

SEPTEMBER 2024 QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

Environmental, Social and Governance

- Total Recordable Injury Frequency Rate (TRIFR) of 0.00
- Appointed Gareth Fleming as Project Director
- Received Environmental Protection Act 1986 (**EP Act**) approval for strategic enhancements at Browns Range¹

Definitive Feasibility Study

- Advanced the Definitive Feasibility Study (DFS), including practical completion of metallurgical variability test work at Bureau Veritas

Exploration Strategy Expansion

- Commenced a regional target generation exploration program across the entire tenement portfolio in Western Australia and the Northern Territory

Corporate

- Received strong investor support for \$43 million placement² and \$3.85 million Share Purchase Plan³
- Continued engagement with NAIF and EFA to progress funding discussions

Northern Minerals Limited (**ASX: NTU**) (**Northern Minerals** or **Company**) is pleased to present its Quarterly Activities Report for the period to 30 September 2024 to accompany the Appendix 5B.

Commenting on the progress made during the quarter, Northern Minerals' Managing Director and CEO Shane Hartwig said:

"The September quarter has been a productive period for Northern Minerals as we continue to drive forward the development of the Browns Range Heavy Rare Earths Project. We extend our sincere thanks to existing shareholders and new investors for their support during the recent capital raise. With strengthened financial resources, we have made solid progress on our

¹ ASX 30 August 2024

² ASX 16 September 2024

³ ASX 23 October 2024



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Definitive Feasibility Study, which remains on track for release in Q3 FY25. Alongside the DFS progress, we have initiated targeted exploration programs aimed at unlocking further value across Browns Range. With sustained momentum in all areas of our business, Northern Minerals remains committed to creating sustainable value for our shareholders through the establishment of a robust, Australian-based heavy rare earths supply chain.”

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Safety

Northern Minerals upheld its strong commitment to workforce health and safety, recording zero recordable injuries. This achievement maintains the Company's TRIFR at 0.00, a benchmark sustained since November 2022.

Organisational Structure Review and Strategic Leadership Announcement

Northern Minerals undertook a thorough review of its organisational structure to ensure alignment with the next phase of the Browns Range Project. This assessment was aimed at realising cost efficiencies and establishing a streamlined structure to assist in the delivery of the Definitive Feasibility Study (DFS) and progress towards a Final Investment Decision (FID). As part of this process, Northern Minerals was pleased to appoint Gareth Fleming to the role of Project Director. Joining Northern Minerals from Hastings Technology Metals, Mr Fleming's experience and leadership will be pivotal in driving the completion of outstanding work items essential to finalising the DFS and progressing towards FID.

Environment

During the quarter, Northern Minerals received approval under Section 45C of the *Environmental Protection Act 1986* (EP Act) from the Environmental Protection Authority¹. The approval amendments provide the Company with an 8.4% increase of the disturbance footprint at Browns Range, from 711 hectares to 771 hectares, and an increase in the development envelope from 2,590 hectares to 4,384 hectares. The approval also allows for realignment of the development envelope for the Project and expansion of the bore field, enabling Northern Minerals to implement infrastructure improvements while continuing to prioritise environmental stewardship and community engagement.

Northern Minerals completed archaeological heritage and biological surveys during the quarter in preparation for upcoming exploration activities and to facilitate access to exploration prospects in the Northern Territory.



Figure 1: Archaeological heritage survey area at Browns Range

Local Engagement and Governance

A key focus during the quarter was a comprehensive review and update of Safe Operating Procedures and task-specific instructions to enhance our understanding of the Project's risk profile. In line with our commitment to continuous improvement, Northern Minerals implemented a significant operational change in August, relocating charter flight operations from Broome to Kununurra Airport as the new base for personnel travel. This change has led to improvements in fatigue management by reducing fly-out travel durations for the site workforce, thereby contributing to safer and more sustainable roster cycles. The relocation of charter flight operations to Kununurra also reinforces Northern Minerals' commitment to supporting the East Kimberley community, with anticipated economic and employment benefits for Kununurra and the surrounding areas as the Browns Range Project progresses.



