3 February 2010

#### **Media ASX Announcement**

To: Company Announcements Office Australian Securities Exchange Level 4 Exchange Centre 20 Bridge Street Sydney NSW 2000



**ASX: FCR** 

# Ferrum Crescent Limited Gardner-Tanami Project Exploration of High Value Rare Earths Targets

The Directors of Ferrum Crescent Limited (**Ferrum**) are pleased to report that Northern Uranium Limited (ASX: NTU), a company that Ferrum holds 12,500,002 shares or 17.5% of the company, has made a further announcement in relation to the heavy Rare Earth Elements (**HREE**) discovered in the Browns Range Dome area of the Gardner-Tanami project. A copy of that announcement is appended.

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#### **ASX RELEASE**

## GARDINER-TANAMI PROJECT EXPLORATION OF HIGH VALUE RARE EARTHS TARGETS

- Review of recent discoveries of quartz-xenotime mineralisation at the Company's 100% owned Gardiner Tanami project highlights high concentration of heavy rare earth elements (HREE)
- Interest in HREE fuelled by rising market prices following China's recent export prohibition and growing demand from key high technology end users
- Browns Range Dome target zone has the potential to host large scale HREE ore deposits of very high value
- Dedicated HREE exploration planned for 2010 in conjunction with the company's core uranium exploration program

Northern Uranium Limited (ASX: NTU) is pleased to report further on the positive attributes of quartz-xenotime mineralisation discovered in the Browns Range Dome area of the Company's 100%-owned Gardiner-Tanami project.

A recent study of the distribution of Rare Earth Elements (REE) in the mineralisation highlights the unusually high concentrations of Heavy Rare Earth Elements (HREE), including several that have increased in value due to their growing demand, restricted availability and strategic importance.

Quartz-xenotime discoveries in the Browns Range Dome area of the Gardiner-Tanami Project were announced by the Company in December 2009, with results of an age-dating study pointing to the possibility of large scale HREE ore-deposit potential in the area.

Northern Uranium Executive Chairman Kevin Schultz said that a further study of the HREE-bearing mineralisation showed that at current REE prices it has extremely high in-ground value.

"Analysis to date has indicated a very favourable HREE dominant rare earth distribution in the mineralisation, and in the current strong market environment it has an estimated in-ground value of US\$1,270 per tonne," Mr Schultz said.

"We have identified an extensive rare earths target zone which represents an exciting avenue for additional value at the Gardiner-Tanami project. In 2010 we will be following up with dedicated HREE exploration activities in conjunction with our core uranium exploration program."

The Chinese Government announced last year that it has restricted the annual export of rare earths and has prohibited exports of HREE such as dysprosium, terbium, thulium, lutetium and yttrium. China has traditionally supplied about 95% of the global rare earths market, and the announcement has heightened the need for additional sources of many rare earths as firming demand causes a tightening in supply and higher prices.

Rare earths are vital in high-technology developments such as hybrid cars and wind turbines, and are of immense strategic importance in a world embracing green technology.

#### Distribution of HREE in Browns Range Quartz-Xenotime Mineralisation

Xenotime (a yttrium and rare earths bearing phosphate mineral) in the western Browns Range Dome area was first identified in the 1980s by Japanese nuclear energy organization PNC Exploration while exploring for uranium. PNC named the area of quartz-xenotime mineralisation "Area 5 Prospect" and one of the larger quartz-xenotime veins gave extremely high grade results up to 16% yttrium, 0.2% uranium, 0.5% light Rare Earth Elements (LREE) and 12% HREE.

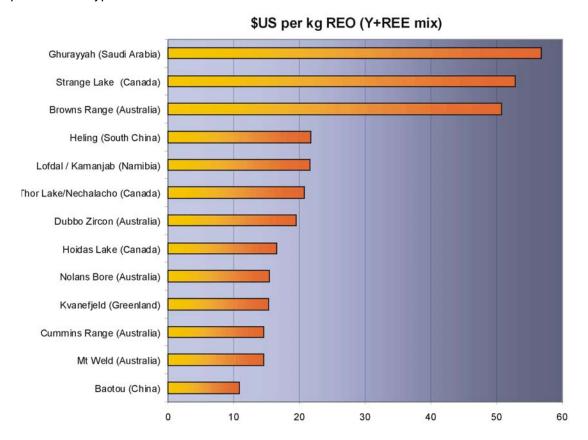
In 2009 previously unknown guartz-xenotime mineralisation was encountered 4km to the northnortheast of Area 5 Prospect during Northern Uranium's uranium exploration program. These newly discovered hydrothermal xenotime-quartz stockworks, referred to as "NNE Prospect", are similar to the Area 5 occurrences. Xenotime concentration was recorded as being up to 3-4 wt-%.

