ASX ANNOUNCEMENT

16 June 2011

New Potential Heavy Rare Earth Drill Targets, Exploration and Market Update

Summary:

- **Browns Range drilling expected to commence in late June 2011**
- **Two new potential drill targets identified at Browns Range through rock chip sampling of up to 5.1% TREO highlighting the underexplored status of the region**
- **Airborne magnetic and radiometric survey underway at Browns Range**
- **Further metallurgical test work reinforces ease of processing**
- **John Galt exploration commenced, with high resolution airborne magnetic and radiometric survey completed**

Northern Minerals (ASX: NTU) is pleased to provide an update on its Heavy Rare Earth Element (HREE) exploration program at the Browns Range and John Galt projects in northern Australia.

The Company has planned a significant exploration campaign at both projects for 2011, focusing on high priority, HREE targets. The program follows positive results from soil sampling and preliminary metallurgical testing programs, which have identified xenotime mineralisation with a dominance of HREE.

Browns Range

The Company's 10,000 metre drilling program is now expected to commence later this month. This follows the extreme wet weather conditions in northern Australia earlier in the year and recent local flooding causing public road closures.

The Company has been able to commence its airborne geophysical surveys and regional geochemical soil sampling program, but the impact of the flooding earlier in the year has prevented heavy vehicle access to the project's drill target areas. However, conditions are now improving, and the Company is liaising closely with the local authorities in an effort to make roads accessible for heavy vehicles as soon as possible. It is now expected that all public roads in the Browns Range area will be opened before the end of June, and drilling will be able to commence before the end of the month.

Northern Minerals Managing Director George Bauk said while the condition of local public roads had postponed the drilling start date slightly, the Company is continuing its exploration activities in anticipation of the drill rigs arrival.

"We have commenced a high resolution airborne magnetic and radiometric survey, which we anticipate will be completed this week," Mr Bauk said.

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"We are continuing ground preparation of drill pads using light vehicles, to enable us to commence drilling immediately once we get the drill rigs on site," Mr Bauk said.

The program will include 10,000 meters of RC drilling at the Area 5 / Area 5 North and the Gambit / Wolverine targets.

Reconnaissance rock chip sampling recently completed in the southern part of the Browns Range project area, has identified two new potential drill target areas located approximately 6km south of Area 5 (see Figure 1 below). Samples of quartz veined arkose returned assays up to 5.1% TREO (sampling and assay details in Table 1 below). Early exploration on the new target areas has commenced with geological mapping, further rock chip sampling and soil sampling underway, ahead of a proposed Phase 2 drilling program.