Figure 2: Inaugural charter flight to Browns Range from the Kununurra airport



DEFINITIVE FEASIBILITY STUDY

Progress continued across several key workstreams of the DFS including:

- Mineral Resource Estimate
- Process test work
- Capital Expenditure and Operational Expenditure review

Independent Technical Expert

SRK has been engaged by Northern Minerals, on behalf of prospective lenders, to undertake an independent technical expert review of the Project and produce an Independent Technical Report (ITR). During the quarter, SRK finalised the technical clarifications associated with its Interim ITR Report on the draft DFS for the Project. These clarifications encompass detailed assessments of the Project's technical and operational assumptions. All clarifications and technical refinements will be considered in the publication of the final DFS, ensuring a robust, transparent foundation for future investment decisions.

Mineral Resource Estimate

The Mineral Resources Estimate (MRE) update for the Project has progressed, with a final independent peer review process underway.

Process Test Work

A variability test work program commenced at Bureau Veritas Minerals (BV) focusing on core samples taken from Browns Range's flagship deposit, Wolverine. The objective of the test work program is to consider grade, lithology and spatial location along strike (horizontal) and depth (vertical). The test work program will enable enhanced metallurgical understanding of the deposit at depth and confirm the metallurgical flotation response of the process flowsheet.

Figure 3 shows the LIMS feed, non-magnetic stream for WHIMS feed and magnetic tails stream. Figure 4 shows the WHIMS carousel, non-magnetic tails stream and the magnetic concentrate stream.



LIMS feed

Non-magnetics

Magnetics

Figure 3: LIMS test work – LIMS feed/non-magnetics/magnetics



WHIMS carousel

Non-magnetics

Magnetics

Figure 4: WHIMS test work – WHIMS carousel/non-magnetics/magnetics

Figure 5 shows the flotation set-up, rougher concentrate 1 and the rougher concentrates 1 to 6.



Flotation set-up



Rougher concentrate 1



Rougher concentrates 1 – 6

Figure 5: Flotation test work – flotation set-up/rougher concentrate 1/rougher concentrates 1 - 6

CAPEX and OPEX Update

During the quarter, the capital expenditure (CAPEX) and operating expenditure (OPEX) updates for the DFS advanced and included requests for updated market pricing on several key packages:

- Process Plant
- Bulk Earthworks
- Power Supply
- Water Supply
- Modular Building Supply
- Village and NPI Buildings Design and Construct
- Flight, Village and Fuel Supply Services
- Water Treatment Supply
- Mobile Equipment and Workshop
- Survey

Aligned with the current DFS schedule, the remaining packages are set to be issued to the market in the coming quarter.

Schedule

Northern Minerals plans to release an updated Mineral Resource Estimate in Q2 FY25 and the final DFS in Q3 FY25.

Expenditure on feasibility study activities during the quarter was approximately \$0.9 million, with an additional \$1.6 million incurred in site costs.

EXPLORATION

Northern Minerals commenced a regional target generation exploration program during the quarter across the entire tenement portfolio located across Western Australia and Northern Territory.



The program expands the area of interest for exploration over the Browns Range Dome - Western Australia (BRD-WA), the Browns Range Dome - Northern Territory (BRD-NT) and the Coomarie Dome (CD).

Importantly, the implementation of active target generative work programs over this expanded area covers the underexplored components of the tenement portfolio. This is an extension in the Company's exploration strategy, which to date has predominantly focussed on BRD-WA.

The regional geological plan of the tenements within the BRD and CD are shown in Figure 6.