The following Table shows Rare Earths and Yttrium distribution from assay results of the quartzxenotime mineralisation at NNE Prospect and averages of typical current market prices for rare earth metals. The data show clearly the favourable rare earths distribution in Browns Range quartz-xenotime mineralisation, emphasising HREEs, particularly dysprosium, erbium, ytterbium and yttrium.

Rare Earths and Yttrium	Rare Earths-and Yttrium distribution from assay of NNE Prospect	Rare Earth Oxide Price used in value analysis (US\$/kg)
Lanthanum	0.009%	\$5.75/kg <sup>1</sup>
Cerium	0.023%	\$4.15/kg <sup>1</sup>
Praseodymium	0.004%	\$25.05/kg <sup>1</sup>
Neodymium	0.040%	\$26.45/kg <sup>1</sup>
Samarium	0.058%	\$3.35/kg <sup>1</sup>
Europium	0.017%	\$495.00/kg <sup>1</sup>
Gadolinium	0.149%	\$9.00/kg <sup>1</sup>
Terbium	0.037%	\$413.00/kg <sup>1</sup>
Dysprosium*	0.259%	\$135.50/kg <sup>1</sup>
Holmium*	0.051%	\$26.36/kg <sup>1</sup>
Erbium*	0.144%	\$27.80/kg <sup>1</sup>
Thulium*	0.018%	\$790.00/kg <sup>2</sup>
Ytterbium*	0.096%	\$132.00/kg <sup>2</sup>
Lutetium *	0.014%	\$236.00/kg <sup>1</sup>
Yttrium	1.557%	\$7.18/kg <sup>1</sup>
Total Y+REE	2.477%	

Sources of prices: <sup>1</sup> Asian Metals 25 Jan 2010; <sup>2</sup> Asian Metals (\* = HREE)Feb 2008 (recent price not available); see also www.gwmg.ca

The value of the Browns Range xenotime mineralisation (at 2.477 wt-% of Y+REE metal), derived from the above Table, is US\$1,270 per tonne. A similar analysis of some other well known REE deposits of the world shows the elevated status of Browns Range xenotime mineralisation as a potential ore type.



#### HREE Exploration Model

The quartz-xenotime mineralisation at Browns Range is unusually low in uranium and thorium compared to disseminated magmatic xenotime from granites. Late-stage differentiation in granites suites can lead to enrichments in elements such as yttrium, HREE, niobium and tantalum and it has been recognised that such late hydrothermal fluids could escape from the granitic intrusions into the regional rocks. The presence of a marked europium anomaly in Browns Range quartz-xenotime mineralisation indicates that the source of the mineralisation is crustal and clearly not linked to a mantle source such as a carbonatite intrusion.

The mineralised trend recognised between Area 5 Prospect and the NNE Prospect indicates that the hydrothermal infiltrations occurred along faults or fractures of regional extent. The metasomatic replacement of brecciated arkose forms mineralised pockets.

The most logical explanation for the source of the Browns Range xenotime mineralisation is a late-stage S-type granitic intrusive at depth. Several uranium-yttrium anomalies to the north of the Browns Range Dome could suggest that the entire area was subject to this type of metasomatism.

The Browns Range Dome area could potentially become an important new province for high-grade Yttrium-HREE mineralisation.



Hydrothermal quartzxenotime mineralisation in the Browns Range area

#### Proposed work program

Exploration will require the size and grade of the newly discovered quartz-xenotime mineralisation to be defined, in conjunction with geological, geophysical and geochemical surveys to determine the mineralised trend and its variability. Determination of the orientation and geometry of the vein system, and its extension in depth, will help to define potential resources. The geological age of the xenotime needs to be better refined to potentially link the hydrothermal mineralising event to late-stage granite intrusions in the region.

The HREE 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.

#### **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<sup>2</sup> 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): \$0.17 c Issued Shares: 72.7m Market Cap: \$12.3m

#### **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.

### GARDINER-TANAMI PROJECT – WA TENEMENTS AND GEOLOGY LOCATION OF BROWNS RANGE

