

## Browns Range Heavy Rare Earth Project Advances Towards Production

- Commissioning of Browns Range Pilot Plant on schedule;
- All equipment is now on site;
- \$4.4 million in R&D financing received under financing agreement with Brevet; and
- Chinese rare earth quota changes may positively impact pricing.

Australian heavy rare earths developer, Northern Minerals Limited (ASX: NTU) (the Company) is pleased to provide an update with regards to the Browns Range Pilot Plant Project in the East Kimberley, WA.

### Commissioning Progress

Commissioning of the plant has commenced with the successful commissioning of the crushing circuit including the crusher and crushed ore conveyor.

The final component, being the ring gear for the mill, was delivered to site on the 28<sup>th</sup> of April 2018.

The plant is on schedule for completion by end June 2018, with first production of heavy rare earth carbonate in the September quarter.



Figure 1: Crushed ore stockpile (left foreground)



Figure 2: CCD and purification

Northern Minerals' Managing Director, George Bauk commented

*"Commissioning at Browns Range has started well, with commissioning systems operating as expected when tested. We are on the cusp of production at Browns Range, with a heightened level of interest in the project globally as the only non-Chinese supplier of Dysprosium."*



Figure 3: Water leach and CCD



Figure 4: Acid storage, kiln and waste gas scrubber



Figure 5: Process plant aerial view



Figure 6: Acid Storage

## Research & Development (R&D) Financing

R&D funding totalling \$4.4 million (March 2018 Quarter) was received from Innovation Structured Finance Co., LLC ("Brevet" New York Based Fund).

The Company has worked with its R&D advisor, Deloitte, to estimate the level of tax offsets for the March quarter, Brevet has now provided funding equal to 80% of the estimated tax offset, with the principal and accrued interest repayable out of actual tax offsets received at the end of the financial year.

## Media Coverage of Rare Earths

Reports by Asian Metal and the Australian Financial Review (AFR) recently highlighted the influence of the Chinese Government in the supply and pricing of rare earths. Crackdowns by the Chinese Government on supply through the curbing of illegal mining has seen production rates decline. There is some conjecture over whether China intends to limit supply, however the ministries involved have indicated that they wish to 'protect and rationally exploit superior minerals through the continued control of total production quotas for rare earths'.



## ASX ANNOUNCEMENT

The AFR article can be accessed from the AFR website or referring to the AFR Monday edition 30 April 2018, page 10, "Cuts to boost rare earth prices" by Michael Bailey.

### For further information:

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### About Northern Minerals:

Northern Minerals Limited (ASX: NTU; Northern Minerals or the Company) has commenced commissioning of the Browns Range Heavy Rare Earth Pilot Plant Project in northern Western Australia.

Through the development of its flagship project, the Browns Range Project (the Project), Northern Minerals aims to be the first significant world producer of dysprosium outside of China.

The Project is 100% owned by Northern Minerals and has several deposits and prospects containing high value dysprosium and other HREs, hosted in xenotime mineralisation.

Dysprosium is an essential ingredient in the production of DyNdFeB (dysprosium neodymium iron-boron) magnets used in clean energy and high technology solutions.

The three-year R&D pilot plant project will commence first production of heavy rare earth carbonate in H1 2018. The pilot plant development provides the opportunity to gain production experience, surety of supply for our offtake partner and assess the economic and technical feasibility of the larger full-scale development.

For more information: [northernminerals.com.au](http://northernminerals.com.au).



ASX Code:	NTU	Market Capitalisation:	A\$97m
Issued Shares:	1,100m	Cash (as at 31 March 2018):	A\$14.9m