QUARTERLY ACTIVITIES REPORT September 2021

NORTHERN MINERALS

ASX:NTU

HIGHLIGHTS

- Northern Minerals successfully completed 8,700 metres of exploration drilling at Browns Range during the quarter;
- Preliminary field pXRF results from Rockslider and Banshee South prospects indicate broad yttrium anomalism;
- Bulk sample ore sorter test work completed on stockpiled ore from Wolverine, the largest orebody at Browns Range;
- Preliminary ore sorting tests on Banshee costean material shows amenability to sorting, with further test work planned;
- Effective sorting of the lower grade Banshee material has potential to increase the Browns Range Mineral Resource Estimate;
- Further sales to thyssenkrupp Materials Trading GmbH in the quarter;
- 2021 R&D tax offset claim lodged with the Australia Taxation Office for the 30 June 2021 financial year;
- First students graduated from our Training to Work Program held at Browns Range.

Figure 1: RC Drilling at Rockslider

Northern Minerals Limited (ASX: NTU) (Company) is pleased to update shareholders on its activities for the quarter ending 30 September 2021.

CYCLOPS, ROCKSLIDER AND BANSHEE HIGHLIGHT EXTENSIVE NEW EXPLORATION TARGETS

Northern Minerals Limited announced in September that the exploration drilling at the Cyclops, Rockslider and Banshee prospects returned highly anomalous portable XRF (pXRF) measurements of yttrium over relatively wide zones. These three prospects are located less than 15km from the Browns Range processing plant.

Banshee South

Preliminary field pXRF data indicated that the Banshee prospect is in fact more extensive than originally thought. Banshee, Banshee West and Banshee South prospects are all part of a much broader mineralized system.

An infill RC drill programme has been planned to test the areas between each of the prospect locations with a view to defining the combined Banshee prospects to an Inferred Mineral Resource under JORC (2012). Drilling commenced in September 2021.

Rockslider

The Rockslider prospect is located immediately south of the Banshee prospect. This is a new prospect identified from airborne radiometrics. A total of 4 RC holes were drilled for 444 metres. Three of the 4 holes intersected elevated pXRF Yttrium anomalism over extensive down hole intervals. Follow up RC drilling has been planned and will commence upon the completion of the drilling at Banshee.

Cyclops Prospect

A recently completed diamond drill hole at the Cyclops Prospect confirmed a xenotime breccia and importantly will be able to provide structural measurements to verify the current geological model. Spot field pXRF measurements indicated highly anomalous Yttrium readings.

The core was geologically logged, cut and sampled and sent for assay. Results will be available during the December quarter.

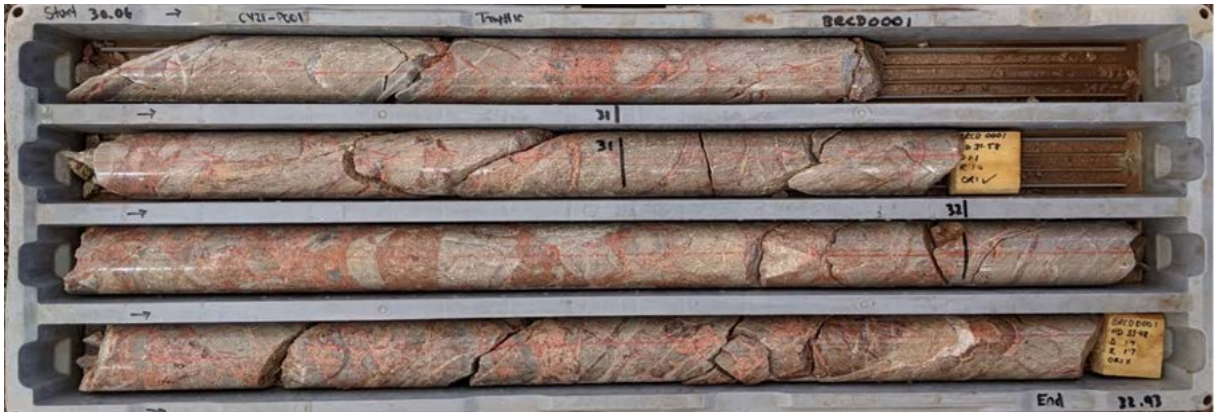

Figure 2. Cyclops Xenotime Breccia 30.06m to 32.93m down hole depth (Pink mineral = Xenotime)