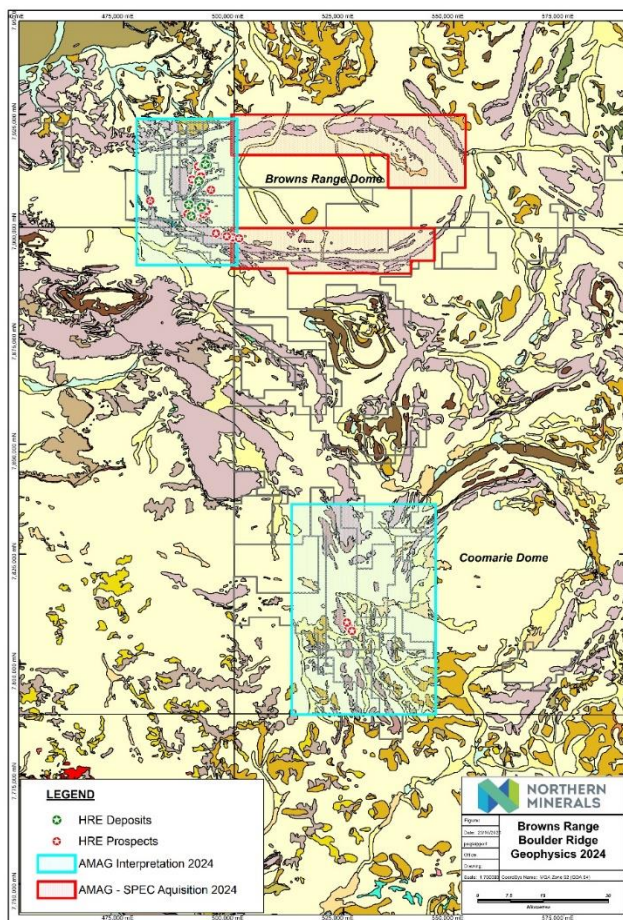


Figure 6: Regional surface geology (250K⁴) showing location of tenements, Browns Range Dome and Coomarie Dome

The first phase of the systematic work programs commenced Q1 FY25 and is planned for completion in Q3 FY25. Data from this phase of the program will inform on-ground

⁴ 250k refers to the map scale, indicating that the map is at a 1:250,000 scale.



reconnaissance and drilling programs, which are scheduled for the field season starting in Q3 FY25.

Several work programs were initiated during the quarter and remain underway, including the geophysical data acquisition, data integration and processing, and enhanced litho-structural interpretation to support regional targeting. An overview of the work programs is provided below.

Browns Range Dome

Regional target generation activities at BRD-WA included beginning a detailed litho-structural interpretation, which incorporates newly acquired airborne geophysical data processed in Q2 FY24. This interpretation is expected to be completed by Q2 FY25. In addition, a new airborne geophysical survey, focusing on the northern and southern contact boundaries of BRD-NT, is scheduled for the Q2 FY25. This survey will cover two specific areas, as shown in Figure 7, with a combined area of 1,070km².

Following the AMAG data acquisition, processing and litho-structural interpretation, the data sets from BRD-WA and BRD-NT will be integrated to develop a comprehensive and unified dataset over the entire Browns Range Dome.

