Gambit	7913775	494188	0.73	1.86	0.59	1.72
BRRK010	Area 5 North	7910422	492432	0.93	2.72	0.67	2.47
BRRK011	Area 5 North	7910473	492356	0.47	1.36	0.32	1.21
BRRK012	Area 5 North	7910541	492380	0.38	1.03	0.28	0.93
BRRK034	Wolverine	7914515	494465	1.18	1.54	0.12	0.48
BRRK048	Wolverine	7914710	493720	3.12	7.95	2.23	7.06
BRRK049	Wolverine	7914708	493724	2.20	5.56	1.61	4.97
BRRK050	Wolverine	7914711	493718	3.01	7.61	2.12	6.73
BRRK051	Wolverine	7914709	493731	0.89	2.20	0.63	1.94

NB – TREE: Total Rare Earth Elements – Total of La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu

THREE: Total Heavy Rare Earth Elements – Total of Tb, Dy, Ho, Er, Tm, Yb, Lu

Y: Yttrium

REE distribution is dominated by high value Heavy Rare Earth Elements (HREE), with **65-75%** of REE's being Heavy REE for all except one of the anomalous samples. Sampling was focused on three separate target areas (see figure below), one of which had already been identified (Gambit), while the other two are newly discovered zones (Wolverine and Area 5 North). No sampling was carried out at the original Area 5 Prospect, but a ground radiometric survey was completed. Geologically, the project area is dominated by arkosic sediments, minor conglomerates and non-outcropping ultramafics (interpreted from aeromagnetics).

Based on the results highlighted in the table above and the latest Rare Earth prices for oxide FOB China, the range of value of the Brown Range xenotime mineralisation from the above table is US\$547 per tonne to US\$5,727 per tonne. This is largely due to HREE being over ~70% of all REE in samples.

Petrology studies on rock chip samples from the area confirm the presence of xenotime within quartz veins. The xenotime is relatively coarse, typically in the range of 50-300 microns with grain groups up to 3mm in length.

Details of the sampling and mapping at each prospect are as follows:

- **Gambit Prospect**

Xenotime mineralisation was previously identified by Afmex regional reconnaissance sampling as part of their Gardiner-Tanami uranium exploration program. Follow-up sampling has identified a xenotime mineralized quartz breccia zone trending east-west, at least 200m in strike length. Rock chip samples of the quartz breccia assayed up to 2.63% TREE+Y including up to 2.30% Total HREE (THREE) +Y.

- **Wolverine Prospect**

This is a newly identified zone of high-grade mineralisation located approximately 900m north of the Gambit Prospect. Although limited in outcrop extent, the mineralisation is very high-grade with rock chip results up to 7.95% TREE+Y including up to 7.06% THREE+Y. Xenotime mineralisation is associated within an approximately east-west trending quartz vein in a sicified arkosic unit. The mineralisation is open to the west along strike where it is potentially obscured by soil cover.

- **Area 5 North**

At Area 5 PNC Exploration reported quartz-xenotime veins with extremely high grade results up to 16% yttrium, and 12% HREE. Recent sampling has been focused on a newly recognized mineralised area 500m to north of PNC's mineralisation, where xenotime mineralisation has been identified within a series of east-west trending structures. This mineralisation is separate to that identified by PNC, who were focused on a very high-grade mineralised quartz vein. Mineralisation at Area 5 North is associated with narrow quartz veins within an arkose host and significantly, xenotime also occurs finely disseminated within the host arkose unit.

Further work

Detailed soil sampling has recently been completed over the three aforementioned prospect areas, and samples will shortly be submitted for analysis. Results from this sampling will help determine the extent of an initial drill program which is proposed for commencement in the December quarter. Prior to the commencement of drilling, further more detailed geological mapping and sampling will be undertaken in the target areas.

About Rare Earths

The Rare Earth Industry has strategic importance in the Age of Technology as Rare Earths are critical in many applications including Hybrid vehicles, computers, mobile phones, wind farms to name a few. Currently 97% of the world production of rare earths comes from China. The US has recently introduced a Rare Earths Supply-Chain Technology and Resources Transformation Act of 2010 to reestablish a competitive domestic rare earths minerals production industry; a domestic rare earth processing, refining, purification, and metals production industry; a domestic rare earth metals alloying industry; and a domestic rare earth based magnet production industry and supply chain in the United States.

Recently, The Chinese Ministry of Commerce has cut the approved export quota of rare earths for the second half of 2010 to 7,976 tonnes, down 72% per cent on last year's second quarter quota of 28,417 tonnes. The prices of many rare earth oxides has increased dramatically in the past 6 months, such as Yttrium increasing from US\$10.50/kg to US\$15.5/kg, Dysprosium increasing from US\$120/kg to US\$275/kg.

About Northern Uranium

Northern Uranium Limited (ASX: NTU) is a uranium exploration and development company, with a large and prospective landholding in Western Australia and the Northern Territory which also includes a number of high value heavy rare earth element (HREE) projects.

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). Afmex, is the operator of uranium exploration and development at the Company's Gardiner-Tanami Project, and will market any uranium produced in Australia by Northern Uranium. Areva also has a substantial shareholding in Northern Uranium,

The Gardiner-Tanami project including the Gardner Range joint venture comprises 10,600km² on the WA-NT border, 200km southeast of Halls Creek. Exploration is focused on high grade unconformity-related uranium deposits, with a number of high priority targets identified. The Gardiner-Tanami area is compared favourably with the Alligator Rivers region in the NT which hosts the Ranger mine (Australia's largest operating uranium mine), and the Athabasca Basin in Canada, host to the world's highest-grade unconformity-related uranium deposits.

INVESTOR INFORMATION

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Capital Structure:

Share Price (NTU): \$0.09
Issued Shares: 101.9m
Market Cap: \$9.3m

FOR AND ON BEHALF OF THE BOARD



George Bauk
Managing Director

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 R Wilson, an employee of the Company who is a Member of The Australasian Institute of Mining and Metallurgy with the requisite experience in the field of activity in which he is reporting. Mr Wilson 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 Wilson 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

Browns Range Project – Areas of HREE (xenotime) mineralization (over uranium radiometric image)

