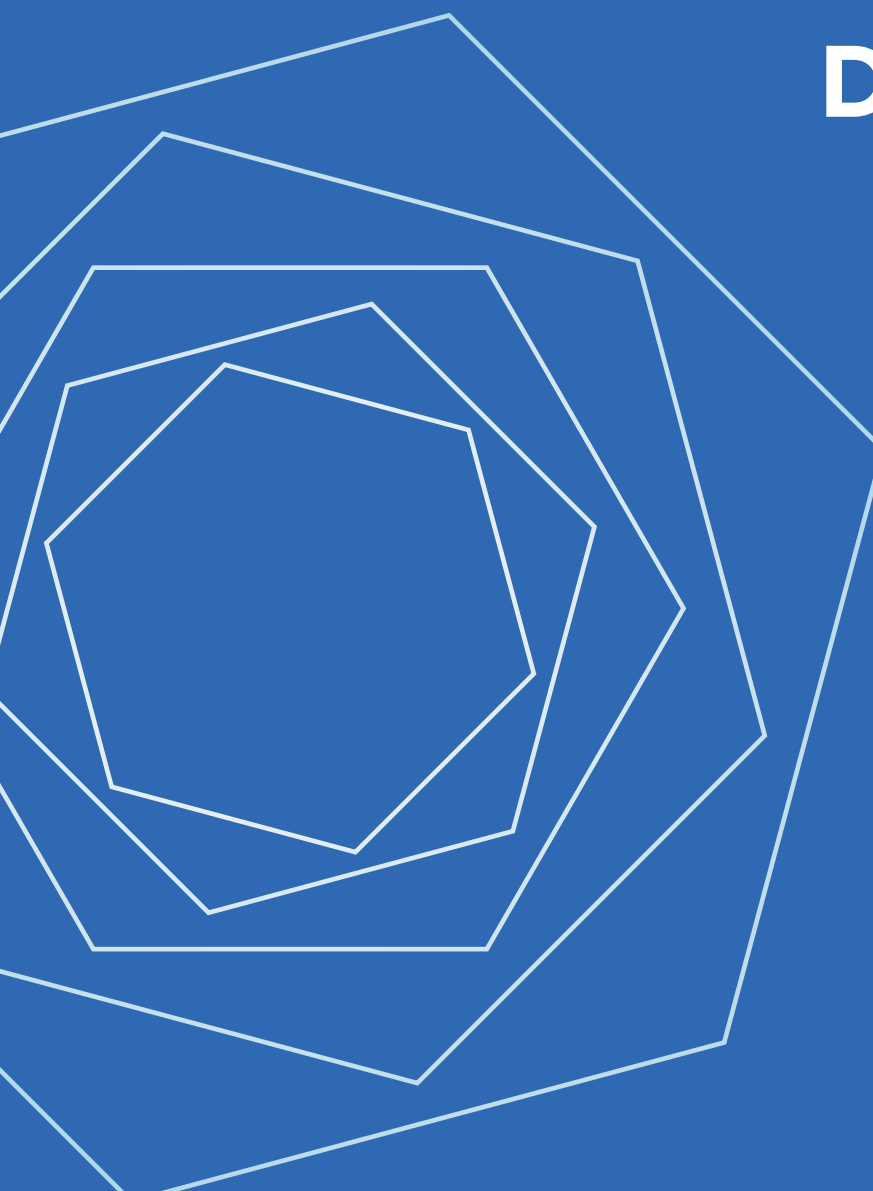


**NORTHERN  
MINERALS**

# **QUARTERLY ACTIVITIES REPORT**

**December  
2020**

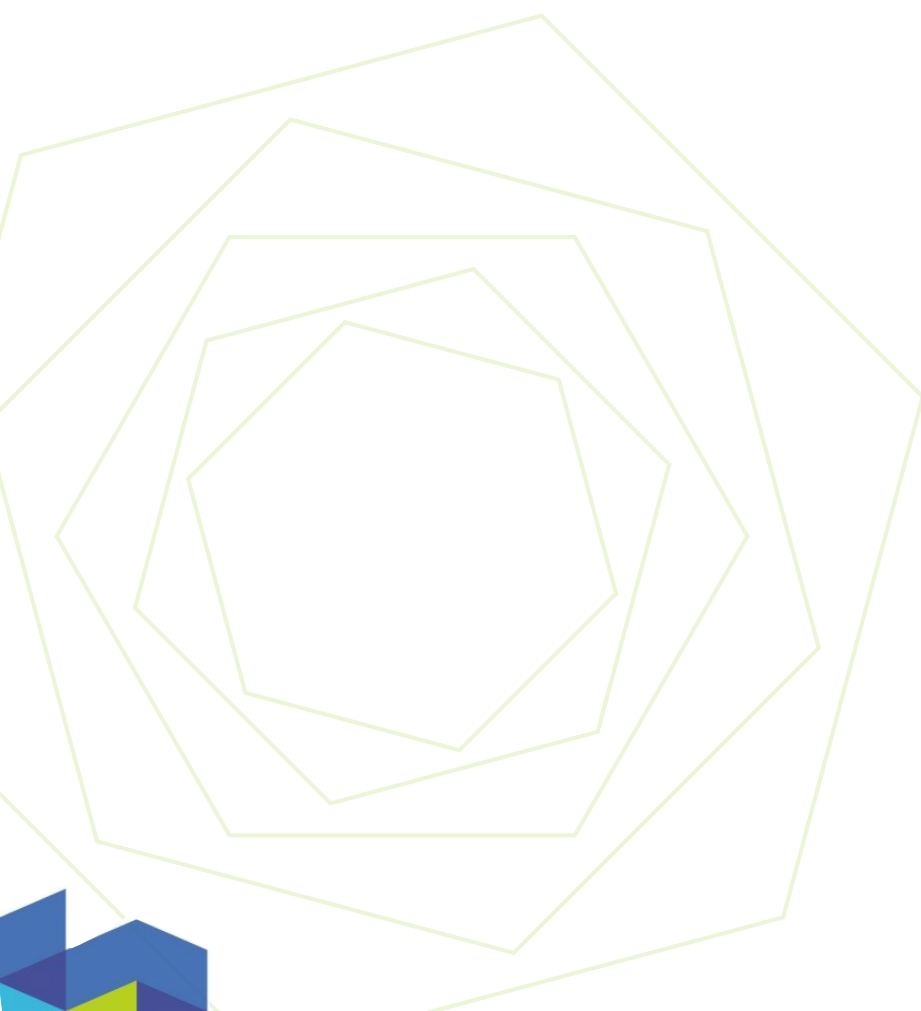


**ASX:NTU**

## HIGHLIGHTS

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- ▶ Northern Minerals successfully completed 8,500 metres of exploration and resource definition drilling during the quarter at Browns Range;
- ▶ First batch of assay results received post period close from 2020 drilling, including promising new greenfield targets;
- ▶ \$8.7 million refund received from ATO for 2020 R&D tax offset claim further strengthens balance sheet; and
- ▶ Northern Minerals delivers on strategic goal to be debt free by end of 2020 calendar year.



Northern Minerals Limited [ASX: NTU] (the **Company**) is pleased to update shareholders on its activities for the quarter ending 31 December 2020.

## EXPLORATION PROGRAM

Northern Minerals announced in November 2020 that it had commenced the first phase of its \$5 million exploration and resource definition drilling program.

The Company successfully completed 8,500 metres of reverse circulation (RC) drilling at Browns Range in the December quarter.

A total of up to 16,500 metres of drilling was budgeted before the end of June 2021, with the second phase of the program scheduled to commence at the end of the northern wet season in 2021.

The primary objective of the program is to increase the heavy rare earth Mineral Resource and life of mine potential at Browns Range.

Post period close, Northern Minerals announced initial drilling results from the first phase of the exploration program.

In January, the Company received assays from 45 drill holes at Dazzler Northwest (7 holes), Dazzler North/Ripcord (16 holes), Dazzler (6 holes), Gambit West (7 holes), Wolverine West (4 holes) and a new prospect named Toad (5 holes).

The assay results from the remaining 71 drill holes drilled in the first phase are expected to be returned in the March quarter.

Encouraging results were received from first-pass drilling at the greenfields Toad and Dazzler North prospects, in particular.