During the quarter the Company expended approximately $2.0 million on exploration and evaluation activities.

ORE SORTER SYSTEM COMMISSIONED AND TESTED ON WOLVERINE AND BANSHEE

Northern Minerals progressed its ore sorting project enhancement initiative with the commissioning and testing of the ore sorter system and is now producing ore sorted material and converting this to a 30% TREO (Total Rare Earth Oxide) concentrate in its' Browns Range beneficiation plant.

The sorter has been run over two test campaigns which included 41 test runs processing 5,300 tonnes of ore from the ROM stockpiles largely coming from Wolverine ore, and 5 test runs on Banshee ore that was bulk sampled from a surface costean that provided 285 tonnes of Banshee ore.

The tests have confirmed that simultaneous sorting of two size fractions is possible on the sorter, allowing a single machine to sort both sortable size fractions (10mm-25mm and 25mm-75mm).

The sortable fraction (>10mm material) of Wolverine ore can be successfully sorted (90% Total Rare Earth Oxide (TREO) recovery in 50% of the mass) and when combined with non-sortable fines achieves a 45% grade increase to the mill and over 95% TREO recovery when feeding a 0.9% TREO ore.

Processing of the Wolverine ore sorted material in the beneficiation plant has resulted in better recoveries in the magnetic separation plant and flotation plant compared to feeding unsorted ore. A total of 164 tonnes of heavy rare earth xenotime concentrate was produced during the quarter, of which a sample of 50 tonnes of 30% TREO xenotime concentrate has been set aside for test work by facilities identified with likely future capability and capacity to process the heavy rare earth xenotime concentrate produced at Browns Range.

Initial sorting tests of the Banshee ore have shown that the highly oxidised surface material contains a large fines fraction and that the grade of the sortable fraction (i.e. >10mm) can be doubled recovering more than 60% of the TREO in 25% of the mass. An additional bulk sample has been extracted from deeper in the costean and three diamond drill holes have been drilled for further test work.

Ore Sorter: The ore sorting system installed at the Pilot Plant.

Figure 3: Feeder with simultaneous feed of two size fractions of ore to the ore sorter machine

During the quarter the Company expended approximately $1.0 million on exploration and evaluation activities.

Sales

Northern Minerals exported and sold 39 tonnes of heavy rare earth carbonate to thyssenkrupp Materials Trading GmbH during the September quarter.

2021 R&D claim lodged with the Australia Taxation Office

Subsequent to the quarter end the Company lodged its tax return and refundable Research and Development (R&D) tax offset claim with the Australia Taxation Office for the 30 June 2021 financial year.

The Company's tax offset claim for the financial year 2021 is for $4.3 million of eligible R&D work.

Training to Work Program

Northern Minerals ran its first Training to Work program in the September quarter. The program gives people with limited or no previous experience an opportunity to live and train at Browns Range over a three-week period. Six local Aboriginal people were selected from a group of over 30 applicants and prepared to come to site. The students completed both a Certificate I in Resources and Infrastructure Operations and practical skills workshops while completing tours and demonstrations of the different areas on site.

The training was based in the purpose-built training room which is located adjacent to the process plant. The proximity to an operational processing plant allowed the students to gain practical knowledge reinforcing their classroom learning.

All six students successfully completed the program and celebrated their achievement with a graduation ceremony attended by their families and community. All students were offered employment with either Northern Minerals or our Contractors.