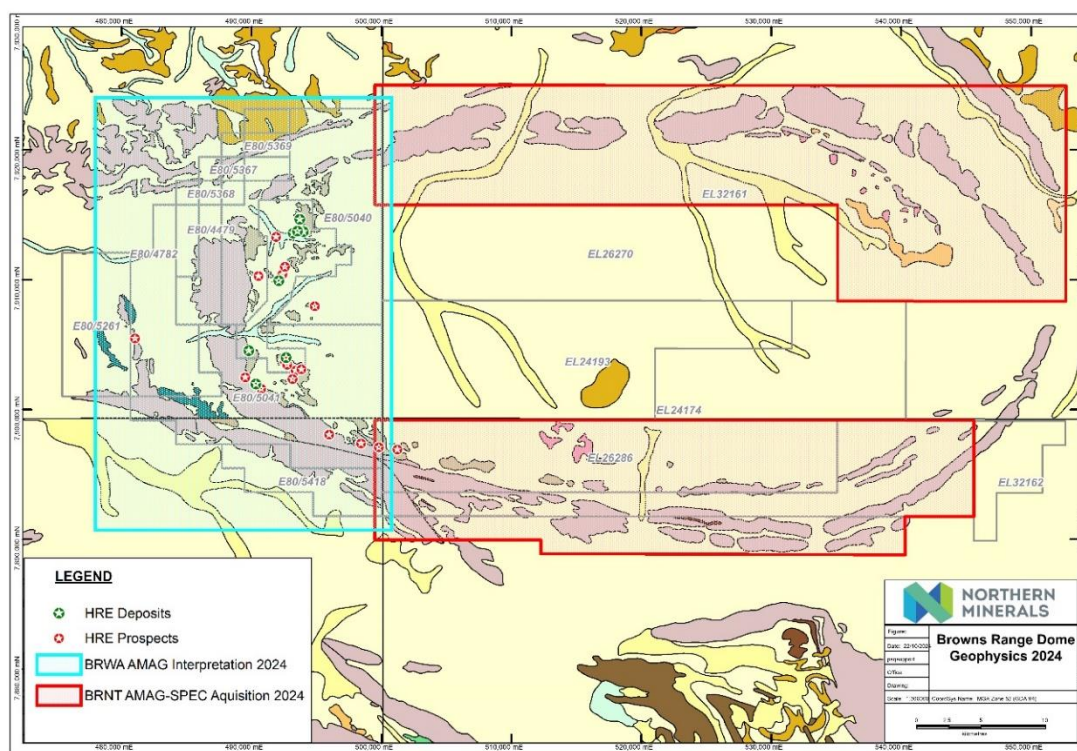


Figure 7: Regional surface geology (250K4) of the Browns Range Dome showing areas for geophysical data acquisition and litho-structural interpretation

Two field-based programs and two desktop analysis programs were also initiated during the quarter, with results currently pending:



- Ground radiometric survey over the Longshot prospect covering approximately 5km of strike extent and covering an area of 7.5km².
- Geochemical orientation survey, including stream sediment and soil sampling over areas of Gardiner Sandstone and transported cover overlying the Browns Range Metamorphics at several regional prospects.
- Reprocessing of existing VTEM data to expand area coverage and provide additional information for targeting undercover at BRD-WA.
- Layered Earth inversion of existing VTEM dataset to determine depth to unconformity and basement at the Longshot prospect.

Coomarie Dome

The Coomarie Dome (CD), which is approximately 75-100km south from the Brown Range Dome in the Northern Territory, is shown in Figure 8. CD incorporates exploration tenements from the Gardiner-Tanami and Boulder Ridge Projects.

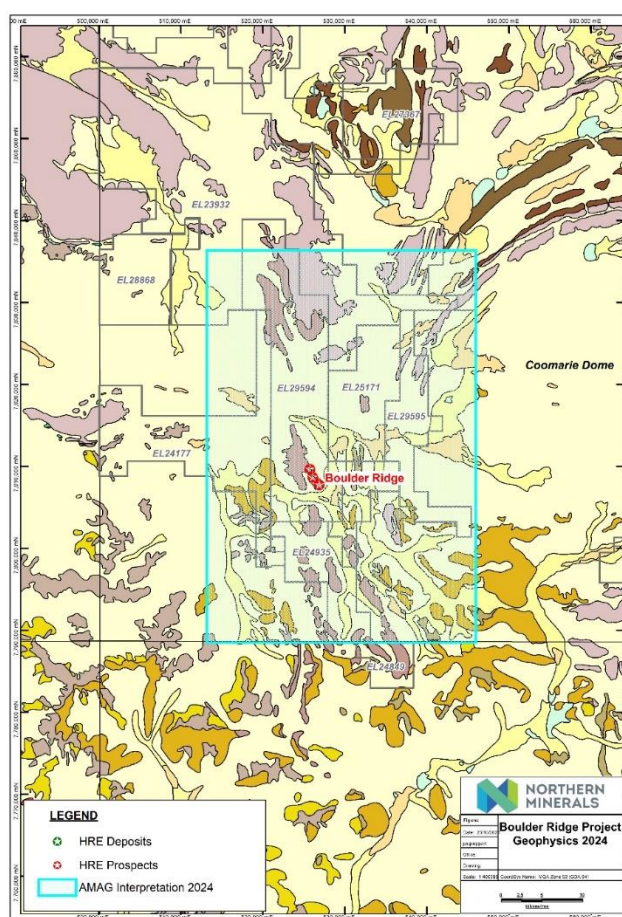


Figure 8: Regional surface geology of Coomarie Dome (250K4) showing areas for litho-structural interpretation

The regional target generation initiatives at CD included the merging and reprocessing of geophysical data to incorporate all available open-source radiometric and magnetic datasets. A



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litho-structural interpretation of the area immediately west of the CD, encompassing the Boulder Ridge prospect area, is scheduled for completion in Q2/Q3 FY25.