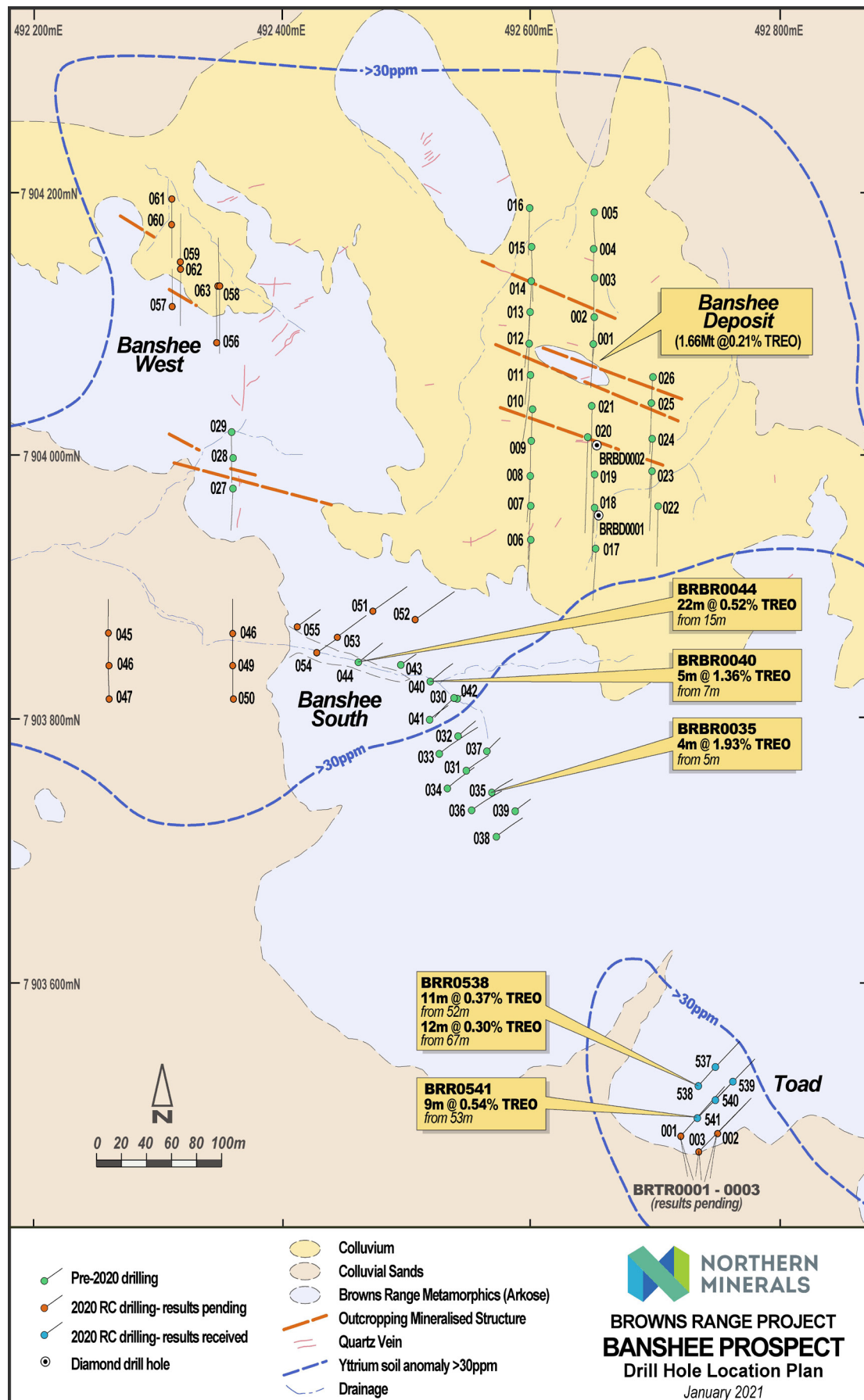
The best results from Toad were 9m @ 0.54% TREO from 53m in BRR0541 and 11m @ 0.37% from 52m, while at Dazzler North an intercept of 3m @ 0.74% TREO from 8m was returned.

Northern Minerals will follow-up these initial results in the second phase of drilling currently being planned at Browns Range.

During the quarter the Company expended approximately \$1.6 million on exploration and evaluation activities.



Reverse Circulation drilling at Dazzler prospect



Toad and Banshee drill hole location plan



## NEW TOAD PROSPECT

Eight RC holes for 580 metres were completed at the Toad prospect in the December quarter, of which Northern Minerals received assay results for five holes (BRR0537 – 0541) in January 2021.