Figure 4: The trainers and graduates of the Training to Work Program

CORPORATE PROFILING ACTIVITY

Northern Minerals CEO, Mark Tory welcomed Channel 7 media to Browns Range in August. The visit included a full site tour. The visit coincided with the graduation ceremony for the Training to Work program, which was also highlighted by the media, again reinforcing the positive relationship Northern Minerals has with the local aboriginal community.

This was an excellent opportunity for Northern Minerals to showcase the plant and the Company's position within the rare earth market.

PAYMENTS TO RELATED PARTIES OF THE ENTITY AND THEIR ASSOCIATES

Payments made during the quarter and included in 6.1 and 6.2 of Appendix 5B – Mining exploration entity quarterly cash flow report are detailed below:

Aggregate amount of payments to related parties and their associates included in cash flows from operating activities total $96,000.

This comprises of payments to Non-executive Directors remuneration from services. There were no payments to related parties and their associates included in cash flows from investing activities.

Authorised for release by the Board

Compliance Statement - Ore Sorting Test Work

The information in this report that relates to ore sorting test work is based on information compiled by Mr Louis de Klerk (Pr Eng, B.Sc Chem Eng, Post Grad Dip in Advanced Process Design), a Competent Person who is a professional engineer and Member of the Australasian Institute of Mining and Metallurgy. Mr de Klerk is a full time employee of the company. Mr de Klerk has sufficient experience that is relevant to the style of mineralisation and the type of metallurgy and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr de Klerk consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information:

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ABOUT NORTHERN MINERALS:

Northern Minerals Limited (ASX: NTU) (Northern Minerals or the Company) is one of a few producers of heavy rare earth element Dysprosium outside of China via production from the Browns Range Heavy Rare Earth pilot plant project in northern Western Australia.

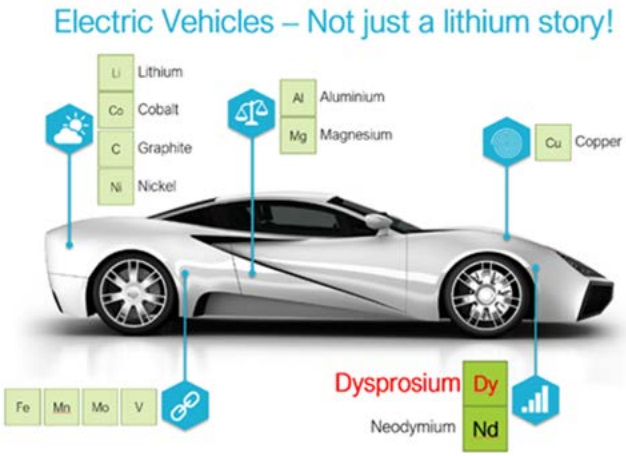
The Company commenced the production of heavy rare earth carbonate in late 2018 as part of pilot assessment of economic and technical feasibility of a larger scale development at Browns Range. An ore sorter was installed and commissioned during 2021 which will also be tested for its economic and technical feasibility at the front end of the pilot plant.

Through the development of its flagship project, the Browns Range Project (the Project), Northern Minerals aims to build the Western Australian operation into a 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, military and high technology solutions.

For more information: **northernminerals.com.au**



ASX Code:	NTU	Market Capitalisation:	A$266.8m
Issued Shares:	4,852m	Cash (as at 30 September 2021):	A$14.3m