Expenditure on exploration and evaluation activities during the quarter was approximately \$1.5 million.

CORPORATE

Strong Support for Equity Raise

During the quarter Northern Minerals announced it had successfully completed a capital raise to support the advancement of key projects, including the continued development of the Browns Range Project². The capital raise was well received by investors, with binding commitments from existing and new institutional and sophisticated investors raising a total of \$43 million (before costs) via a two-tranche placement (Tranche 2 subject to shareholder approval).

Subsequent to quarter-end, Northern Minerals completed its Share Purchase Plan (SPP), with a total amount of \$3.85 million raised (before costs)⁵. Proceeds from the SPP, along with the proceeds of the placement, enable the Company to continue key project initiatives, seek project funding and proceed towards FID alongside undertaking value-accretive exploration initiatives.

Project Funding

During the quarter Northern Minerals also advanced funding discussions with the Northern Australia Infrastructure Facility (NAIF) and Export Finance Australia (EFA).

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 totalled \$0.546 million.

This comprised payments to Executive and Non-Executive Directors' remuneration from services and fees paid to HFW, of which Mr Adam Handley is a partner. HFW has provided legal services to the Company on normal commercial terms and conditions.

There were no payments to related parties and their associates included in cash flows from investing activities.

⁵ ASX 23 October 2024



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Authorised by the Board of Directors of Northern Minerals Limited

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Future Performance and Forward-Looking Statements

This Report contains certain “forward-looking statements”. The words “expect”, “anticipate”, “estimate”, “intend”, “believe”, “guidance”, “should”, “could”, “may”, “will”, “predict”, “plan” and other similar expressions are intended to identify forward-looking statements. Any indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this Report are based on assumptions and contingencies that are subject to change without notice and involve known and unknown risks and uncertainties and other factors that are beyond the control of Northern Minerals, its directors and management including any further impacts of COVID-19 on Northern Minerals’ continued trading and operations. This includes statements about market and industry trends, which are based on interpretations of current market conditions.

You are strongly cautioned not to place undue reliance on forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption caused by external factors.

Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. Actual results, performance or achievements may differ materially from those expressed or implied in such statements and any projections and assumptions on which these statements are based. These statements may assume the success of Northern Minerals’ business strategies, whether the success is realised in the period for which the forward-looking statement may have been prepared or otherwise. No representation or warranty, express or implied, is made as to the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this Report. The forward-looking statements are based on information available to Northern Minerals as at the date of this Report. Except as required by law or regulation (including the ASX Listing Rules), none of Northern Minerals, its representatives or advisers undertakes any obligation to provide any additional or updated information whether as a result of a change in expectations or assumptions, new information, future events or results or otherwise.



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About Northern Minerals

Northern Minerals Limited (**ASX: NTU**) (**Northern Minerals** or **Company**) owns 100% of the Browns Range Heavy Rare Earth (HRE) Project in northern Western Australia, comprising tenements uniquely rich in the heavy rare earth elements dysprosium (Dy) and terbium (Tb).

Dysprosium and terbium are critical in the production of dysprosium neodymium iron-boron (DyNdFeB) magnets used in clean energy, defence and high-technology solutions. Dysprosium and terbium are prized because their unique properties improve the durability of magnets by increasing their resistance to demagnetisation.

Browns Range's flagship deposit is Wolverine, which is thought to be the highest-grade dysprosium and terbium orebody in Australia. The Company is preparing to bring Wolverine into production with the objective of providing a reliable alternative source of dysprosium and terbium to production sourced from China.

To further its strategic objective, Northern Minerals is undertaking a Definitive Feasibility Study for a commercial-scale mining and processing operation at Browns Range to process Wolverine ore.

Apart from Wolverine, Northern Minerals has several additional deposits and prospects within the Browns Range Project that contain dysprosium and other heavy rare earth elements, hosted in xenotime mineralisation.

For more information, please visit northernminerals.com.au



Tenement Report

Details of mining tenements as at the quarter ended 30 September 2024 (ASX Listing Rule 5.3.3).