Toad is approximately 250 metres southeast of the Banshee South prospect (see above drill hole location plan) and was identified as an area of anomalous surface portable XRF yttrium readings and a uranium radiometric anomaly.

The target is adjacent to a north-south trending quartz vein/breccia and an interpreted northwest-southeast trending regional structure.

The initial drilling comprised five drill holes on two fences, drilled at an inclination of 60 degrees towards the northeast.

A further three holes were drilled to follow-up on the anomalous portable XRF readings in the first five holes.

Details of the recent exploration drilling results were reported on 18th January 2021 (see ASX announcement “First drilling results indicate potential for Mineral Resource growth at Browns Range”). Northern Minerals expects to be able to announce the remaining results from the drilling program (which are not yet available) in March 2021 quarter.



Drilling at the Toad prospect in late 2020



## PILOT PLANT

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Beneficiation testwork on Gambit West and Wolverine ore was completed in the December quarter at the Browns Range Pilot Plant.

The xenotime concentrate produced from the Gambit West beneficiation testwork was used to complete a hydrometallurgical plant test campaign on this material and successfully produced rare earth carbonate. The second hydrometallurgical plant test campaign on Wolverine xenotime concentrate commenced in December but was cut short due to the early onset of the wet season. This campaign will be completed in January 2021.

Construction and installation of the ore sorting equipment at the Pilot Plant was advanced in the December quarter, with final works planned to start at the end of the northern wet season.

Commissioning of the ore sorter is on track to be completed in mid-2021, and subject to further ore sorter and beneficiation testwork at the Pilot Plant, the \$5.9 million investment is expected to materially improve feed grade and reduce overall processing costs.

The new exploration results, along with further testwork findings from the Pilot Plant, will feed into any future commercial, large-scale project feasibility study.

During the quarter the Company expended approximately \$3.3 million on production and development activities.

## CORPORATE ACTIVITY

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### R&D tax offset update

Northern Minerals received a refund payment of \$8.7 million from the Australian Tax Office (ATO) in November 2020, further strengthening its balance sheet.

This refund related to the Company's refundable R&D tax offset claim for the financial year ended 30 June 2020, submitted in October 2020.

The Company supported the Federal Government's decision to abandon plans to cut the Research and Development tax concession by \$1.8 billion and impose a \$4 million cap on businesses with turnovers under \$20 million, as well as the potential for 2020 clawbacks.

Northern Minerals' R&D activities remain focused on testing the processes required to extract heavy rare earth elements from hard rock xenotime ore at its Browns Range Pilot Plant.

### Zero debt

Immediately following receipt of its 2020 R&D tax offset refund, Northern Minerals repaid its last amount of debt of \$2 million to JHY Investments Pty Ltd (JHY) under the \$4 million Convertible Note and Option Subscription Agreement which the Company entered into with JHY in December 2018.

In doing so, Northern Minerals achieved its strategic goal of being debt free by the end of the 2020 calendar year and had \$10.6 million cash in the bank as at 31 December 2020.



## Director resignation

Mr Adrian Griffin resigned from his position as a Non-Executive Director on Northern Minerals' Board in November 2020.

Mr Griffin cited growing demands from other executive positions held with separate resources sector-related companies.

Northern Minerals Non-Executive Chairman Colin McCavana acknowledged the long-term contribution of Mr Griffin to the Company as one of its founding Directors.

## Director appointment

Northern Minerals also announced in November the appointment of Mr LiangBing Yu to the Board as a Non-Executive Director.

Mr Yu has more than 20 years' experience in business operation and management and is currently an Executive Partner at Beijing GloryHope Oriental Investment Centre.

## Payments to related parties of the entity and their associates

Payments made during the quarter and included in items 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 \$147,000.

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

## COMPLIANCE STATEMENT

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The information in this report that relates to Exploration Results is extracted from the report entitled "First drilling results indicate potential for Mineral Resource growth at Browns Range" dated 18th January 2021 and is available to view on the company's website ([www.northernminerals.com.au](http://www.northernminerals.com.au)). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## Authorised for release by the Board

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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 Project in northern Western Australia.

The Company commenced the production of heavy rare earth carbonate in late 2018 as part of a three-year pilot assessment of economic and temporarily technical feasibility of a larger scale development at Browns Range. In March 2020, the operation was placed into care & maintenance as a result of COVID-19 and has partially restarted operations in August 2020.