Figure 1 – Browns Range Project – Prospect locations and new potential targets

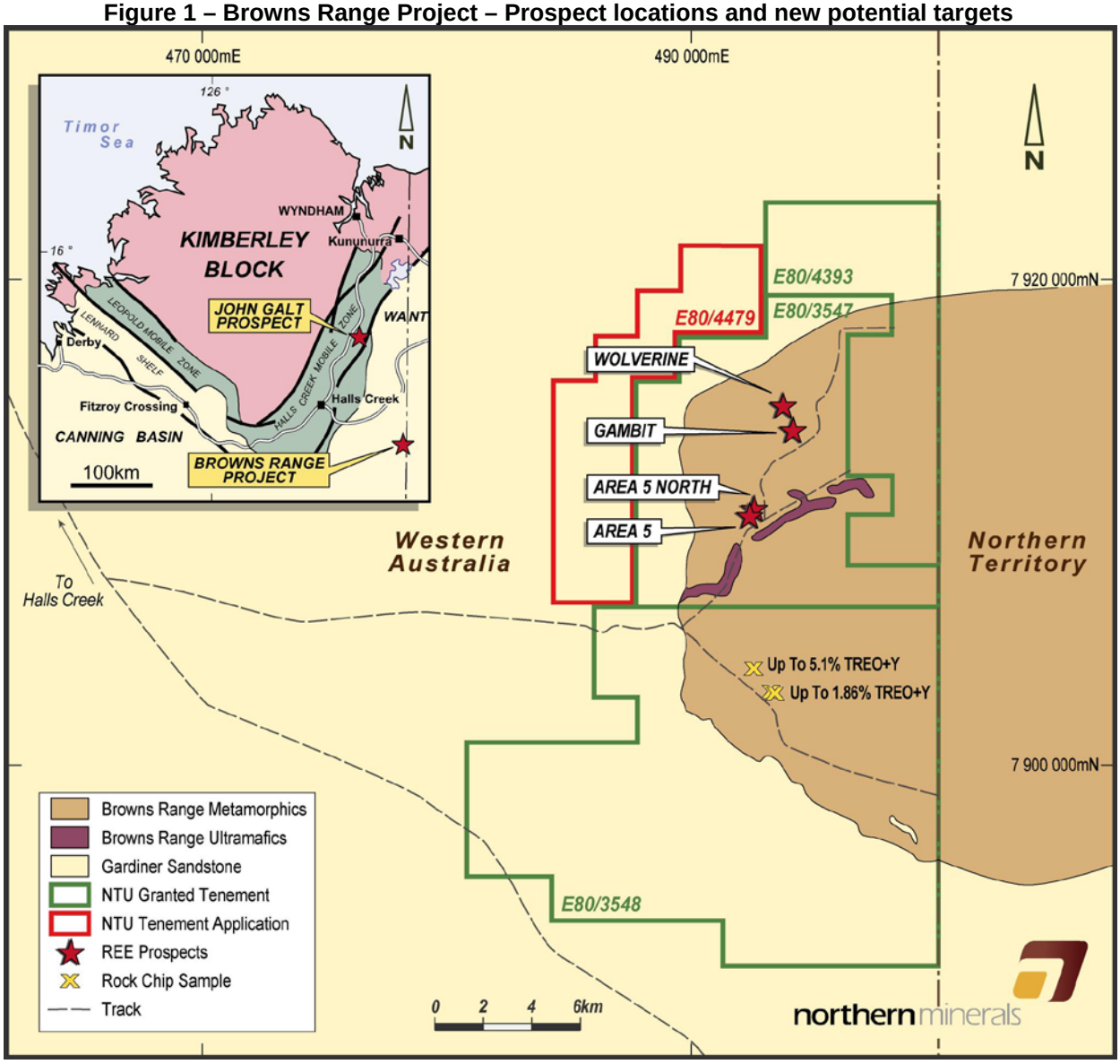


Table 1 – Summary of rock chip sample results

Sample Id	Northing	Easting	TREO(%)	THREO(%)	Dy_2O_3 (ppm)	Y_2O_3 (ppm)
BRRK069	7903057	493433	1.66	1.50	1496	10184
BRRK070	7904074	492589	2.21	1.64	2014	14516
BRRK071	7904068	492581	5.12	3.41	3957	29309
BRRK072	7904041	492579	0.72	0.48	502	3493
BRRK073	7903074	493294	1.86	1.51	1572	10855

NB – TREO: Total Rare Earth Elements – Total of La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3

THREO: Total Heavy Rare Earth Elements – Total of Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3

“The discovery of additional xenotime mineralization in the southern half of the project area highlights the under-explored status of the region, and the potential for further rare earth discoveries within the project area” Mr Bauk said.

Metallurgical Testing

Northern Minerals is also continuing metallurgical test work on priority targets at Browns Range. Previous testing has confirmed the dominance of xenotime mineralisation. This metallurgical work is ongoing, with preliminary results from test work on samples from the Gambit and Wolverine prospects, indicating high recoveries. The data from latest testwork also supports the earlier work that the rare earths are predominantly present in one mineral, namely xenotime. This reinforces the early indications that the ore is amenable to relatively simple flotation beneficiation techniques.

Browns Range Rock Chip Sample

A xenotime mineralized quartz vein breccia from Browns Range (Gambit Prospect) – the margin of the quartz vein is predominantly xenotime.

John Galt

The John Galt projects lies to the north west of Browns Range, and Northern Minerals has identified a number of exciting early stage HREE targets. Recently collated data from historical drilling confirmed high concentrations of HREE in xenotime mineralisation, with a particularly strong presence of Dysprosium and Yttrium.

Northern Minerals has now completed a high resolution airborne magnetic and radiometric survey. Preliminary data is currently being reviewed, and final data is expected within a week.

The Company is aiming to commence ground work in the next quarter, which will include detailed geological mapping, rock chip sampling and geochemical soil sampling, leading to the identification of potential drill targets. Heritage surveys, which are currently scheduled for July, are required prior to the commencement of on-ground work activities, and drilling is planned for quarter four 2011.

