Northern Minerals on path to becoming a leading dysprosium producer by 2016

Northern Minerals ('Northern', ASX: NTU) is one of the rare earth stocks that is challenging the market trend, as it continues to perform well in the markets. From last May 30 to June 30, Northern rose 16.13%. The Company experienced an intense month, characterized by its demonstrated confidence in the future of the rare earths market. Indeed, Northern decided to retain an AUD$ 26 million minority interest in its Browns Range heavy rare earths project in Western Australia rather than selling it to the Australia Conglin International Investment Group (ACIIG). Northern Minerals also announced that a AUD$ 5.3 million placement for its Browns Range Heavy Rare Earth (HRE) project in northern Western Australia, adding to AUD$ 6.5 million already in Northern's coffers, easing the path to completion. In late June, Northern also announced the completion of its preliminary feasibility study (PFS) for the Browns Range project.

The PFS confirms that, says Northern, Browns Range could be "the first significant world producer of high value dysprosium outside of China." Northern says production could begin as early as the latter half of 2016. This means that the Browns Range project offers excellent economics because, apart from the presence of dysprosium (which commands premium prices), the PFS was based on "a conventional mining operation involving both open cut and underground operations, and a relatively simple processing flow-sheet with all infrastructure located on site". The PFS also identified a base production of 279 MT of dysprosium per year and a total of 3,200 MT of mixed rare earth oxides. Such is the concentration of 'heavies' in the mix that Northern could survive on the production of dysprosium alone. Northern also

noted that it has faced little difficulty in extracting the xenotime (the mineral containing the rare earths) from the host rock. Having completed the feasibility study, therefore, Northern has also maintained a degree of financial 'independence', managing to keep control of funding mechanisms as it moves to secure the capital to bring the project to production stage. The current resource estimate for the Browns Range project now stands at 4.13-million tons of at 0.68% (or 28,084 tons TREO).

Due to the global economic downturn, the rare earths market was marked by lower demand in the past two years, resulting in a price consolidation and a determined effort by the Chinese government to cut down on price distorting mechanisms as 'black market' rare earths trading. China's rare earth policy has also established the increasing buildup of strategic reserves by the Chinese government including terbium oxide, neodymium, gadolinium, dysprosium and praseodymium.

Heavy rare earths are mainly used in "green technologies" (electric transportation, wind turbines, energy saving lamps) and until somebody starts to produce heavy rare earths outside of China, the supply situation with these rare earths is still at risk. Meanwhile, technology is not standing still and innovations requiring rare earths are launched every day. Recently, General Electric announced that it has developed a new and very efficient generation of refrigerators that require magnets based on a gadolinium alloy. Clearly, given the size of the market for refrigerators and the rising costs of electricity worldwide, this will boost global demand for gadolinium. In the automotive sector, if Tesla succeeds in expanding its annual production from 22,500 to 500,000 cars a year, there will be a huge impact on demand for such metals as copper, lithium and rare earths. As the Chinese government increases reserves stocks, it is reasonable to expect that prices for rare earths in China will rise in the coming weeks or months. China's plan to introduce a new environmental tax

on rare earths from 2015 is also likely to increase prices while, Lynas and Molycorp are not expected to bring any relief to rising heavy rare earths demand. All of this is good news for those companies like Northern Minerals, focusing on heavy rare earths and taking the necessary technical and financial steps to head toward production just as the rare earths market should reach new peaks.