TENEMENT REPORT

Project	Location	Tenement ID	State	Status	Holder Application	Interest
Browns Range WA	Browns Range	E80/4479	WA	Granted	Northern Minerals	100%
	Browns Range	E80/4782	WA	Granted	Northern Minerals	100%
	Browns Range	M80/627	WA	Granted	Northern Minerals	100%
	Browns Range	E80/5040	WA	Granted	Northern Minerals	100%
	Browns Range	E80/5041	WA	Granted	Northern Minerals	100%
	Browns Range	E80/5260	WA	Application	Northern Minerals	100%
	Browns Range	E80/5261	WA	Application	Northern Minerals	100%
	Browns Range	E80/5367	WA	Application	Northern Minerals	100%
	Browns Range	E80/5368	WA	Application	Northern Minerals	100%
	Browns Range	E80/5369	WA	Application	Northern Minerals	100%
	Browns Range	E80/5370	WA	Application	Northern Minerals	100%
	Browns Range	E80/5418	WA	Application	Northern Minerals	100%
	Browns Range	L80/76	WA	Granted	Northern Minerals	100%
	Browns Range	L80/77	WA	Granted	Northern Minerals	100%
	Browns Range	L80/78	WA	Granted	Northern Minerals	100%
	Browns Range	L80/79	WA	Granted	Northern Minerals	100%
Browns Range NT	Browns Range	EL26270	NT	Granted	Northern Minerals	100%
	Browns Range	ELA32161	NT	Application	Northern Minerals	100%
	Browns Range	ELA32162	NT	Application	Northern Minerals	100%
	Browns Range	EL24174	NT	Granted	Northern Star	REE Rights Only
	Browns Range	EL24193	NT	Granted	Northern Star	REE Rights Only
	Browns Range	EL26286	NT	Granted	Northern Star	REE Rights Only
John Galt	John Galt	E80/4298	WA	Granted	Northern Minerals	100%
	John Galt	E80/4967	WA	Granted	Northern Minerals	100%
	John Galt	E80/5070	WA	Granted	Northern Minerals	100%
	John Galt	E80/5230	WA	Granted	Northern Minerals	100%

Project	Location	Tenement ID	State	Status	Holder Application	Interest
Boulder Ridge	Boulder Ridge	EL29594	NT	Granted	Northern Minerals	100% (excluding gold rights)
	Boulder Ridge	ELA24849	NT	Application	Northern Minerals	100% (excluding gold rights)
	Boulder Ridge	ELA24935	NT	Application	Northern Minerals	100% (excluding gold rights)
Gardiner-Tanami NT	Boulder Ridge	EL24177	NT	Granted	Northern Star Resources	REE rights only
	Boulder Ridge	EL25171	NT	Granted	Northern Star Resources	REE rights only
	Tanami	EL23932	NT	Granted	Northern Star Resources	REE rights only
	Tanami	EL25009	NT	Granted	Northern Star Resources	REE rights only
	Ware Range	EL26498	NT	Granted	Northern Star Resources	REE rights only
	Ware Range	EL26541	NT	Granted	Northern Star Resources	REE rights only
	Pargee	EL27367	NT	Granted	Northern Minerals	100%
	Tanami	EL29592	NT	Granted	Northern Star Resources	REE rights only
	Tanami	EL29593	NT	Granted	Northern Star Resources	REE rights only
Gardiner-Tanami NT	Tanami	EL29595	NT	Granted	Northern Star Resources	REE rights only
	Tanami	ELA29619	NT	Application	Northern Star Resources	REE rights only
	Tanami	ELA29621	NT	Application	Northern Star Resources	REE rights only
	Tanami	EL26635	NT	Granted	Northern Star Resources	REE rights only
	Boulder Ridge	ELA28868	NT	Application	Northern Star Resources	REE rights only
	Boulder Ridge	ELA30132	NT	Application	Northern Minerals	100%
	Boulder Ridge	EL27590	NT	Granted	Northern Star Resources	REE rights only
	Tanami	ELA32163	NT	Application	Northern Star Resources	REE rights only
	Tanami	ELA32164	NT	Application	Northern Star Resources	REE rights only
Rabbit Flats	Rabbit Flats	ELA25159	NT	Application	Northern Star Resources	REE rights only
	Rabbit Flats	ELA25160	NT	Application	Northern Star Resources	REE rights only