Market Update

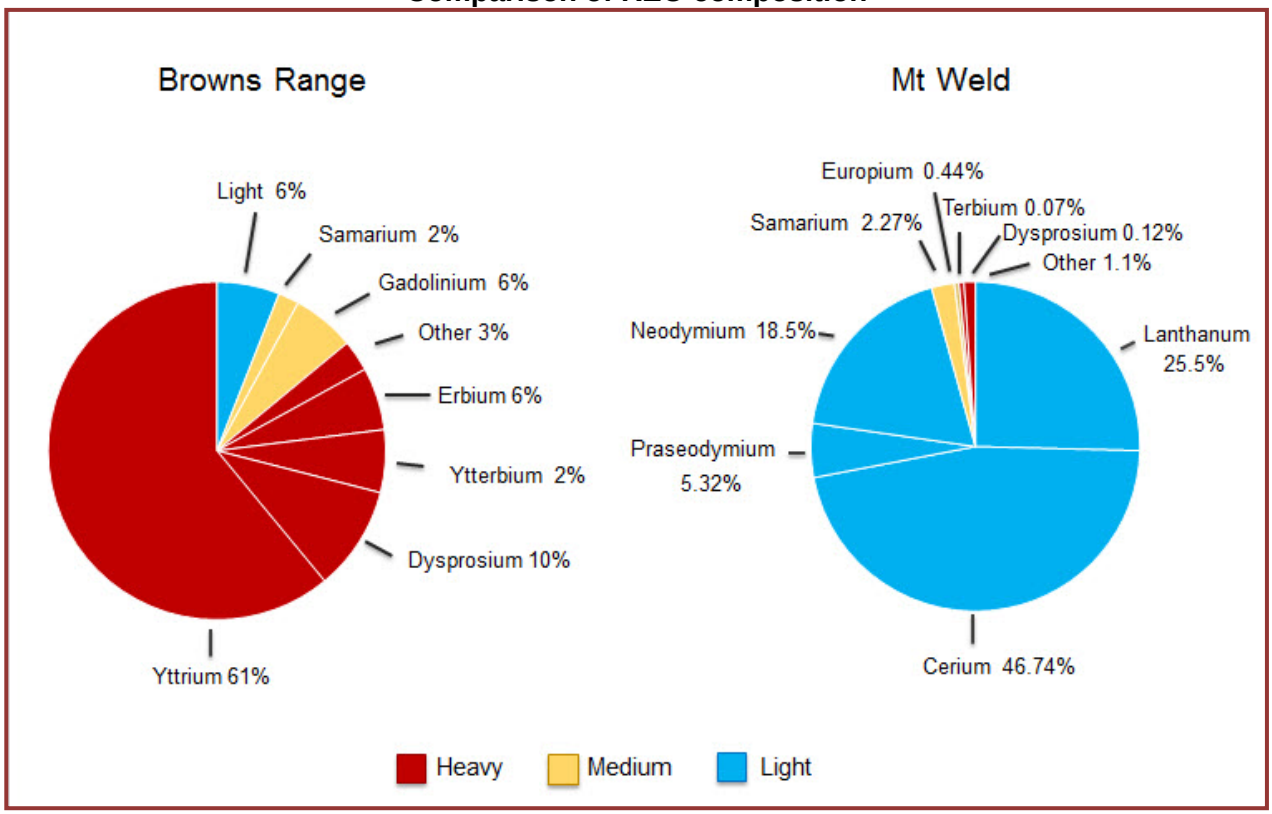
Earlier this year China set the production quota for rare earths at 93,800 tonnes REO for 2011, which significantly less than 2010 demand of 125,000 tonnes REO. More recently, China has continued to constrain the supply of rare earths through industry consolidation, increasing the scope of export quotas and making concerted efforts to eliminate illegal mining. The strategic nature of rare earths to China is evident from the measures that the Chinese Ministry of Industry and Information Technology is putting in place over the next five years to maximize the benefit of their extraction to the Chinese economy. As a result of these measures, supply, particularly in the current quarter, has been severely constrained

This has been most evident in the values for HREO such as Dysprosium, which has increased to $1,480 per kilogram (FOB China), up from to $400/kg since the start of 2011. Over the same period, Yttrium has also increased from $90/kg to $162/kg.

Dysprosium is an important additive in neodymium-iron-boron magnets, which are increasingly used in clean energy applications. Demand for Dysprosium is expected to increase significantly with only minimal forecast increases in supply. Yttrium is used to make phosphors for use in fluorescent lighting, television displays and computer monitors as well as in yttria stabilized zirconia, an important wear resistant ceramic.

The development of alternative sources of rare earths supply to China remains the focus of the Rest of World (ROW) consumers. While the ROW will be able to meet 60-80% of its light rare earths needs in 2015, it will remain seriously deficient in the supply of heavy rare earths. Given the time required to bring a new rare earths project on line, the Industrial Minerals Company of Australia (IMCOA) believes that ROW will be able to meet only 10% (at best) of its heavy rare earths needs in 2015.

Comparison of REO composition



The comparison above shows the distribution of REO identified in Browns Range from the four prospects, Area 5, Area 5 North, Gambit and Wolverine. The Mt Weld REO composition data above sourced from the Lynas Corporation website.

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About Northern Minerals

Northern Minerals Limited (ASX: NTU) is focused on exploration and development of rare earth elements (REE) and uranium, with a large and prospective landholding in Western Australia and the Northern Territory.

The Company has identified high value, heavy rare earth elements (HREE) at its Browns Range project. The discovery is particularly significant due to the nature of the mineralisation (xenotime), and the strong global demand and price for the HREE it contains. Northern Minerals currently has fully funded HREE exploration programs underway at Browns Range and the geologically similar John Galt project.

Northern Mineral's uranium program is focussed on the Gardiner-Tanami project and Gardner Range JV, which comprise 10,500km^2 on the WA-NT border. Exploration is focused on high grade unconformity-related uranium targets. The area is compared favourably to 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.

Northern Minerals also holds phosphate projects in the NT, for which it is currently pursuing options for development or divestment.

For more information, visit **www.northernminerals.com.au**

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.