Project	Location	Tenement ID	State	Status	Holder	Interest
Browns Range WA	Browns Range	E80/4479	WA	Granted	Northern	100%
	Browns Range	E80/4782	WA	Granted	Northern	100%
	Browns Range	E80/5040	WA	Granted	Northern	100%
	Browns Range	E80/5041	WA	Granted	Northern	100%
	Browns Range	M80/627	WA	Granted	Northern	100%
	Browns Range	M80/649	WA	Application	Northern	100%
	Browns Range	L80/76	WA	Granted	Northern	100%
	Browns Range	L80/77	WA	Granted	Northern	100%
	Browns Range	L80/78	WA	Granted	Northern	100%
	Browns Range	L80/79	WA	Granted	Northern	100%
	Browns Range	L80/107	WA	Application	Northern	100%
	Browns Range	L80/0109	WA	Application	Northern	100%
	Browns Range	L80/0110	WA	Application	Northern	100%
	Browns Range	L80/0111	WA	Application	Northern	100%
	Browns Range	L80/0113	WA	Application	Northern	100%
	Browns Range	L80/0120	WA	Application	Northern	100%
	Browns Range	E80/5260	WA	Granted	Northern	100%
	Browns Range	E80/5261	WA	Granted	Northern	100%
	Browns Range	E80/5367	WA	Granted	Northern	100%
	Browns Range	E80/5368	WA	Granted	Northern	100%
	Browns Range	E80/5369	WA	Granted	Northern	100%
	Browns Range	E80/5370	WA	Granted	Northern	100%
	Browns Range	E80/5418	WA	Granted	Northern	100%
	Browns Range	EL24193	NT	Granted	Northern	100%



Project	Location	Tenement ID	State	Status	Holder	Interest
Browns Range NT	Browns Range	EL24174	NT	Granted	Northern Star	REE rights only
	Browns Range	EL26270	NT	Granted	Northern	100%
	Browns Range	EL26286	NT	Granted	Northern	100%
	Browns Range	ELA32161	NT	Application	Northern	100%
	Browns Range	ELA32162	NT	Application	Northern	100%
John Galt	John Galt	E80/4298	WA	Granted	Northern	100%
	John Galt	E80/4967	WA	Granted	Northern	100%
	John Galt	E80/5230	WA	Granted	Northern	100%
	John Galt	E80/6079	WA	Application	Northern	100%
Boulder Ridge	Boulder Ridge	EL29594	NT	Granted	Northern	100%
	Boulder Ridge	ELA24849	NT	Application	Northern	100% (excluding
	Boulder Ridge	ELA24935	NT	Application	Northern	100% (excluding
	Boulder Ridge	EL24177	NT	Granted	Northern	100%
	Boulder Ridge	EL25171	NT	Granted	Northern Star	REE rights only
	Boulder Ridge	ELA28868	NT	Application	Northern Star	REE rights only
	Boulder Ridge	EL27590	NT	Granted	Northern Star	REE rights only
Gardiner-Tanami NT	Tanami	EL23932	NT	Granted	Northern Star	REE rights only
	Tanami	EL25009	NT	Granted	Northern Star	REE rights only
	Ware Range	EL26498	NT	Granted	Northern	100%
	Ware Range	EL26541	NT	Granted	Northern	100%
	Pargee	EL27367	NT	Granted	Northern	100%
	Tanami	EL29592	NT	Granted	Northern Star	REE rights only
	Tanami	EL29593	NT	Granted	Northern Star	REE rights only
	Tanami	EL29595	NT	Granted	Northern	100%
	Tanami	ELA29619	NT	Application	Northern Star	REE rights only



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Project	Location	Tenement ID	State	Status	Holder	Interest
	Tanami	EL26635	NT	Granted	Northern Star	REE rights only
	Tanami	ELA32163	NT	Application	Northern Star	REE rights only
	Tanami	ELA32164	NT	Application	Northern Star	REE rights only
Rabbit Flats	Rabbit Flats	ELA25159	NT	Application	Northern Star	REE rights only
	Rabbit Flats	ELA25160	NT	Application	Northern Star	REE rights only

The Company was not granted any mining tenements in the quarter. During the quarter applications were entered for L80/0120 and E80/6079. No farm-in or farm-out agreements were entered into during the quarter.