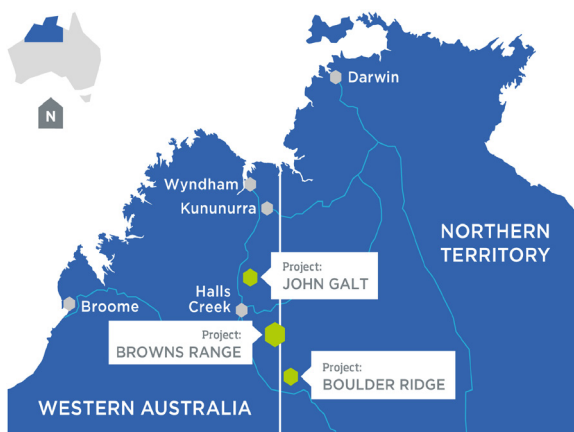
The work program provides the opportunity to gain production experience and surety of supply for our offtake partner, Thyssenkrupp, as well as allowing the assessment of various project enhancement initiatives including ore sorting and the separation of the product into individual rare earth oxides.

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](http://northernminerals.com.au)



**ASX Code: NTU**

**Market Capitalisation: A\$275.1m**

**Issued Shares: 4,437m**

**Cash (as at 31 December 2020): A\$10.6m**



## 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 | E80/5040    | WA    | Granted     | Northern Minerals       | 100%            |
|                 | Browns Range | E80/5041    | WA    | Granted     | Northern Minerals       | 100%            |
|                 | Browns Range | M80/627     | WA    | Granted     | 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 | 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 NT | Browns Range | EL24193     | NT    | Granted     | Northern Star Resources | REE rights only |
|                 | Browns Range | EL24174     | NT    | Granted     | Northern Star Resources | REE rights only |
|                 | Browns Range | EL26270     | NT    | Granted     | Northern Minerals       | 100%            |
|                 | Browns Range | EL26286     | NT    | Granted     | Northern Star Resources | REE rights only |
|                 | Browns Range | EL32161     | NT    | Application | Northern Minerals       | 100%            |
|                 | Browns Range | EL32162     | NT    | Application | Northern Minerals       | 100%            |
| John Galt       | John Galt    | E80/4298    | WA    | Granted     | Northern Minerals       | 100%            |
|                 | John Galt    | E80/4967    | WA    | Granted     | Northern Minerals       | 100%            |

| Project            | Location      | Tenement ID | State | Status      | Holder Application      | Interest                     |
|--------------------|---------------|-------------|-------|-------------|-------------------------|------------------------------|
| John Galt          | John Galt     | E80/5070    | WA    | Granted     | Northern Minerals       | 100%                         |
|                    | John Galt     | E80/5230    | WA    | Granted     | Northern Minerals       | 100%                         |
| Boulder Ridge      | Boulder Ridge | EL29594     | NT    | Granted     | Northern Minerals       | 100% (excluding gold rights) |
|                    | Boulder Ridge | EL24849     | NT    | Application | Northern Minerals       | 100% (excluding gold rights) |
|                    | Boulder Ridge | EL24935     | 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              |
|                    | Tanami        | EL29595     | NT    | Granted     | Northern Star Resources | REE rights only              |
|                    | Tanami        | EL29619     | NT    | Application | Northern Star Resources | REE rights only              |
|                    | Tanami        | EL26635     | NT    | Granted     | Northern Star Resources | REE rights only              |
|                    | Boulder Ridge | EL28868     | NT    | Application | Northern Star Resources | REE rights only              |
|                    | Boulder Ridge | EL30132     | NT    | Application | Northern Minerals       | 100%                         |
|                    | Boulder Ridge | EL27590     | NT    | Granted     | Northern Star Resources | REE rights only              |
|                    | Tanami        | EL32163     | NT    | Application | Northern Star Resources | REE rights only              |
|                    | Tanami        | EL32164     | NT    | Application | Northern Star Resources | REE rights only              |
| Rabbit Flats       | Rabbit Flats  | EL25159     | NT    | Application | Northern Star Resources | REE rights only              |
|                    | Rabbit Flats  | EL25160     | NT    | Application | Northern Star Resources | REE rights only              |

